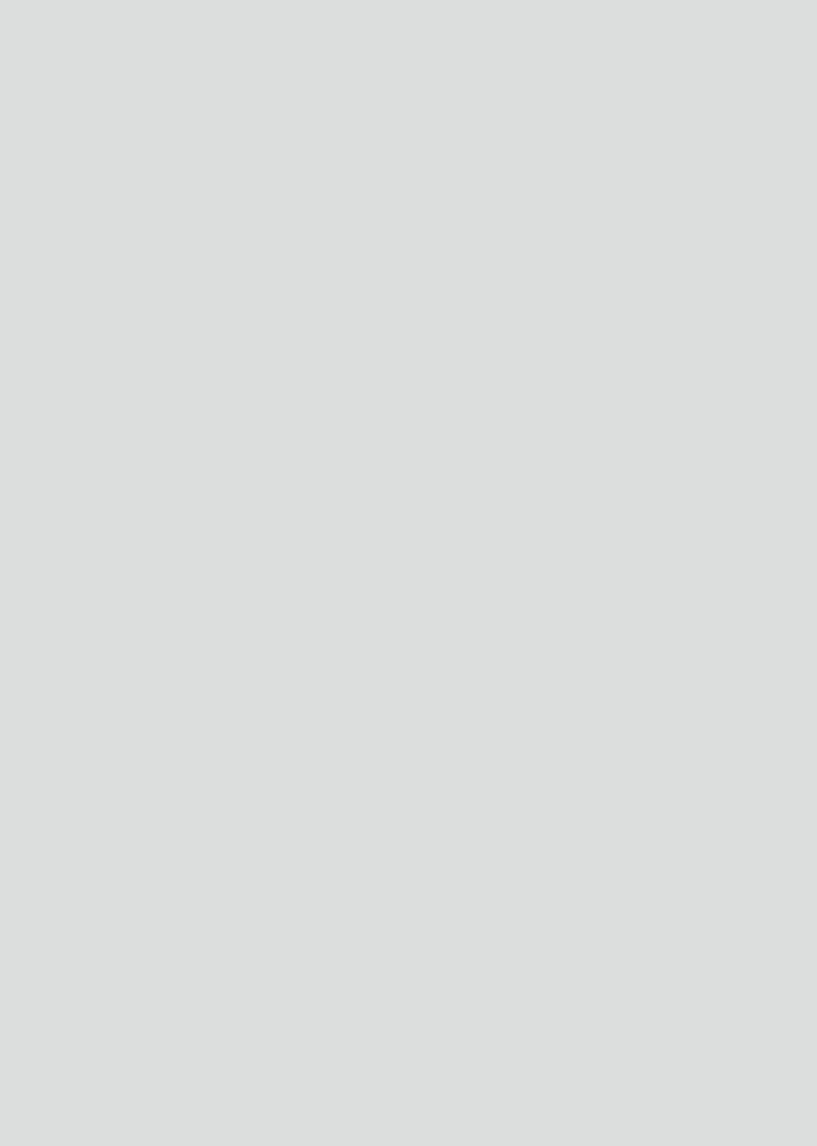
Huawei Technologies Co., Ltd. 2009 Annual Report

# **Enriching Life Through Communication**







# **Content**

- **01** Letter from the CEO
- 03 Business Highlights in 2009
- **04** Five-Year Financial Highlights
- **05** Letter from the Chairperson
- 07 Vision, Mission and Core Values
- 08 Management Discussion and Analysis
- 19 Independent Auditor's Report
- 20 Consolidated Financial Statements Summary and Notes
- 41 Corporate Governance Report
- 47 Corporate Social Responsibility
- 51 Abbreviations, Financial Terminology and Exchange Rates

# Letter from the CEO



2009 was a tumultuous year for the global economy and for the entire telecommunications industry. At Huawei, we are proud to have weathered the storm, despite the challenging economic environment, and recorded a solid year with a continuation of our steady growth. Sales revenue exceeded CNY 149.1 billion (USD 21.8 billion), a year-on-year increase of 19%. We generated a net profit of CNY 18.3 billion (USD 2.7 billion) and achieved an operating margin of 14.1%. Huawei's profitability was greatly reinforced by our success in expanding our global markets.

# Sales revenue exceeded CNY 149.1 billion, a year-on-year increase of 19% |

Huawei is committed to our customers, and in 2009, we continued to build and strengthen customer relationships. Today, we are proud to partner with 45 of the top 50 global telecom operators. In high-growth markets, Huawei grew fast due to the deployment of 3G networks in China as well as rapid development of the mobile market in India. In developed markets, we continued to expand cooperation with leading European operators, while operators in the United States, Japan and Australia are recognizing our unique values.

Our business focus in 2009 concentrated on four main areas: Telecom Network Infrastructure, Applications and Software, Professional Services, and Devices. In the area of Telecom Network Infrastructure, we solidified our leadership position in GSM/3G/LTE, optical, access networks, and routers and we continued to promote All-IP transformation for our customers. In the Applications and Software domain, our products and solutions benefited customers by offering value-added platforms with increased operational efficiency. Professional Services is a key strategic investment for Huawei and our Managed Services, in particular, achieved rapid growth and helped customers to establish a competitive edge. In the Devices area, we continued to focus on the operator resale market and maintained good global market share.

In 2009, the continued transformation of Huawei's internal management processes remained our priority. We continue to improve the efficiency of our operation and delivery systems and this supports our guarantee of timely, accurate and high

quality delivery that enables customers to promote telecom services in their markets. Another important initiative, called Integrated Financial Services (IFS), is improving the efficiency of our internal management processes and supporting our global business development initiatives.

Huawei is also transforming our organizational structure and our human resource mechanisms. We are moving away from centralized governance to a more decentralized structure, allowing organizations and employees who serve customers directly to have more decision-making power. This is enabling them to mobilize resources more quickly and to respond to customer needs more effectively. Our account managers, solution experts, and delivery experts are now organized into work groups that allow for better understanding of customer requirements, improvement of customer communications, and achievement of effective equipment and service delivery to ensure our customers' business success.

We are also optimizing regional organizations and carrying out operational synergies, in order to improve our strategic planning and strategy implementation, and global resources allocation. These changes will improve Huawei's ability to serve our customers and support our goal of a 20% year-onyear increase in sales revenue in 2010.

Driven by the development of broadband in 2010, particularly the advancement in mobile broadband, Huawei will continue to maintain a strong and steady momentum across our key business areas. We foresee broad market development opportunities in mobile and home broadband networks, fixed mobile convergence, business operation support systems and smart devices. Huawei will also continue to strengthen our investment in professional services, especially managed services, to improve our own development, while helping to enhance operational efficiency for our customers.

We have always believed that Huawei's success is predicated on the success of our customers. We believe that a company will serve its customers better if dedicated contributors (including investors and employees) are highly valued. And also, a company can only ensure timely, accurate, highquality and cost-efficient delivery through consistently abiding by a spirit of dedication and simplicity. Consistent with that philosophy, Huawei will continue to focus on helping our customers face challenges and leverage opportunities, while also continuing to provide them with a superior value proposition.

We would like to express our sincere appreciation to our customers and partners for their constant support and trust. We would also like to thank our 95,000 employees for their long-term dedication to serving customers around the world. Huawei remains committed to enriching people's lives through communication.

Ren Zhengfei Chief Executive Officer

# **Business Highlights in 2009**

#### Built leading position in wireless

Huawei ranked second in global market share of radio access equipment.

#### Successfully delivered the world's first LTE/EPC commercial network

Commercial operation began on the world's first LTE network, built by Huawei, for TeliaSonera in Oslo, Norway. To date, Huawei has been awarded the largest number of LTE commercial contracts around the world.

#### Launched the world's first end-to-end 100G solution from routers to transmission system

Huawei became the first supplier to provide an end-toend 100G solution. This solution provides end-to-end 100G capability from routers to the transmission system. With it, operators can build environmentally friendly ultra-broadband networks and provide their customers with high value services, such as high quality mobile broadband, high-definition video, and telepresence.

#### Gained widespread acclaim in the global telecom industry

Huawei was honored to be the recipient of significant recognition in 2009, including: Vodafone's "Supplier of the Year"; IEEE's Outstanding Contribution Award; "Asia-Pacific Wireless Infrastructure Vendor of the Year"; "Broadband Equipment Vendor of the Year" and "Vendor of the Year" awarded by Frost & Sullivan; being ranked the fifth most innovative company in the world by Fast Company; and receiving the Financial Times' Arcelor Mittal Boldness in Business award for performance in and contribution to emerging

#### Leader in technology development and advancement

Currently, Huawei employees hold 148 leadership positions in 123 industry standards organizations globally, including as board members of authoritative organizations such as OMA, IEEE, ATIS, and the WiMAX Forum. Huawei submitted more than 18,000 standards proposals and filed a total of 42,543 patent applications. In addition, Huawei ranked second in terms of global Patent Cooperation Treaty patent applications across all industries.

#### Dedicated to the environment

The resource consumption by Huawei's main products achieved a year-on-year decrease of more than 20%. Huawei deployed over 3,000 sites powered by alternative energies around the world that actively promote the sustainable development of the industry and society.

# **Five-Year Financial Highlights**

CNY Million	2009	2008	2007	2006	2005
Revenue	149,059	125,217	93,792	66,365	48,272
Operating profit	21,052	16,197	9,115	4,846	6,752
Operating margin	14.1%	12.9%	9.7%	7.3%	14.0%
Net profit	18,274	7,848	7,558	3,999	5,519
Cash flow from operating activities	21,741	6,455	7,628	5,801	5,715
Cash and cash equivalents	29,232	21,017	13,822	8,241	7,126
Working capital	41,835	29,588	23,475	10,670	10,985
Total assets	139,653	118,240	81,059	58,501	46,433
Total borrowings	16,377	14,009	2,731	2,908	4,369
Owner's equity	43,316	37,454	30,032	20,846	19,503
Liability ratio	69.0%	68.3%	63.0%	64.4%	58.0%



# **Letter from the Chairperson**



Over the past few decades, the rapid development of mobile telephony and the Internet has literally changed the world. "A global village", with shared information, is fast becoming a reality. Universal access to telecom services has grown beyond all expectations and that is greatly improving people's lives. Huawei has been one of the key drivers of this historic development, with products and solutions serving one third of the global population. We take great pride in this achievement.

Based on our deep understanding of convergence and customer needs, Huawei has continued to drive All-IP transformation. We work hard to create strategic benefits for our customers and our customer-centric innovation strategy allows us to provide them with a superior value proposition. This commitment to our customers helped us to maintain our healthy financial situation in 2009, with a sales revenue of CNY 149.1 billion (USD 21.8 billion) and operating cash flow of CNY 21.7 billion (USD 3.2 billion), helping us to meet customer needs, leverage challenges and expand opportunities.

Our four business units all had steady growth last year. Telecom Network Infrastructure enhanced its market position by providing cutting-edge products and solutions to our customers. The most significant milestone was the deployment of the world's first commercial LTE/EPC network in Norway last December, thus solidifying our position as a leader in the nextgeneration of telecommunications technology. Our Applications and Software business was also trending upward, as we continued to help our customers achieve business success by facilitating operational efficiency. Professional Services gained strong business momentum in 2009, illustrating that we were recognized by our partners for ongoing strategic investment in this area. Lastly, our Devices business unit maintained a solid competitive position in the industry, despite the challenging global economic environment.

To address the challenges presented by global climate change, Huawei is helping customers lower energy consumption and carbon emissions through our advanced "green" solutions that create social, economic, and environmental benefits. In 2009, the resource consumption of our main products achieved a year-on-year decrease of more than 20%. We deployed 3,000 sites powered by alternative energies around the world. Huawei proactively extended telecom service offerings and committed to bridging the digital divide. Huawei's customized telecom

solutions helped people from remote areas to gain access to the information society, and our 36 global training centers cultivated local industry talent. In addition, our employee security system further improved with an additional CNY 1.68 billion of welfare expenditure in 2009.

Communications will continue to shape people's lives and the telecommunications industry will be at the center of this. Driven by the rapid deployment of new technologies and evolving consumer requirements, we will soon have a "Networked World" with ubiquitous connectivity and services. New businesses, represented by the "Internet of Things", mobile broadband, cloud computing and home networks, will lead us into an exciting new decade.

New businesses, represented by the "Internet of Things", mobile broadband, cloud computing and home networks, will lead us into an exciting new decade. J

As telecom markets become saturated, the telecom industry will evolve from connecting people to connecting machines (M2M). It is estimated that by 2020, the Internet will expand communication from the six billion people around the world to the estimated 50 billion machines and, in the process, open new opportunities for the telecom industry.

Markets for traditional fixed-line voice services have matured over their hundred-year history, and, with the advent and adoption of mobile communications, we have seen a gradual revenue decrease for these services. Mobile broadband, however, is just entering its golden age, bringing human society to new heights. When traffic and cost challenges are finally addressed, mobile broadband will become the most significant force in our industry's development. But in order to achieve sustainable growth, operators will need to increasingly shift their focus from voice communications to mobile broadband services

Cloud computing will also provide operators with tremendous opportunities. Operators entering the cloud computing market can leverage their unique network and subscriber advantages to create new value-added services and experiences by integrating industry content and applications. Cloud computing is a key area for operators who want to go beyond being merely a bit pipe provider.

Home networks are another new battlefield for the convergence of telecom, TV and the Internet. They will provide unprecedented strategic opportunities for operators because of the bi-direction and high bandwidth features of the telecom network.

In the next decade, these trends will help to break through telecom industry bottlenecks, providing new opportunities and increasing market potential. Huawei looks forward to continuing to develop innovative products, services, and technologies that help our customers build converged, simple, efficient, environmentally friendly, and evolving networks to support the growth of new services and promote sustainable development of the industry.

We would like to thank our customers and industry partners for their consistent support, and our employees for their excellent efforts in creating even more value and greater business success for our customers around the world.

Chairperson of the Board

# **Vision, Mission and Core Values**

#### Vision

To enrich life through communication.

To focus on our customers' market challenges and needs by providing excellent communications network solutions and services in order to consistently create maximum value for customers.

#### Core Values

Our core values are deeply rooted in every aspect of our business. They are the internal driving force for the Company and are our commitments to the ecosystem. These values enable us to provide effective services to our customers and to achieve our vision of "enriching people's lives through communication".

#### Customers First

Huawei exists to serve customers, whose demand is the driving force behind our development. We continuously create longterm value for customers by being responsive to their needs and requirements. We measure our work against how much value we bring to customers, because we can only succeed through our customers' success.

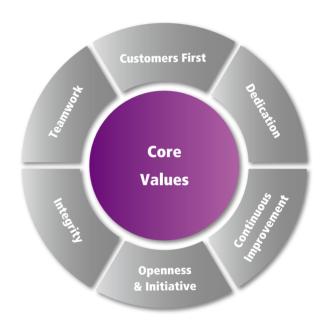
We win customers' respect and trust primarily through dedication. It includes every effort we make to create value for customers and to improve our capabilities. We value employees' contributions and reward them accordingly.

#### Continuous Improvement

Continuous improvement is required for us to become better partners for our customers, improve our company and grow as individuals. This process requires that we actively listen and learn in order to improve.

#### Openness & Initiative

Driven by customer needs, we passionately pursue customercentric innovations in an open manner. We believe that business success is the ultimate measure of the value of any technology, product, solution or process improvement.



Integrity is our most valuable asset. It drives us to behave honestly and keep our promises, and, thus, win our customers' trust and respect.

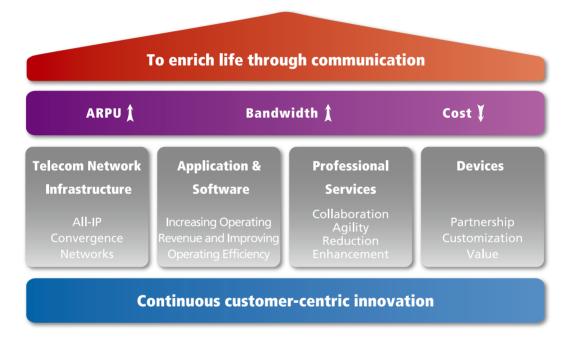
#### Teamwork

We can only succeed through teamwork. By working closely in both good times and bad, we lay the foundation for successful cross-cultural collaboration, streamlined inter-departmental cooperation and efficient processes.

# **Management Discussion and Analysis**

#### Strategy

Driven by customer requirements, we gradually build end-to-end integrated advantages across four areas: Telecom Network Infrastructure, Applications and Software, Professional Services, and Devices. We are dedicated to helping operators address their challenges with our ABC strategy: Average Revenue Per User (ARPU), Bandwidth and Cost.



#### Telecom Network Infrastructure: All-IP Convergence Network

In Telecom Network Infrastructure, Huawei builds advantages in core areas such as fixed network, mobile network, and datacom IP technology through years of continuous development. We have become the preferred partner for operators in the age of convergence and we will continue to bring unique values to our customers in the future.

#### Applications and Software: Increasing Operating Revenue and Improving Operating Efficiency

In Applications and Software, we dedicate ourselves to providing global telecom operators with an open application environment, an intelligent operating platform and responsive professional services, all of which help operators increase operating revenue, improve operating efficiency, and, ultimately, achieve business success.

#### Professional Services: Collaboration, Agility, Reduction and Enhancement

In Professional Services, Huawei helps customers further increase total value of ownership (TVO) through continuously optimized service solutions and improved operational efficiency.

#### Devices: Partnership, Customization, and Value

We focus on the operator resale market to help customers meet the diversified device requirements of users, and provide consumers with rich and convenient communications experiences by providing a wide variety of network terminals.

#### Continuous Customer-Centric Innovation

In order to meet the needs of our customers, we focus on a strategy of continuous customer-centric innovation. The goal of our product R&D is to deliver timely solutions for anticipated and actual customer needs by developing innovations in technologies, products, solutions and services.

We have more than 43,600 employees engaged in R&D and have established 17 research institutes in countries including the U.S., Germany, Sweden, Russia, India, and China. We have set up over 20 joint innovation centers with top operators to transform leading technologies into a competitive edge for customers and achieve business success.

#### **Business Review 2009**

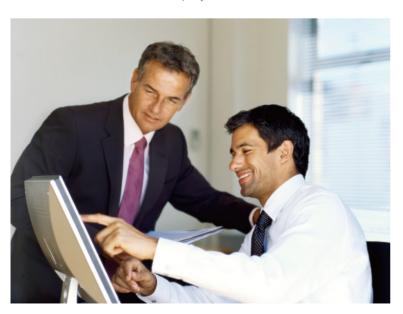
2009 was still a challenging year for most businesses. Despite the challenging operating environment, Huawei managed to achieve significant revenue growth and maintain a solid profit margin and strong operating cash flow by responding promptly to market conditions and efficiently delivering high-quality product solutions to our customers.

Our sales revenue for 2009 amounted to CNY 149,059 million, up 19% from the previous year. While slower than the CAGR over the last five years, the 2009 growth was strong with respect to the overall level in the industry. Our contract sales amounted to CNY 206,012 million, up 30% over 2008, which lays a good foundation for our future revenue growth.

#### Telecom Network Infrastructure

In 2009, sales revenue from radio access products increased significantly. In particular, UMTS and WiMAX solutions grew rapidly and GSM and CDMA solutions rose steadily. Huawei has also established a leading position in China's TD-SCDMA market and LTE solutions worldwide. Both the shipments and revenue of Huawei's Radio Access Network ranked second in the world in 2009

Mobile communication technologies evolve quickly, with the coexistence of a variety of radio access technologies and the evolvement from voice to data transmission being the major challenges faced by telecom operators. To assist customers in overcoming these challenges, Huawei launched its fourthgeneration BTS and SingleRAN solutions, and created a win-win situation for the Company and its customers.



Huawei's unified fourth-generation BTS can be used for GSM, UMTS, CDMA, WiMAX, TD-SCDMA, and LTE solutions. By the end of 2009, the fourth-generation BTS solution has successfully served mobile operators in more than 100 countries.

Huawei's SingleRAN solution enables operators to achieve full convergence of multi-mode wireless networks, including base stations, base station controllers, sites and operation as well as maintenance management. This enables unified network deployment and operations with multiple technologies, significantly reducing the TCO and maximizing network performance. Our SingleRAN solution has been installed for more than 30 operators by the end of 2009.

Huawei's new energy solutions were extensively applied in 2009, assisting telecom operators in reducing their OPEX. By the end of 2009, there were over 3,000 BTSs operated with power supplies coming from alternative energies. In particular, Huawei helped Telenor in building a green network in Bangladesh, which successfully reduced CO<sub>2</sub> emissions by more than 700 tons per year, and Huawei and Telenor were awarded the "Green Mobile Award" by GSMA for this remarkable contribution.

In the All-IP broadband network area we achieved rapid growth in 2009 by taking advantage of the IP-based broadband networks, broadband acceleration and 3G development in China

We developed highly competitive IP products and solutions: optimized video broadband, any media mobile backhaul, and visualized IP OAM, which gained wide acceptance and grew by over 50% because they successfully addressed the operators' need for developing fixed and mobile broadband services. We have established a competitive advantage in the SingleMetrobased broadband metro solution across Asia, Africa, Latin America, and CIS, and have begun to receive recognition from principal operators in Europe. Our mobile IP backhaul solution serves major operators in Europe and has created a good early

Leveraging on our leading position in 40 Gbit/s WDM and 3G opportunities in China, our optical networks sales increased by 30% over 2008, largely contributed by the growth in our traditional markets including Asia, Africa, Latin America and CIS, as well as our expansion to new high-end markets such as North America, Japan, and Korea. Thanks to leading technologies and rapid delivery of IP microwaves, we achieved an increase of more than 40% in microwave sales.

Driven by the replacement of copper wire with optical fiber, and with the competitive SingleFAN concept, our FTTx solution grew by more than 300%, serving principal operators in Europe. At the same time, this solution has entered the North American market, and Huawei completed the industry's first test of 10Gbit/s GPON together with Verizon, creating a leading edge for the next generation of optical access.

Our core network business maintained steady growth in 2009. We have established a leading position in our Soft Switch products, and achieved rapid growth in IP Multimedia Subsystem (IMS), Packet Switch products, and Unified Data Center

Since most leading operators acknowledge that IMS represents the future of converged networks. IMS entered into highspeed development in 2009. Huawei became the leader in the IMS area by breaking through the first echelon of operators in Europe and America. The Packet Switch sales doubled, making large-scale breakthroughs with leading solutions in Europe and Latin America. Our EPC was the first commercial application in Europe. In 2009, we launched the IPN 2.0 mobile broadband management solution to help operators improve their operating performance. The Mobile Soft Switch solution (with unified, enabled 2G/3G) grew steadily as a whole, while recording a nearly 100% growth in India. Huawei's Unified Data Center has helped operators to take full advantage of subscriber-centric Subscriber Data Management (SDM), increased by nearly 30% in 2009.

In September 2009, our Mobile Soft Switch solution received the "InfoVision Award" from IEC, with its technical innovation and product reliability receiving industry-wide recognition. Going forward, we will continue to enhance our competitive edge in core network based on unified the ATCA platform, and assist telecom operators to reduce CAPEX and maximize revenue by offering them with innovative and cost-effective products.

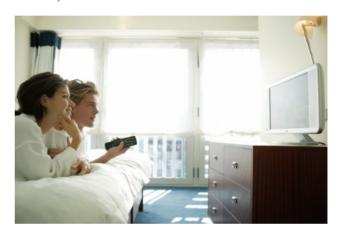
#### **Applications and Software**

Huawei's Applications and Software products and solutions target individual and residential users, enterprise users, as well as carrier operating and supporting systems. Through continuous innovation and open cooperation, we provide customers with end-to-end solutions, including our SDP and Digital Shopping Mall Solution, BSS Solution, Digital Home Solution, Rich Communication Solution (RCS), and Mobile Office Solution.

As part of our commitment to continuous innovation, we have built several application innovation centers in collaboration with operators, which allow us to incubate attractive business applications with top operators around the world. Digital Photo Frame, Widget, Message+, and Mobile Advertisement were a few of the launches in 2009.

We established 12 local R&D centers in countries including

India, Indonesia, Thailand, Russia and Brazil, to rapidly respond to customer needs for customization. We are committed to providing open application environments, intelligent operation platforms and fast professional services, to help operators increase their operating income, improve their efficiency, and ultimately achieve business success.



In 2009, Huawei's SDP solution, as the next generation network platform, gained broad recognition from operators for helping them to reduce TCO, shorten the delivery period, and facilitate business innovations. Along with the rapid development in China, our Mobile Office Solution achieved strong growth and consistent breakthroughs in foreign markets, including Europe, as well. Huawei's Digital Home Solution enables operators to attract end users through a variety of experiences, and IPTV, among others, grew rapidly. Our BSS Solution sustained stable growth in key regions, thanks to our in-depth comprehension of customer needs in reducing costs, improving efficiency and increasing revenue.

#### **Professional Services**

Over the past few years, professional services have expanded quickly in the telecommunications industry. In addition to traditional services such as maintenance, training and network optimization, an increasing number of operators are choosing to outsource more of their non-core business activities and processes to external service providers, which has resulted in significant growth in this area. At the same time, service vendors from traditional telecom equipment suppliers to IT companies and from well-known multi-national enterprises to small localized firms, are starting to strengthen their professional services capabilities to capture more business opportunities. As a result, the competition among vendors has increased.

In 2009, some regional telecom operators reduced investments and tightened cost controls due to the global economic environment, which posed challenges to the service industry. However, it brought new opportunities to Professional Services

as well, in particular Managed Services. Huawei has enhanced global infrastructure and platforms to solidify the strategic partnership with existing customers. Meanwhile, Huawei has also dramatically improved service solution development capabilities and deepened collaboration with new customers. which enables us to expand quickly in the mature markets (especially in Europe, the United States and other markets).

Our Professional Services business, including Network Integration, Customer Support, Managed Services, Network Technology Services, and Learning Services, recorded considerable sales in 2009, which significantly increased our service revenue and reinforced our brand awareness around the world

In 2009, the revenue from our Professional Services business achieved high speed growth over the previous year, especially in China, India, Asia Pacific and Latin America. Substantial growth of equipment sales in China and India has boosted Customer Support and Network Technology Services to develop quickly in these markets. In the more mature European markets, our sales from Professional Services increased only slightly over the previous year. But we made breakthroughs in this area in terms of cooperation with principal operators in the UK, Germany, and Spain, which will lay a solid foundation for accelerated growth in the future.

Through the end of 2009, Huawei was awarded more than 100 Managed Services contracts around the world. We made significant breakthroughs in mature markets, such as Europe and the USA, and we won contracts with operators including Jazztel (Spain), O2 (Germany), Virgin Media (UK), and Cox (USA). Our multi-vendor maintenance capabilities, EOT and Outsourcing, received full recognition from principal operators.



#### Devices

In 2009, we capitalized on opportunities such as the continuous growth of 3G subscribers and services in Europe and the USA, and the issuance of 3G licenses and business growth in China. To guickly respond to customer needs, Huawei Device enhanced the development of local R&D centers and supply systems. We improved cooperation across the industry chain, including design, software, and content to create product competitiveness and quick response capabilities. We also continued to focus on the value proposition of "Partnership, Customization, and Value" and on the operator resale market, and offered intelligent solutions to help telecom operators attract more subscribers and businesses, through creation of a simple and pleasant life for end users.

Our mobile broadband devices continuously ranked first in the global market with 35 million units shipped in 2009. Through continuous innovations we launched a portfolio of products with higher speed and performance. We also took a differentiated, user-friendly approach and enjoyed popularity among operators and consumers.

We shipped more than 30 million mobile phones. Our market share of CDMA mobile phones ranked third in the world and second in China. Our C5600 model gained 38% market share against comparable products. We made significant breakthroughs in the mid-range and high-end CDMA mobile phone market with China Telecom. The revenue from TD-SCDMA mobile phones increased more than tenfold with our customized model for China Mobile, T2211, being ranked among premium models. Huawei successfully cooperated with T-Mobile to launch the world's first Android-based prepaid phone, Pulse. The T-Mobile Pulse sold more than 10,000 units in the first three weeks since its launch in high-end markets such as the UK and Germany. Our U7519 touch phone for the North American market became the best-seller during the 2009 Christmas week in the USA.

For converged terminals, Huawei maintained steady growth in the home access market. We became one of the leading providers of xDSL terminals, with the largest market share in the world. The shipment of our home gateways doubled. Launched for Vodafone, we shipped more than 1 million HG553 units of the world's-first commercial double-uplink gateway, supporting HSPA and ADSL2. Another gateway product, HG536, the world's first DECT gateway that we customized for China Telecom, also gained great popularity among users since its launch.

The revenue from video-conferencing products increased by 40% in 2009. We introduced IMS-based high-definition, intelligence, and fidelity solutions with higher price performance, which was widely recognized by users and



enjoyed rapid growth.

The 3G market will continue to grow as more 3G licenses are expected to be granted in emerging markets. Smartphones will also be a focus of greater development and the mobile broadband market will continue to expand. Meanwhile, the video-conferencing market will be transformed by highdefinition image transmission and we will see more advanced high-end intelligent and hi-fi systems. All of these development trends will bring more opportunities for our full range of devices.

#### **Results of operations**

CNY Million	2009	2008	YOY(%)
Revenue	149,059	125,217	19.0%
Gross margin	39.6%	39.7%	(0.1%)
Total operating expenses and other income as % of revenue	25.4%	26.8%	(1.4%)
Operating margin	14.1%	12.9%	1.2%
Net finance (income)/expense	(1,255)	6,623	(118.9%)
Income tax expense	3,870	1,533	152.4%
Net profit	18,274	7,848	132.8%

The 2009 operating margin was 14.1%, an increase of 1.2 percentage points from 12.9% in 2008. The improved operating margin was benefited from aggressive expense control measures, which were able to absorb a minor decrease in gross margin. Gross margin in 2009 was 39.6%, 0.1 percentage points lower than that of 2008. Among all business units, gross margin for Telecom Network Infrastructure experienced a noticeable decline, but the decline was mitigated by a favorable products mix change, from which resulted in a basically unchanged overall gross margin when comparing to that of 2008. The challenging global and industry economic environments combined with severe competition imposed harsh pressure on gross margins. The Company implemented comprehensive cost management and sought every cost

reduction opportunities in such areas as product development, procurement, manufacturing, delivery and service, to maintain appropriate profitability level while helping customers to lower their total cost of ownership.

Net profit for 2009 was CNY 18,274 million, an increase of 132.8% comparing to that of 2008, driven by revenue growth, improvement in operating margin and benefiting from the change in exchange gain or loss year-on-year. Excluding the effects of change in exchange gains or losses totaling CNY 6,937 million between 2009 and 2008, net profit increased 26.5% in 2009 over the previous year.

#### Total operating expenses and other income

CNY Million	2009	2008	YOY(%)
Research and development expenses	13,340	10,469	27.4%
as % of revenue	8.9%	8.4%	0.5%
Selling, general and administrative expenses	24,169	22,422	7.8%
as % of revenue	16.2%	17.9%	(1.7%)
Other operating expense/(income)	408	670	(39.1%)
as % of revenue	0.3%	0.5%	(0.2%)
Total operating expenses and other income	37,917	33,561	13.0%
as % of revenue	25.4%	26.8%	(1.4%)

The Company strengthened expense control in 2009, took a series of measures to improve process and staff efficiency, and maintained headcount growth at reasonable levels. These effectively lowered the expense ratio (total operating expenses

and other income as a percentage of revenue). The total expense ratio declined 1.4 percentage points year-on-year mainly attributable to the decline in the SG&A expense ratio (which decreased 1.7 percentage points year-on-year). R&D

expense ratio increased 0.5 percentage points year-on-year, as additional R&D investments exceeded the expense reduction from efficiency improvements.

# Net finance(income) / expense

CNY Million	2009	2008	YOY(%)
Exchange (gain) /loss	(1,642)	5,295	(131.0%)
Other net finance expense	387	1,328	(70.9%)
Total Net finance (income) /expense	(1,255)	6,623	(118.9%)

2009 net finance income of CNY 1,255 million compares very favorably to 2008 net finance expense of CNY 6,623 million. This was primarily attributable to the change in foreign exchange gain or loss between 2009 and 2008, which amounted to CNY 6,937 million. Other net finance expense

has a favorable impact of CNY 941 million due to lower interest rates and cash flow improvement which were favorably reflected in borrowing costs and investment incomes.

# **Financial position**

CNY Million	2009	2008	YOY(%)
Non-current assets	15,047	12,512	20.3%
Current assets	124,606	105,728	17.9%
Among which:			
Inventory	24,947	23,044	8.3%
Trade receivables	51,875	44,281	17.1%
Cash and cash equivalents	29,232	21,017	39.1%
Total assets	139,653	118,240	18.1%
Non-current liabilities	13,566	4,646	192.0%
Among which:			
Long-term borrowings	8,490	1,026	727.5%
Current liabilities	82,771	76,140	8.7%
Among which:			
Short-term borrowings	7,887	12,983	(39.3%)
Trade payables	28,393	30,624	(7.3%)
Owner's equity	43,316	37,454	15.7%
Total liabilities and equity	139,653	118,240	18.1%

Cash and cash equivalents as of December 31, 2009 amounted to CNY 29,232 million, an increase of 39.1% comparing to that of December 31, 2008. Cash to Revenue ratio amounted to 19.6% at the end of 2009, versus 16.8% at the end of 2008, an increase of 2.8 percentage points.

**Trade receivables** increased 17.1% year-on-year, mainly due to the revenue growth. The Company continued to improve trade receivable management. Its DSO of 125 days in 2009 was a 2-day improvement comparing to that of 127 days in 2008. **Inventory** increased 8.3% year-on-year. Its ITO of 100 days in 2009 was a 10-day improvement comparing to that of 110 davs in 2008.

Trade payables decreased 7.3% year-on-year. Its DPO of 113 days in 2009 was a 33-day decline comparing to that of 146 days in 2008.

Total long-term and short-term borrowings as of December 31, 2009 amounted to CNY 16,377 million, an increase of 16.9% comparing to that of CNY 14,009 million in 2008, the maturity profile of borrowings has been extended to better match liabilities to assets. The percentage of long-term borrowings in 2009 was 51.8%, an increase of 44.5 percentage points from that of 7.3% at the end of 2008.

#### **Operating cash flow**

CNY Million	2009	2008	YOY(%)
Net profit	18,274	7,848	132.8%
Depreciation, amortization and non-operating loss/(income)	(198)	7,772	(102.5%)
Cash flow before change in operating assets and liabilities	18,076	15,620	15.7%
Change in operating assets and liabilities	3,665	(9,165)	(140.0%)
Cash flow from operating activities	21,741	6,455	236.8%

The Company continued to improve its working capital management in 2009, cascading challenging working capital targets to each operating unit. This achieved an end-to-end working capital management efficiency improvement and attained favorable results comparing to 2008, especially in the area of inventory management.

The net cash inflow from operating activities in 2009 amounted to CNY 21,741 million, an increase of 236.8% year-on-year, which was mainly driven by:

- Improvement in working capital management: The total balance of net operating assets and liabilities as of December 31, 2009 decreased CNY 3,665 million comparing to that of December 31, 2008, while the total balance of net operating assets and liabilities as of December 31, 2008 increased CNY 9,165 million comparing to that of December 31, 2007. This resulted in a yearon-year operating cash inflow increase of CNY 12,830 million.
- Improvement in net profit: The year-on-year operating cash flow increase attributable to profit improvement amounted to CNY 2,456 million after considering the impact of depreciation, amortization and non-operating loss or gain (mainly from unrealized exchange loss or gain).

#### Financial risk management

The Company's Treasury Department is responsible for financial risk management, under the direction of the Finance Committee of the Board of Directors. The Company has stipulated a series of financial risk management policies, that match with our business strategy, to manage liquidity, currency, interest rate and credit risks.

#### Liquidity risk

A strong cash flow from operation is the most important way to manage liquidity risk for the Company. Huawei has established a well functioning cash flow forecasting and planning system. This enables evaluation of short-term and long-term liquidity needs. We use various sources to meet theses liquidity needs: maintaining a reasonable level of cash, obtaining adequate committed credit facilities, and establishing access to global funding sources.

#### Liquidity trends:

CNY Million	2009	2008
Operating cash flow	21,741	6,455
Cash and cash equivalents	29,232	21,017
Committed credit facility	6,136	3,705
Total borrowings	16,377	14,009

#### Currency risk

The Company's reporting currency is CNY. The exchange rate fluctuation between CNY and other currencies will impact the financial statements, either through the income statement or through the equity translation reserve. The Company has established a currency exposure management system, and mitigated currency risk using mainly the natural hedge method, which controls each currency exposure through appropriate selection of transaction currency in such activities as sales, procurement and financing, and selling or buying foreign currencies at spot rates where necessary.

#### Interest rate risk

The Company's interest rate risk arises primarily from noncurrent borrowings. The Company uses the combination of fixed and variable rates borrowings to manage interest rate risk. Borrowings at variable rates and at fixed rates expose the Company to cash flow interest rate risk and borrowing fair value interest rate risk respectively.

#### Credit risk

The Company's credit risk is primarily attributable to trade receivables from customers. The Company has established and implemented standard credit management policies, processes, IT systems and credit risk evaluation models across all the operating geographies. The Company uses the credit risk evaluation model to determine customer credit ratings and credit limits, and implements various key credit control points in the end-to-end sales and collection cycle. The Company's credit management department routinely evaluates global credit risk exposure, estimates potential losses and makes bad debt provisions accordingly. When the credit risk for a specific customer or outstanding trade receivable becomes inappropriately high, a special processing mechanism is initiated to resolve the situation

#### **Research and Development**

The Company is committed to investing in R&D and creating competitive products and solutions. The Company filed 6,770 new patents in 2009, thus accumulatively filed 42,543 patents. According to the World Intellectual Property Organization (WIPO), Huawei ranked second in terms of patents applications under the WIPO Patent Cooperation Treaty (PCT). In addition, Huawei is holding a leading position in terms of essential LTE patents applications.

Huawei proactively joined, supported and made significant contribution to international standards. Huawei has become a member of 123 standards organizations in 2009, taking 148 leadership positions. For example, act as ITU-T SG11 chairperson in ITU, vice president in SG16 and ITU-R SG5.By the end of 2009, we have submitted 18,000 proposals in aggregate. Huawei was widely recognized for its contribution in this area and was the only company that received '2009 Corporate Award' from IEEE Standards Association.

Despite the challenging economic environment, the Company continued to increase its R&D investment in 2009. The R&D expenses in 2009 amounted to CNY 13,340 million, an increase of 27.4% from that of 2008.

In the R&D area, the Company intensively promoted Integrated Product Development (IPD) process. As a result of thorough comprehension of the needs of its customers, the Company dramatically reduced its time to market and facilitated the success of its customers.

Based on our strong innovation capabilities, Huawei won R&D assistance from several government programs in 2009 through competition processes, such as China's Next Generation

Broadband Wireless Networks, Next Generation Internet and EU FP programs etc. For the amount of government grants received, see note 3 to the consolidated financial statements.

#### **Critical Accounting Estimates**

The consolidated financial statements on which this management discussion and analysis was based were prepared in compliance of International Financial Reporting Standards (IFRSs), see note 1(a) to consolidated financial statements for details

The application of IFRSs requires the Company to make judgments, estimates and assumptions that directly affect its reported financial position and operation results. The accounting estimates and assumptions discussed in this section are those that the management considers to be the most critical to the Company's consolidated financial statements.

#### Revenue Recognition

Application of the accounting principles related to the measurement and recognition of revenue requires the Company to make judgments and estimates. Even for the same product, the Company often has to interpret contract terms to determine the appropriate accounting treatments. When services, installation and training etc., are rendered with product sales, it is judged by the Company whether the deliverables should be treated as separate units of accounting. When there are multiple transactions with the same customer, significant judgments should be made whether separate contracts are considered as part of one arrangement according to the contracts terms and conditions. When the installed equipments are accepted by customer in different periods, the Company should determine whether the completed project is able to be used by customer, whether the receivable is collectible and whether revenue is recognized by stages.

Revenue recognition is also impacted by various factors including the credit-worthiness of customer. Estimates of these factors are evaluated periodically to assess the adequacy of the estimates. If the estimates were changed, revenue would be impacted.

For a construction contract, revenue is recognized using the percentage of completion (POC) method, measured by reference to the percentage of contract costs incurred to date to estimated total contract costs for the contract. If at any time these estimates indicate the POC contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately in cost. The revenue of the construction contracts are CNY 14,108 million (9.5% of total revenue) and

CNY 11,239 million (9.0% of total revenue) for the year ended December 31, 2009 and December, 31 2008, respectively.

#### Allowance for Doubtful Accounts

The Company's gross accounts receivable balance was CNY 56.216 million and CNY 48.982 million as of December 31. 2009 and December 31, 2008, respectively. The allowance for doubtful accounts was CNY 4,341 million, or 7.7% of the gross accounts receivable balance, as of December 31, 2009, and CNY 4,701 million, or 9.6% of the gross accounts receivable balance, as of December 31, 2008. The allowance is based on the Company's assessment of the collectability of customer accounts. The Company regularly reviews the allowance by considering factors such as historical experience, credit quality, age of the accounts receivable balances, and current economic conditions that may affect a customer's ability to pay.

The Company's provision for doubtful accounts was CNY 648 million and CNY 670 million for fiscal years ended December 31, 2009 and December 31, 2008, respectively. If a major customer's credit worthiness deteriorates, or if actual defaults are higher than the historical experience, or if other circumstances arise, the estimates of the recoverability of amounts due to the Company could be overstated, and additional allowances could be required, which could have an adverse impact to the Company's profit.

#### Inventories Write-down

The Company's inventory balance was CNY 24,947 million and 23,044 million as of December 31, 2009 and December 31, 2008, respectively. Inventories are carried at the lower of cost or net realizable value. Inventory write downs are measured as the difference between the cost of the inventory and net realizable value, and are charged to the provision for inventory. Net realizable 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. Factors shall be considered at the recognition of net realizable value include: purpose for the inventories held, aging of inventories and percentage of inventory utilization, category and condition of the inventories, subsequent events that have material influence to inventories. Inventory provisions are reviewed at least every quarter to ensure accuracy and reasonableness.

The Company's total provision for inventory charged to income statement was CNY 598 million and 141 million for fiscal years ended December 31, 2009 and December 31, 2008, respectively.

#### Warranty Provision

The liability for product warranties was CNY 1,175 million as of December 31, 2009, compared with CNY 1,274 million as of December 31, 2008. The Company's products are generally

covered by a warranty for 12 months. The Company accrues for warranty costs as part of cost of sales based on associated material costs, technical support labor costs, and associated overhead.

The provision for product warranties issued for fiscal years ended December 31, 2009 and December 31, 2008 was CNY 1,842 million, CNY 1,810 million, respectively.

If the Company experiences an increase in warranty claims compared with the historical experience, or if the cost of servicing warranty claims is greater than expected, the Company's gross margin could be adversely affected.

#### Income Tax

The Company is subject to income taxes in China and numerous foreign jurisdictions. Significant judgment is required in determining the consolidated provision for income taxes.

During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. The Company recognizes tax liabilities for anticipated tax issues based on estimates of whether additional taxes will eventually be due. The Company believes that its accruals for tax liabilities are adequate for all open audit years based on its assessment of many factors including past experience and interpretations of tax law. While the deferred tax assets recognized is to the extents that the deferred tax assets can be utilized based on the assessment of future taxable income.

Since the tax assessment relies on estimates and assumptions and may involve a series of complex judgments about future events, 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.



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

We are the auditor of Huawei Technologies 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 financial year ended December 31, 2009. We have issued an unqualified audit report dated March 15, 2010 on the audited consolidated financial statements of the Group for the financial year ended December 31, 2009.

Huawei Technologies 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 20 to 40 comprising the consolidated balance sheet as at December 31, 2009, the consolidated income statement, the consolidated statement of cash flow for the year then ended, and an accounting policy summary and other explanatory notes, which is derived from the audited consolidated financial statements of the Group.

We conducted our engagement in accordance with International Standard on Auditing 800, the independent auditor's report on special purpose audit engagements. Our responsibility is to express an opinion on the consolidated financial statement summary based on our procedures conducted. 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.

In our opinion, the consolidated financial statements summary is consistent, in all material respects, with the audited consolidated financial statements of the Group for the financial year ended December 31, 2009 from which they are derived.

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

> KPMG Huazhen Certified Public Accountants

9th Floor, China Resources Building 5001 Shennan East Road Shenzhen 518001, China

March 25, 2010

# Consolidated Income Statement

	Note	2009	2008
		CNY'million	CNY'million
Revenue	2	149,059	125,217
Cost of sales		90,090	75,459
Gross profit		58,969	49,758
Research and development expenses		13,340	10,469
Selling, general and administrative expenses		24,169	22,422
Other operating expenses, net	3	408	670
Operating profit before financing costs		21,052	16,197
Net finance (income) / expense	4	(1,255)	6,623
Share of losses of associates / jointly controlled entities		163	193
Profit before income tax		22,144	9,381
Income tax expenses	5	3,870	1,533
Profit for the year		18,274	7,848
Attributable to:			
Equity holders of the company		18,253	7,855
Minority interests		21	(7)
Profit for the year		18,274	7,848

# Consolidated Balance Sheet

	Note	2009	2008
		CNY'million	CNY'million
Assets			
Property, plant and equipment	6	8,317	7,285
Intangible assets	7	553	127
Investments in associates and jointly controlled entities	8	311	490
Other non-current financial assets		108	225
Deferred tax assets	9	5,147	3,742
Other non-current assets		611	643
Total non-current assets		15,047	12,512
Inventories	10	24,947	23,044
Trade and other receivables	11	63,282	52,854
Other financial assets		7,145	8,813
Cash and cash equivalents	12	29,232	21,017
Total current assets		124,606	105,728
Total assets		139,653	118,240
Equity			
Equity attributable to equity holders of the company		43,253	37,421
Minority interests		63	33
Total equity		43,316	37,454
Liabilities			
Borrowings	13	8,490	1,026
Defined benefit post-employment obligations		3,512	2,791
Deferred government grants		933	626
Deferred tax liabilities	9	631	203
Total non-current liabilities		13,566	4,646
Borrowings	13	7,887	12,983
Income tax payable		3,696	1,355
Trade and other payables	14	70,013	60,528
Provisions for warranties	15	1,175	1,274
Total current liabilities		82,771	76,140
Total liabilities		96,337	80,786
Total equity and liabilities		139,653	118,240

# Consolidated Statement of Cash Flow

	Note	2009	2008
		CNY'million	CNY'million
Cash flows from operating activities			
Cash receipts from customers		165,802	114,612
Cash paid to suppliers and employees		(141,411)	(105,745)
Other operating cash flows		(2,650)	(2,412)
Net cash from operating activities		21,741	6,455
Net cash used in investing activities		(5,219)	(12,477)
Net cash (used in) / from financing activities		(8,384)	13,992
Net increase in cash and cash equivalents		8,138	7,970
Cash and cash equivalents at January 1		21,013	13,822
Effect of foreign exchange rate changes		81	(779)
Cash and cash equivalents at December 31	12	29,232	21,013

# **Notes to the Consolidated Financial Statements Summary**

# 1. Basis of preparation of consolidated financial statements summary and significant accounting policies of the Group

#### (a) Basis of preparation

Huawei Technologies Co., Ltd. (the "Company") and its subsidiaries (the "Group") have prepared a full set of consolidated financial statements ("consolidated financial statements") for the year ended December 31, 2009 in accordance with International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual IFRSs, International Accounting Standards and Interpretations issued by the International Accounting Standards Board.

This consolidated financial statements summary has been prepared and presented based on the audited consolidated financial statements for the year ended December 31, 2009.

#### (b) Functional and presentation currency

This consolidated financial statements summary is presented in Chinese Yuan, which is the Company's functional currency. All financial information presented in Chinese Yuan has been rounded to the nearest million.

# (c) Translation of foreign currencies

#### i) Foreign currency transactions

Transactions in 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 at the foreign exchange rates ruling at the balance sheet date. Exchange gains and losses are recognised in the consolidated income statement.

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 determined.

#### ii) Foreign operations The results of foreign operations, except for foreign operations in hyperinflationary economies, are

translated into Chinese Yuan at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Balance sheet items are translated into Chinese Yuan at the closing foreign exchange rates at the balance sheet date. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve.

The results of foreign operations in hyperinflationary economies are translated to Chinese Yuan at the exchange rate ruling at the balance sheet date. 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 currency. The restatement is based on relevant price indices at the balance sheet date.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to the consolidated income statement when the profit or loss on disposal is recognised.

#### d) Subsidiaries and minority interests

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable are taken into account.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Minority interests represent the portion of the net assets of subsidiaries attributable to interests that are not owned by the Company, whether directly or indirectly through subsidiaries, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of

a financial liability. Minority interests are presented in the consolidated balance sheet within equity, separately from equity attributable to the equity holders of the Company. Minority interests in the results of the Group are presented on the face of the consolidated income statement as an allocation of the total profit or loss for the year between minority interests and the equity holders of the Company.

Where losses applicable to the minority exceed the minority's interest in the equity of a subsidiary, the excess, and any further losses applicable to the minority. are charged against the Group's interest except to the extent that the minority has a binding obligation to, and is able to, make additional investment to cover the losses. If the subsidiary subsequently reports profits, the Group's interest is allocated all such profits until the minority's share of losses previously absorbed by the Group has been recovered.

#### (e) Associates and jointly controlled entities

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 jointly controlled entity is an entity which operates under a contractual arrangement between the Group and other parties, which the contractual arrangement establishes that the Group and one or more of the other parties share joint control over the economic activity of the entity.

An investment in an associate or a jointly controlled entity is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost and adjusted thereafter for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see note 1(j)). The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated income statement, whereas the Group's share of post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the jointly controlled entity, the Group's interest is reduced to Nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with the Group's long-term interests that in substance form part of the Group's net investment in the associate or the jointly controlled entity.

Unrealised profits and losses resulting from transactions between the Group and its associates and jointly controlled entities 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 the consolidated income statement.

#### (f) Investment properties

Investment properties are buildings which are owned to earn rental income and /or for capital appreciation. Investment properties are stated in the consolidated balance sheet at cost less depreciation and impairment losses (see note 1(j)). Rental income from investment properties is accounted for as described in note 1(t)(iv).

Depreciation is calculated to write off the cost of buildings, less their estimated residual value, using the straight line method over their estimated useful life.

#### (g) Other property, plant and equipment

#### i) Recognition and measurement

Items of property, plant and equipment are stated in the consolidated balance sheet at cost less accumulated depreciation (see below) and impairment losses (see note 1(j)). Cost includes expenditures that are directly attributable to the acquisition of the assets. The cost of self-constructed items of property, plant and equipment includes 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 (see note 1(u)).

Where parts of an item of property, plant and equipment have different useful lives, the cost is allocated on a reasonable basis between the parts and each part is depreciated separately.

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 the consolidated income statement on the date of retirement or disposal.

#### ii) Subsequent costs

The cost of replacing part of an item of property. plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in the consolidated income statement as incurred.

#### iii) 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. Both the useful life of an item of property, plant and equipment and its residual value, if any, are reviewed annually.

#### (h) Intangible assets

#### i) 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. Because of the nature of the Group's research and development activities, 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. Hence both research costs and development costs are generally recognised as expenses in the period in which they are incurred.

#### ii) Other intangible assets

Other intangible assets that are acquired by the Group are stated in the consolidated balance sheet at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 1(j)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

#### iii) Amortisation

Amortisation of intangible assets with finite useful lives is recognised in the consolidated income statement on a straight-line basis over the assets'

estimated useful lives. Both the period and method of amortisation are reviewed annually.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out above.

#### (i) Leased assets

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that 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. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

#### i) Classification of assets leased to the Group Assets that are held by the Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. 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 in the consolidated income statement 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 the consolidated income statement as an integral part of the aggregate net lease payments made. Contingent rentals are charged to the consolidated income statement in the accounting period in which they are incurred.

#### (j) Impairment of assets

i) Impairment of investments in debt and equity securities and receivables

Investments in debt and equity securities and other

current and non-current receivables that are stated at cost or amortised cost or are classified as available-forsale securities are reviewed at each balance sheet date 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; and
- a significant or prolonged decline in the fair value of an investment in an equity instrument below its

If any such evidence exists, any impairment loss is determined and recognised as follows:

- For investments in associates and jointly controlled entities recognised using the equity method (see note 1(e)), the impairment loss is measured by comparing the recoverable amount of the investment as a whole with its carrying amount in accordance with note 1(j)(ii). The impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount in accordance with note 1(j)(ii).
- For unquoted equity securities carried at cost, the impairment loss is measured as the difference between the carrying amount of the financial asset and the estimated future cash flows, discounted at the current market rate of return for a similar financial asset where the effect of discounting is material. Impairment losses for equity securities are not reversed.
- For trade and other current receivables and other financial assets carried at amortised cost, the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate (i.e. the effective interest rate computed at initial recognition of these assets), where the effect of discounting is material. This assessment is made collectively where financial assets carried at amortised cost share similar risk characteristics, such as similar past due status, and have not been individually

assessed as impaired. Future cash flows for financial assets which are assessed for impairment collectively are based on historical loss experience for assets with credit risk characteristics similar to the collective group.

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, the impairment loss is reversed through profit or loss. A reversal of an impairment loss shall not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

For available-for-sale securities, the cumulative loss that has been recognised directly in the fair value reserve is reclassified to the consolidated income statement. The amount of the cumulative loss that is recognised in the consolidated income statement is the difference between the acquisition cost (net of any principal repayment and amortisation) and current fair value. less any impairment loss on that asset previously recognised in the consolidated income statement.

Impairment losses recognised in the consolidated income statement in respect of available-for-sale equity securities are not reversed through profit or loss. Any subsequent increase in the fair value of such assets is recognised in other comprehensive

Impairment losses are written off against the corresponding assets directly, except for impairment losses recognised in respect of trade debtors and bills receivable included within trade and other receivables, whose recovery is considered doubtful but not remote. In this case, the impairment losses for doubtful debts are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against trade debtors and bills receivable directly and any amounts held in the allowance account relating to that debt are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in the consolidated income statement.

#### ii) Impairment of other assets

Internal and external sources of information are reviewed at each balance sheet date to identify indications that the following assets may be impaired or an impairment loss previously recognised no longer exists or may have decreased:

- property, plant and equipment;
- long term prepayments; and
- intangible assets

If any such indication exists, the asset's recoverable amount is estimated. In addition, for intangible assets that are not yet available for use and intangible assets that have indefinite useful lives, the recoverable amount is estimated annually whether or not there is any indication of impairment.

#### Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cashgenerating unit).

#### • Recognition of impairment losses

An impairment loss is recognised in the consolidated income statement whenever the carrying amount of an asset, or the cashgenerating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to sell, or value in use, if determinable.

# Reversals of impairment losses

An impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

#### (k) Inventories

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

Cost is calculated using the standard cost method with periodical adjustments of cost variance to arrive at the actual cost, which approximates actual cost on a first-in first-out basis. The cost of inventories includes expenditure incurred in acquiring the inventories and bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost 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. The amount of 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. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

#### (I) Construction contracts

Construction contracts are contracts specifically negotiated with a customer for the construction of an assets or a group of assets, where the customer is able to specify the major structural elements of the design. The accounting policy for contract revenue is set out in note 1(t)(ii). When the outcome of a construction contract can be estimated reliably, contract costs are recognised as an expense by reference to the stage of completion of the contract at the balance sheet date. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately. When the outcome of a construction contract cannot be estimated reliably,

contract costs are recognised as an expense in the period in which they are incurred.

Construction contracts in progress at the balance sheet date are recorded in the consolidated balance sheet at the net amount of costs incurred plus recognised profit less recognised losses and progress billings, and are presented in the consolidated balance sheet of the consolidated financial statements as the "Gross amount due from customers for contract work" (as an asset) or the "Gross amount due to customers for contract work" (as a liability), as applicable. Progress billings not vet paid by the customer are included in the consolidated balance sheet of the consolidated financial statements under "Trade and other receivables". Amounts received before the related work is performed are included in the consolidated balance sheet of the consolidated financial statements, as a liability, as "Trade and other payables".

#### (m) Trade and other receivables

Trade and other receivables are initially recognised at fair value and thereafter stated at amortised cost less impairment losses for bad and doubtful debts (see note 1(i).

#### (n) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between the amount initially recognised and redemption value being recognised in the consolidated income statement over the period of the borrowings, together with any interest and fees payable, using the effective interest

#### (o) Trade and other payables

Trade and other payables are initially recognised at fair value and thereafter stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

### (p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and call deposits with banks. 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 consolidated cash flow statement.

#### (q) Employee benefits

i) Short-term employee benefits and contributions to defined contribution retirement plans Salaries, annual bonuses 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 plan obligations

The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine the present value and the fair value of any plan assets is deducted. The discount rate is the yield at the balance sheet date on government bonds that have maturity dates approximating the terms of the Group's obligations. The calculation is performed by management using the projected unit credit method.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised as an expense in the consolidated financial statements on a straight line basis over the average period until the benefits become vested. If the benefits vest immediately, the expense is recognised immediately in the consolidated income statement.

In calculating the Group's obligation in respect of a plan, any actuarial gain or loss is recognised in the consolidated income statement immediately.

#### (r) Provision for product warranties and other provisions and contingent liabilities

#### i) Provision for product warranties

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

ii) Other 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 estimated reliably, the obligation is disclosed as a 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.

#### (s) 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 the consolidated income statement 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 balance sheet date, and any adjustment to tax payable in respect of previous vears

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being 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.

All deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. 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.

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 balance sheet date. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at each balance sheet date 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 the legally enforceable right 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.

#### (t) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Provided 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 the consolidated income statement as follows:

#### i) Sale of goods and services rendered

Revenue from sales of goods is recognised when the significant risks and rewards of ownership of goods have been transferred to the buyer. Revenue from 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) Contract revenue

When the outcome of a construction contract can be estimated reliably, revenue from a fixed price contract is recognised using the percentage of completion method, measured by reference to the percentage of contract costs incurred to date to estimated total contract costs for the contract; and When the outcome of a construction contract cannot be estimated reliably, revenue is recognised only to the extent of contract costs incurred that it is probable will be recoverable.

#### iii) Government grants

Government grants are recognised in the consolidated balance sheet initially 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 revenue in the consolidated income statement 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 subsequently are recognised in the consolidated income statement on a systematic basis over the useful life of the asset.

### iv) Rental income from operating leases Rental income receivable under operating leases is

recognised in the consolidated income statement 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 the consolidated income statement 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.

#### (u) Net finance expense

Finance income comprises dividend and interest income on funds invested (including available-for-sale financial assets), gains on the disposal of availablefor-sale financial assets, and changes in the fair value of financial assets held for trading. Interest income is recognised as it accrues using the effective interest method. Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established; dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions and impairment losses recognised on financial assets. 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.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

Foreign currency gains and losses are reported on a net basis.

#### (v) Without recourse factoring expenses

Factoring without recourse constitutes transfer of trade receivables. The Group transfers its trade receivables to banks or financial institutes; the bank or the financial institute fully bears the collection risk without the right to receive payments from the Group in the event a loss occurs due to the non-collectibility of the receivables transferred. The Group's customers make payments of the receivables transferred directly to the bank or the financial institute.

In a factoring without recourse, trade receivables transferred are derecognised from the consolidated balance sheet. Excess of carrying amount of trade receivables over cash received from the banks or financial institutes arising from factoring without recourse is included in the "Other operating expenses" of the consolidated income statement.

#### 2. Revenue

	2009	2008
	CNY'million	CNY'million
Sales of goods	115,306	99,588
Provision of services	19,578	14,310
Revenue from construction contract	14,108	11,239
Rental income	67	80
	149,059	125,217

### 3. Other operating expenses, net

	2009	2008
	CNY'million	CNY'million
Gains from internally generated intangible assets injected into a jointly controlled entity	-	(506)
Government grants	(273)	(241)
Without recourse factoring expenses	727	1,342
Others	(46)	75
	408	670

# Gains from internally generated intangible assets injected into a jointly controlled entity

The Group set up a jointly controlled entity with Symantec Corporation ("Symantec"), namely Huawei Symantec Technologies Co., Limited ("Huawei Symantec"). Pursuant to the contribution agreement dated February 5, 2008, Symantec contributed USD 150,000,000 in cash, as well as certain intellectual properties with carrying value of Nil in Symantec's book in exchange for 49% equity interests in Huawei Symantec. The Group contributed HKD 45,000,000, as well as its internally generated trademark, network storage and security appliance technology (including patents, license and in process research and development projects) and customer relationships with carrying value of Nil in the Group's book for the rest 51% equity interest in Huawei Symantec. The excess of the Group's share of total cash contributions by Symantec and the Group over its HKD 45,000,000 cash contribution was recognised as gains in the consolidated income statement.

#### Government grants

During the year, the Group received unconditional government grants of CNY 251,006,000 in respect of its contributions to the development of new high-technology in the PRC (2008: CNY 130,183,000). These grants were directly recognised as other operating income.

For the year ended December 31, 2009, the Group received grants of CNY 328,445,000 (2008: CNY 487,017,000) which were conditional upon completion of certain research and development projects. These grants were initially recognised in the consolidated balance sheet as deferred income and amortised through the consolidated income statement on a systematic basis in the same periods in which the expenses are incurred. During 2009, CNY 22,296,000 of conditional government grants were recognised in the consolidated income statement (2008: CNY 110,782,000).

#### 4. Net finance (income) / expense

	2009	2008
	CNY'million	CNY'million
Net foreign exchange (gain) / loss	(1,642)	5,295
Other net finance expenses	387	1,328
	(1,255)	6,623

### 5.Income tax in the consolidated income statement

	2009	2008
	CNY'million	CNY'million
Current tax		
- current year profit	4,673	2,341
- under-provision in respect of prior years	24	65
Deferred tax		
Origination and reversal of temporary difference	(827)	(873)
	3,870	1,533

#### 6. Property, plant and equipment

	Land and buildings	Machinery, electronic equipment and other equipment	Motor vehicles	Construction in progress	Investment properties	Decoration and leasehold improvements	Total
	CNY'million	CNY'million	CNY'million	CNY'million	CNY'million	CNY'million	CNY'million
Cost:							
At December 31, 2009	3,082	9,963	351	2,042	434	1,892	17,764
At December 31, 2008	2,921	9,013	381	839	434	1,755	15,343
Depreciation and impairment loss:							
At December 31, 2009	867	6,532	208	-	216	1,624	9,447
At December 31, 2008	705	5,511	217	-	192	1,433	8,058
Carrying amounts:							
At December 31, 2009	2,215	3,431	143	2,042	218	268	8,317
At December 31, 2008	2,216	3,502	164	839	242	322	7,285

# **Investment properties**

The Group is engaged in the manufacturing, sales and marketing of telecommunication equipment and the provision of related services. Beginning from January 1, 2004, it leased certain buildings to an ex-subsidiary and a former related company. Such buildings are classified as investment properties.

The carrying value of investment properties as of December 31, 2009 is CNY 217,733,000 (2008: CNY 241,682,000). The fair value of investment properties as of December 31, 2009 is estimated by the directors to be CNY 358,745,000 (2008: CNY 466,386,000).

The fair value of investment properties is determined by the Group internally by reference to market conditions and discounted cash flow forecasts. The Group's current lease agreements, which were entered into on an arm's-length basis, were taken into account.

## 7. Intangible assets

	Software	Patents	Trademark	Total
	CNY'million	CNY'million	CNY'million	CNY'million
Cost:				
At December 31, 2009	697	607	25	1,329
At December 31, 2008	164	476	24	664
Amortization and impairment loss: At December 31, 2009	352	403	21	776
At December 31, 2008	155	362	20	537
Carrying amounts:				
At December 31, 2009	345	204	4	553
At December 31, 2008	9	114	4	127

## 8.Investments in associates and jointly controlled entities

The Group has the following investment in associates:

Name of associate	Form of business structure	Ownership region		nership entage	Principal activity
TD Tech Holding Limited	Incorporated	Hong Kong	2009	2008 49%	Research and development, production and sale of TD- SCDMA telecom products
Industria Electrónica Orinoquia S.A	Incorporated	Caracas, Venezuela	35%	-	Research and development, production and sale of telecommunication terminals

The Group's unrecognised share of losses for the year ended December 31, 2009 and cumulative post-acquisition losses as at that date in the above associates was Nil (2008: CNY 168,185,000) and Nil (2008: CNY 189,659,000), respectively.

Summary financial information on the associates:

	Assets	Liabilities	Equity	Revenues	Profit /(Loss)
	CNY'million	CNY'million	CNY'million	CNY'million	CNY'million
2009 100 percent	1,089	866	223	5,096	610
2008 100 percent	193	597	(404)	182	(343)

Details of the Group's interest in the jointly controlled entities are as follows:

Name of jointly controlled entity	Form of business structure	Country /region	Ownership percentage	Principal activity
Huawei Symantec	Incorporated	Hong Kong	51%	Research and development, production and sale of network storage and security products
Huawei Marine Systems Co., Limited	Incorporated	Hong Kong	51%	Construction and operation of submarine fibres

Summary financial information on jointly controlled entities - Group's effective interest:

	2009	2008
	CNY'million	CNY'million
Non-current assets	39	24
Current assets	787	676
Non-current liabilities	(2)	(1)
Current liabilities	(489)	(209)
Net assets	335	490
Income	1,011	438
Expenses	(1,175)	(631)
Total	(164)	(193)

## 9. Deferred tax assets and liabilities

	2009	2008
	CNY'million	CNY'million
Accrual and provision	2,810	1,755
Property, plant and equipment	140	121
Impairment	545	265
Unrealised profit	1,631	889
Tax losses	1	681
Undistributed profits of subsidiaries	(493)	(149)
Other deductible differences	20	31
Other taxable differences	(138)	(54)
Total	4,516	3,539

## 10. Inventories

	2009	2008
	CNY'million	CNY'million
Raw materials	5,015	4,487
Work in progress	2,335	2,217
Finished goods	7,238	7,081
Goods delivered but not completely installed	12,940	11,216
	27,528	25,001
Less: Provision for obsolescence	(2,581)	(1,957)
	24,947	23,044

### 11. Trade and other receivables

	2009	2008
	CNY'million	CNY'million
Trade receivables	51,875	44,281
Gross amount due from customers for contract work	4,253	4,682
Non-trade receivables	7,154	3,891
	63,282	52,854

## Impairment of trade receivable

Impairment losses in respect of trade receivable are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against of the trade receivables directly (see note 1(j)).

The movement in the allowance for impairment in respect of trade receivables during the year is as follows:

	2009	2008
	CNY'million	CNY'million
At January 1	4,701	4,189
Impairment loss recognised and reversed during the year	648	670
Uncollectible amounts written off	(1,008)	(158)
At December 31	4,341	4,701

## 12. Cash and cash equivalents

	2009	2008
	CNY'million	CNY'million
Call deposits	16	200
Cash and bank balances	29,216	20,817
Cash and cash equivalents in the consolidated balance sheet	29,232	21,017
Bank overdraft		(4)
Cash and cash equivalents in the consolidated statement of cash flows	29,232	21,013

## 13. Borrowings

Terms and conditions of outstanding borrowings were as follows:

	Total	1 year or less	1 to 5 years	Above 5 years
	CNY'million	CNY'million	CNY'million	CNY'million
EUR	1,885	1,078	807	-
USD	11,574	4,642	6,932	-
CNY	2,265	1,515	-	750
Other currency	653	652	1	
Total	16,377		7,740	

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

All of the Group's bank facilities are subject to the fulfilment of covenants relating to certain of the Group's balance sheet ratios, as are commonly found in lending agreements with banks. If the Group were to breach the covenants, the draw down facilities would become payable on demand. As at December 31, 2009, none of the covenants relating to draw down facilities had been breached (2008: Nil).

## 14. Trade and other payables

	2009	2008
	CNY'million	CNY'million
Trade payables	28,393	30,624
Bills payable	13,690	9,982
Gross amount due to customers for contract work	781	864
Non-trade payables and accrued expenses	27,149	19,058
	70,013	60,528

## 15. Provisions for warranties

	2009	2008
	CNY'million	CNY'million
Balance at January 1	1,274	1,104
Provisions made during the year	1,842	1,810
Provisions used during the year	(1,941)	(1,640)
Balance at December 31	1,175_	1,274

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 services and anticipated rates of warranty claims for new products. The Group expects to settle majority of the liability within the next twelve months.

## 16. Operating leases

## Leases as lessee

Non-cancellable operating lease rentals are payable as follows:

	2009	2008
	CNY'million	CNY'million
Less than one year	305	371
Between one and two years	145	229
Between two and five years	55	174
Above five years	83	-
	588	774

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

During the year ended December 31, 2009, CNY 1,786,628,000 was recognised as an expense in the consolidated income statement in respect of operating leases (2008: CNY 1,137,921,000).

#### Leases as lessor

The Group leases out certain of its properties under operating leases (see note 2). Non-cancellable operating lease rentals are receivable as follows:

	2009	2008
	CNY'million	CNY'million
Less than one year	42	8
Between one and five years	58	31
Above five years	1	
	101	39

During the year ended December 31, 2009, CNY 66,836,000 was recognised as rental income in the consolidated income statement (2008: CNY 80,102,000).

### 17. Capital commitments

## Acquisition and construction of buildings

Capital commitments of the Group in respect of acquisition and construction of buildings are summarized as follows:

	2009	2008
	CNY'million	CNY'million
Contracted for	1,469	974
Authorised but not contracted for	291	2,507
	1,760	3,481

## **Corporate Governance Report**

#### **Shareholders**

Huawei Technologies Co., Ltd. (the "Company" or "Huawei") is a wholly owned subsidiary of Shenzhen Huawei Investment & Holding Co., Ltd. ("Huawei Holding"). Huawei Holding is solely owned by employees of the Company, without any third parties, including the government bodies, holding any of its shares.

As of 31 December 2009, the shareholders and their respective shareholding in Huawei Holding are as follows:

Shareholder	Shareholding (%)
The Union of Shenzhen Huawei Investment & Holding Co., Ltd. (the "Union")	98.58%
Ren Zhengfei	1.42%

Huawei Holding implements an Employee Shareholding Scheme (the "Scheme") through the Union, which currently involves 61,457 employees, who are represented by and exercise their rights through the elected representatives. In addition, the Scheme effectively aligns the personal goals of employees with the Company's long-term development, fostering the continuing success of Huawei.

### **Corporate Governance Structure**

Huawei has established a clear and comprehensive governance framework, which is the cornerstone of sound corporate performance and sustainable growth.



### **Board of Directors**

The Board, which comprises nine members, has the overall responsibility to oversee operations and management of the Company. Its key roles and responsibilities include:

- Approving the Company's strategic directions and its medium to long-term business plan
- Approving the Company's major financial arrangements and business transactions
- Approving the Company's operational and financial results
- Establishing and reviewing the governance structure in accordance with the development of the Company and changes in the operating environment
- Overseeing the establishment and maintenance of the Company's monitoring mechanism
- Providing advice and guidance to management regarding significant issues encountered
- Approving the appointment and remuneration of the Chief Executive Officer; establishing the succession plans for the Chief Executive Officer and other senior management
- Approving the appointment and remuneration policy of senior management and their performance evaluations

In 2009, the Board of Directors reviewed and approved the Company's three-to-five-year strategic plan, the annual business plan and budget, the appointment and remuneration of senior management, and process enhancement programs. In addition, the Board of Directors passed various resolutions on the Company's strategic directions, financing arrangements and major contracts.

The Board of Directors has established the Audit Committee, the Finance Committee and the Human Resources Committee to assist the Board in overseeing the Company's operations.



#### **Audit Committee**

The Audit Committee consists of seven members, including Directors and the Chief Internal Auditor. The key roles and responsibilities of the Audit Committee include:

- Approving the Company's risk management strategies and internal control framework
- Reviewing the Company's internal audit plan, monitoring its execution results, and overseeing the implementation of internal control improvement measures
- Monitoring management's and employees' integrity and the Company's compliance with rules and regulations
- Approving the appointment of independent auditor together with the Board of Directors, and evaluating the performance of the independent auditor

The Audit Committee generally holds meetings on a quarterly basis. Five meetings were held in 2009 to review the Company's risk management strategies and approve the annual internal audit plan. In addition, the Audit Committee monitored the Company's internal control effectiveness through regular reports from the Internal Audit Department and Global Process Owners (GPO), such as the Audit Trend Report, the Semi-annual Control Assessment (SACA) and the GPO Internal Control Reports. The Audit Committee also approved the guiding principles on the Business Conduct Guidelines (BCG) compliance. During 2009, the Audit Committee discussed the management letter with the independent auditor.

#### **Finance Committee**

The Finance Committee consists of ten members, including Directors and senior financial executives. The key roles and responsibilities of the Finance Committee include:

- Reviewing the Company's medium to long-term business plan and annual financial budget
- Reviewing financial strategies, policies and major transactions in capital structure, corporate financing activities, major investments such as mergers and acquisitions, and divestures
- Monitoring the Company's operational and financial results and ensuring integrity of financial information.

The Finance Committee generally holds meetings on a monthly basis, and may call for special sessions when necessary. Nine meetings were held in 2009 to review the Company's financial and operational management, and approve policies of capital investments, subsidiaries and joint ventures management, credit management, corporate financing and assets management, etc.

#### **Human Resources Committee**

The Human Resources Committee consists of seven members. including Directors and human resources executives. The key roles and responsibilities of the Human Resources Committee

- Evaluating the Company's human resources strategy and
- Reviewing the Company's medium to long-term human resources plan and annual budget
- Reviewing the appointment, performance evaluation, remuneration, and succession plan of the Company's middle and senior management
- Assessing and approving any fast-track promotion

The Human Resources Committee generally holds meetings on a monthly basis. Twelve meetings were held in 2009, focusing on the management and succession plans of executives, the enhancement of the remuneration and incentive policies, corporate structure and performance, as well as human resources management process.

#### **Executive Management Team**

The Board has delegated the management of the Company's daily operations to the Executive Management Team (EMT). The key roles and responsibilities of the EMT include:

- Establishing and communicating the vision, mission and core values of the Company
- Providing recommendations to the Finance Committee regarding the capital structure and investments, including major capital investments, mergers and acquisitions, and investments in new markets
- Formulating the Company's medium to long-term business plan, the annual operational plan and budget for the Board's approval
- Approving the operational plans and budgets of each business unit, market unit and functional unit
- Identifying, managing, and anticipating risks that the Company faces, and determining the risk management strategies and measures
- Setting policies and guidelines for information security, especially IPR protection
- Reviewing the Company's annual human resources plan, including key performance indicators and remuneration policies

The EMT has established the Strategy and Customer Standing Committee, the Business Transformation Executive Steering Committee, and the Investment Review Board to assist the EMT to manage the Company's strategic development, business transformation and product investment, respectively.



## **Supervisory Board**

Pursuant to the requirements of the Company Law of the People's Republic of China, Huawei has established a Supervisory Board, which consists of five members who are elected by the shareholders.

The key roles and responsibilities of the Supervisory Board include overseeing the Company's financial and operational results, and monitoring the performance of the Directors, Chief Executive Officer and other senior management. Members of the Supervisory Board attend Board meetings as observers.

#### **Independent Auditor**

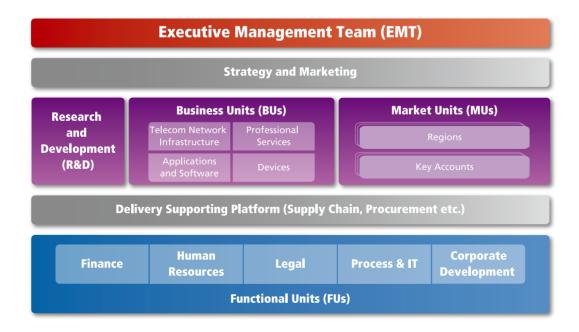
Independent auditor is responsible for auditing the Company's financial statements in accordance with applicable accounting standards and audit procedures, and expresses an opinion as to whether the financial statements are true and fair.

The scope of the financial audit and the annual audit results are subject to the review of the Audit Committee. Any relationship or service that may potentially affect the objectivity and independence of the independent auditor is reviewed by the Audit Committee. The independent auditor may also discuss with the Audit Committee for any audit issues identified or any difficulties encountered during the course of the financial audits. In 2009, the Audit Committee has several meetings with the independent auditor.

Huawei has selected KPMG as the independent auditor of the Company since 2000.

## **Corporate Structure and Organization**

The Company adopts a matrix structure under the EMT that consists of Strategy and Marketing, R&D, Business Units (BUs), Market Units (MUs), Delivery Supporting Platform, and Functional Units (FUs).



Strategy and Marketing is responsible for leading the strategic development of the Company, including business development, corporate branding and communications, formulating business plans and monitoring business performance.

In addtion to the R&D Base located in Shenzhen. Huawei has established 17 R&D centres globally. Through collaborating with the leading telecommunication operators, the Company has also established over 20 innovation centres worldwide, in order to continuously enhancing the competitive edge of the Company's products and solutions.

Huawei has four BUs, namely Telecom Network Infrastructure, Applications and Software, Professional Services and Devices. Based on our continuous innovation and customer-centric approach, we provide customers with quality and leading-edge products and services in a cost-effective manner.

The MUs, including Regions and Key Accounts, are responsible for the Lead to Cash (LTC) process. By strengthening operational management and capabilities at regional level, the MUs ensure the Company's strategies are effectively implemented in each geographic location. In particular, Regions are responsible for their respective operational targets and customer service levels. The Key Accounts formulates and executes customer relationship management policy and mobilize resources accordingly to maintain high customer satisfaction level.

The Delivery Supporting Platform forms a timely, accurate, quality and cost effective delivery mechanism to meet customers' needs through the global end-to-end functions of procurement, manufacturing and logistics.

FUs, including the Finance Function, Human Resources Department, Legal Department, Process & IT Department and Corporate Development Department etc., provide resources and support to the Company's business functions, and improve operational efficiency through optimization of structures, processes, systems and tools.

## **Continuous Improvement of Management Systems**

Huawei has been implementing a structured and customeroriented management system since 1997. With the assistance of the world's top management consulting companies, the Company has aligned its management processes with international leading practices in respect of research and development, supply chain management, client relationship management, human resources management, financial controls and quality assurance processes, etc, including:

- Core competency enhancement through restructuring of strategy management, demand management, quality management and end-to-end delivery processes
- Transformation of customer relationship management process, focusing on customers' needs and maximizing values for customers and Huawei
- An Integrated Product Development(IPD) process to ensure customer-oriented R&D and an Integrated Supply Chain(ISC) management process to ensure the end-to-end delivery.
- Transformation of Integrated Financial Services (IFS) that covers all key financial aspects to support the Company's rapid growth and globalization strategy
- A world-class human resources management system to support the Company's business operations worldwide
- Enhancement of quality assurance management and product design process to achieve higher efficiency and better quality

#### Alignment of business strategy and goals

Huawei has utilized balanced scorecards to manage organizational performance. Corporate goals are communicated top-down to business functions to align business activities, covering client relationship management, internal operations, employee development, and financial management. The assignment of business targets enables different business functions to take ownership of their responsibilities to achieve the Company's short and long-term objectives.

The balanced scorecards of each function are reviewed and revised on an annual basis, to align with the annual business plan and budget. In addition, the setting, monitoring and annual assessment of individual employee and business function performance targets ensure the Company's strategies and goals are embedded throughout the organization.

#### **Internal Controls**

Based on the COSO (The Committee of Sponsoring Organizations of The National Commission of Fraudulent Financial Reporting) framework, Huawei has designed and implemented an internal control system, covering the business

and financial processes across all subsidiaries and business units, including the internal controls over financial reporting with a view to ensure the integrity of data within the financial statements. The Company's internal control framework consists of five components, including Control Environment, Risk Assessment, Control Activities, Information & Communication and Monitoring.

#### Control environment

Control environment is the foundation of an internal control system. Huawei establishes and maintains high standards of ethical values, and promotes good corporate citizenship and strict compliance with laws and regulations. Huawei has established BCG to define the Company's acceptable behaviors and business conduct. Senior management sets the tone at the top and acts as role models for employees. In addition, Huawei has provided structured training programs and required employees to acknowledge their understanding and commitment to comply with the BCG.

Huawei has a well-established governance structure, which comprises of the Board of Directors, Board Committees and the EMT, with clear delegation of authority and accountability. Huawei has also clearly segregated the roles and responsibilities for its functions and units to ensure proper check and balance. In addition, Huawei has established a Business Control Department to assist business functions to improve control processes, with the Internal Audit Department performing independent reviews on a regular basis to assess the internal control effectiveness of all processes.

### Risk Assessment

Huawei performs risk assessment on all business processes on a regular basis. Each process owner is responsible for identifying, assessing and managing different types of risks. Risk assessment criteria include the likelihood and the potential impact of risk occurrence, for example, the impact on the business, financial reporting and reputation, etc.

The EMT works closely with the process owners to identify, manage and monitor the significant risks faced by the Company. They also assess the potential risk impact of any changes in the external and internal environments, review and approve the associated risk management strategies and risk mitigating measures for the Company.

#### Control Activities

Huawei has established standard business processes globally, and identified Key Control Points (KCPs) and Global Process Owners (GPO) for each process. In addition, the Company has established a Global Process Control Manual and Segregation of Duties Matrix, which apply to all subsidiaries and business units. The GPOs are responsible for ensuring the overall internal control effectiveness, in light of operational environment and changing risk exposures.

#### Information & Communication

The Company has established information and communication channels to collect external information, and to facilitate information flows within the Company.

Senior management discusses business strategies and operational issues with different functions through regular meetings. All the operational policies and procedures are available in the Company's intranet, and training seminars on business operations and internal controls are organized regularly to ensure that employees can obtain the latest information in a timely manner. The Company has also established mechanism to communicate internal control issues and the follow-up actions.

#### Monitoring

The GPOs conduct monthly compliance tests on KCPs in order to monitor the internal control effectiveness. In addition, GPOs conduct Semi-Annual Control Assessment (SACA) to assess the overall effectiveness of internal controls, and submit the assessment reports to the Audit Committee for review.

The Internal Audit Department is responsible for performing an independent evaluation on the internal control system of the Company, and conducting investigations on any cases of potential violation of the BCG. The Internal Audit Department reports the audit and investigation results to the Audit Committee and senior management.

The Audit Committee monitors the internal control effectiveness of the Company, including the implementation of control improvement plans. The Audit Committee has the authority to request management to provide explanations on control issues identified and to take remediation actions. The Audit Committee may also suggest the Human Resources Committee to take disciplinary actions when necessary.

The Company has established a whistle blowing mechanism for employees to report any irregularities, and provided channels for raising complaints in the Honesty & Integrity Agreement signed with suppliers. Any irregularities reported by internal or external parties will be followed-up by the Company to ensure that business conducts of staff members are properly monitored.

## **Corporate Social Responsibility**

Huawei is an active corporate citizen and integrates its socially responsibility philosophies into every aspect of its operations. In 2009, our focus remained on protecting the environment, bridging the digital divide, contributing to society, and employee welfare. We joined hands with our partners and customers to contribute to the harmonious and sustained development of our society, the economy, and the environment.

#### **Environmental Protection**

Environmental protection has become a key issue for the world's population. In order to address this critical issue, Huawei has established its green strategy titled "Green Communications, Green Huawei, and Green World", integrating the environmentally friendly concept into product planning, design, R&D, production, and corporate operations, thus minimizing both customers' TCO and the impact on the environment.

In 2009, we continued to increase our investment in green solutions and technologies and expanded Huawei's Energy Conservation & Emission Reduction Team.

## **Green Product Certification Program**

Huawei initiated the Green Product Certification Program at the end of 2009 to assess green performance of products throughout their life cycles - from raw materials and production through transportation and use to retirement. The certification covers all energy-saving and environmentally friendly areas that customers are concerned with.



**Switch-Asia** 

**Program** 

Huawei deployed more than 3,000 BTSs with alternative energy sources around the world by the end of 2009.

## **Alternative Energies BTS deployment**

Huawei, as the sole participating Asia-based company, and Deutsche Telecom jointly participated in the Switch-Asia program to boost CSR awareness of small and medium-sized enterprises in the electrical and electronics industry in China and help them resolve problems related to the environment and safety.



#### **Energy-saving Design**

Based on Life Cycle Assessment(LCA), Huawei focuses on consumption- and emission-optimized design in the areas of core and transmission networks, taking energy saving and environmentally-friendly factors into account.

#### Sustainable Energy Solutions

Based on specific requirements of customers and local physical conditions, Huawei provides alternative energy solutions, including the solar energy, solar and wind power generator system, and hybrid power solutions.

### **Packaging and Transportation**

We are improving renewable packaging materials to reduce consumption of wood during transportation of communication equipment. We also decreased consumption of materials using light-weight and small packaging and we extend the life cycle of packaging materials by establishing and refining effective recovery systems.

## **Bridging the Digital Divide**

With the rapid development of the telecommunications industry, communications services are playing an increasingly important role in promoting the global economy. The digital divide across various regions and communities, however, is also rising. Leveraging its expertise and experience in telecoms solutions, Huawei is committed to bridging this divide. We enable more people to access the information age by providing customized solutions and we promote the adoption of communications by helping undeveloped regions grow communications education and cultivate talent.

## **Launched EasyGSM BTS for Rural Coverage**

The BTS features a compact size and energy conservation attributes. It facilitates the adoption of new energies and enables coverage in remote areas.





Huawei and ITA jointly planned a donation program in Oman, in the Middle East, which was designed to donate wireless data communication equipment to 100 schools under the Ministry of Education of Oman.

## **Expanding Communications Coverage**

Huawei provides solutions with lower ARPU, which enable operators to both expand coverage in remote regions and gain benefits for sustained growth.

#### Bridging the Broadband Divide

Broadband is the cornerstone of a nation's competitiveness. Developed countries formulate their national broadband strategies one after another to boost their broadband capabilities. Expensive deployment, however, makes national broadband out of reach for many undeveloped countries. Huawei's end-to-end national broadband solution supports a full range of integrated access and flexible service provisions, significantly reducing deployment costs and enhancing flexibility and customization. These solutions help undeveloped countries to become more competitive via broadband networks.

## **Education** donations

#### **Promoting Communication Knowledge and Skills**

To boost local communication technologies, Huawei has established 36 training centers around the world, which help people develop useful skills. Through various funds for students, scholarships, education networks, and equipment donations, Huawei helps teenagers in Asia, Africa, and Latin America to access opportunities to learn telecommunications skills and to understand the external world via the Internet.

## **Contribution to Society**

As a responsible corporate citizen, Huawei contributes actively to public welfare, education, and disaster relief and aid initiatives for the global community. With these CSR efforts, we provide people in difficulties with opportunities to improve their lives.

## **Lending a helping hand** to the stricken region in the Philippines

Huawei, the first corporate donor, had donated USD 30,000 to Philippines for Ondoy typhoon relief.



## **Corporate Social** Responsibility **Activity Fund in India**



Huawei established the Corporate Social Responsibility Activity Fund in India, to continuously advocate the Deepalaya program and fund programs designed to help disabled children learn fundamental skills.

## **Sponsoring Safaricom Marathon**

Huawei has sponsored the Safaricom Marathon in Kenya, every year since 2006. The money raised goes to the protection of wild animals and to children's education in remote areas.



## **Holding a Supplier CSR Training Conference**



We held a Supplier CSR Training Conference in June 2009, which was attended by 228 senior executives from 173 suppliers. Senior management from Vodafone, British Telecom, and Deutsche Telekom gave keynote speeches.

#### **Employee Welfare**

At Huawei, we established a culture that strives to be the best. Our dedicated and determined staff are our most valuable asset. They are on the ground everyday implementing our customer-centric strategies. We incentivize our employees through competitive compensation and attractive development opportunities. Our employees also have the opportunity to pick which path they would like their career to follow at Huawei.

Huawei highly values the health of its staff and internal harmony of the organizational climate. To maintain the healthy minds and bodies of our employees, we established the Staff Health Instruction Center and the Chief Staff Health and Safety Officer.

## **Supply Chain**

Huawei has attached great importance to CSR fulfillment for itself and its global supplier as well as partners. As one of Huawei's key strategies, we continuously carry out ethical and green procurement and strengthening CSR management in the supply chain. The following are two strategic objectives:

- Improve CSR awareness and capability of Huawei and its supply chain to achieve sustainable development
- Closely work with our suppliers, strengthening the improvement and management of CSR in the supply chain by joint efforts, guaranteeing responsible ways for production, and also establishing a brand image and confidence as a responsible corporate citizen in the supply chain among global customers

# **Abbreviations, Financial Terminology and Exchange Rates**

## Abbreviations

Abbreviations	Full name
ADSL	Asymmetric Digital Subscriber Line
ARPU	Average Revenue Per User
ASIC	Application Specific Integrated Circuit
ASON	Automatic Switching Optical Network
ATCA	Advanced Telecom Computing Architecture
ATIS	The Alliance for Telecommunications Industry Solutions
BSS	Business Support System
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CDMA	Code Division Multiple Access
CRBT	Color Ring Back Tone
CSR	Corporate Social Responsibility
DECT	Digital Enhanced Cordless Telecommunications
DSLAM	Digital Subscriber Line Access Multiplexer
DWDM	Dense Wavelength Division Multiplexing
EDGE	Enhanced Data rates for GSM Evolution
EOT	Establish, Operate and Transfer
EPC	Evolved Packet Core
FAN	Fixed Access Network
FTTx	Fiber to the x
GPON	Gigabit-Capable Passive Optical Network
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
GSMA	GSM Association
HSPA	High-Speed Packet Access
ICT	Information and Communications Technology
IEC	International Engineering Consortium
IEEE	Institute of Electrical and Electronics Engineers
IFS	Integrated Financial Services
IMS	IP Multimedia Subsystem
IP	Internet Protocol
IPD	Integrated Product Development

IPN Intelligent Packet Network IPTV IP Television ISO International Standardization Organizations ISP Internet Service Provider ITU International Telecommunication Union LCA Life Cycle Assessment LTE Long Term Evolution MAN Metropolitan Area Network NGN Next Generation Network OAM Operation Administration and Maintenance OMA Operation Administration and Maintenance OMA Operating Expenditure PCT Patent Cooperation Treaty QoS Quality of Service RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System Vole Over Broadband Vole Over Broadband Vole Over Broadband Vole Over Broadband Vole Over IP WiMAX Worldwide Interoperability for Microwave Access WiPO World Intellectual Property Organization xDD Scolon Spatial Code Division Multiple Access WiPO World Intellectual Property Organization xDD World Intellectual Property Organization	Abbreviations	Full name
ISO International Standardization Organizations ISP Internet Service Provider ITU International Telecommunication Union LCA Life Cycle Assessment LTE Long Term Evolution MAN Metropolitan Area Network NGN Next Generation Network OAM Operation Administration and Maintenance OMA Open Mobile Alliance OPEX Operating Expenditure PCT Patent Cooperation Treaty OoS Quality of Service RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TTD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System Vole Over Broadband VolP Volce over IP WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	IPN	Intelligent Packet Network
ITU Internet Service Provider ITU International Telecommunication Union  LCA Life Cycle Assessment  LTE Long Term Evolution  MAN Metropolitan Area Network  NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Open Mobile Alliance  OPEX Operating Expenditure  PCT Patent Cooperation Treaty  Qos Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  Vole Over Broadband  Vole Voice Over IP  WIMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	IPTV	IP Television
ITU International Telecommunication Union  LCA Life Cycle Assessment  LTE Long Term Evolution  MAN Metropolitan Area Network  NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Open Mobile Alliance  OPEX Operating Expenditure  PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  RAD Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Volce Over Broadband  VolP Volce over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	ISO	International Standardization Organizations
LITE Long Term Evolution  MAN Metropolitan Area Network  NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Operating Expenditure  PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	ISP	Internet Service Provider
LTE Long Term Evolution  MAN Metropolitan Area Network  NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Operating Expenditure  PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOIR Voice Over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	ITU	International Telecommunication Union
MAN Metropolitan Area Network  NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Open Mobile Alliance  OPEX Operating Expenditure  PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VolP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	LCA	Life Cycle Assessment
NGN Next Generation Network  OAM Operation Administration and Maintenance  OMA Open Mobile Alliance  OPEX Operating Expenditure  PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TCO Total Cost of Ownership  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  Vole Over Broadband  VolP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	LTE	Long Term Evolution
OAM Operation Administration and Maintenance OMA Open Mobile Alliance OPEX Operating Expenditure PCT Patent Cooperation Treaty QoS Quality of Service RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TCO Total Cost of Ownership TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System VOBB Voice Over Broadband VoIP Voice over IP WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	MAN	Metropolitan Area Network
OMA Open Mobile Alliance OPEX OPEX Operating Expenditure PCT Patent Cooperation Treaty QoS Quality of Service RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System VOBB Voice Over Broadband VoIP WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	NGN	Next Generation Network
OPEX PCT Patent Cooperation Treaty  QoS Quality of Service RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System Vole Vole WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	OAM	Operation Administration and Maintenance
PCT Patent Cooperation Treaty  QoS Quality of Service  RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VolP WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	OMA	Open Mobile Alliance
QoS RAN Radio Access Network R&D Research and Development Rol Return on Investment SAE System Architecture Evolution SDP Service Delivery Platforms SMS Short Message Service STB Set Top Box TCO Total Cost of Ownership TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver TVO Total Value of Ownership UMTS Universal Mobile Telecommunication System VOBB Voice Over Broadband VolP WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	OPEX	Operating Expenditure
RAN Radio Access Network  R&D Research and Development  Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VolP WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	PCT	Patent Cooperation Treaty
R&D  Research and Development  Rol  Return on Investment  SAE  System Architecture Evolution  SDP  Service Delivery Platforms  SMS  Short Message Service  STB  Set Top Box  TCO  Total Cost of Ownership  TD-SCDMA  Time Division-Spatial Code Division Multiple Access  TRX  Transceiver  TVO  Total Value of Ownership  UMTS  Universal Mobile Telecommunication System  VOBB  Voice Over Broadband  VolP  Voice over IP  WiMAX  Worldwide Interoperability for Microwave Access  WIPO  World Intellectual Property Organization	QoS	Quality of Service
Rol Return on Investment  SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	RAN	Radio Access Network
SAE System Architecture Evolution  SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	R&D	Research and Development
SDP Service Delivery Platforms  SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	Rol	Return on Investment
SMS Short Message Service  STB Set Top Box  TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	SAE	System Architecture Evolution
STB  TCO  Total Cost of Ownership  TD-SCDMA  Time Division-Spatial Code Division Multiple Access  TRX  Transceiver  TVO  Total Value of Ownership  UMTS  Universal Mobile Telecommunication System  VOBB  Voice Over Broadband  VolP  WiMAX  Worldwide Interoperability for Microwave Access  WIPO  World Intellectual Property Organization	SDP	Service Delivery Platforms
TCO Total Cost of Ownership  TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VolP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	SMS	Short Message Service
TD-SCDMA Time Division-Spatial Code Division Multiple Access  TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	STB	Set Top Box
TRX Transceiver  TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	TCO	Total Cost of Ownership
TVO Total Value of Ownership  UMTS Universal Mobile Telecommunication System  VOBB Voice Over Broadband  VoIP Voice over IP  WiMAX Worldwide Interoperability for Microwave Access  WIPO World Intellectual Property Organization	TD-SCDMA	Time Division-Spatial Code Division Multiple Access
UMTS  Universal Mobile Telecommunication System  VOBB  Voice Over Broadband  VoIP  Voice over IP  WiMAX  Worldwide Interoperability for Microwave Access  WIPO  World Intellectual Property Organization	TRX	Transceiver
VOBBVoice Over BroadbandVoIPVoice over IPWiMAXWorldwide Interoperability for Microwave AccessWIPOWorld Intellectual Property Organization	TVO	Total Value of Ownership
VoIP       Voice over IP         WiMAX       Worldwide Interoperability for Microwave Access         WIPO       World Intellectual Property Organization	UMTS	Universal Mobile Telecommunication System
WiMAX Worldwide Interoperability for Microwave Access WIPO World Intellectual Property Organization	VOBB	Voice Over Broadband
WIPO World Intellectual Property Organization	VoIP	Voice over IP
	WiMAX	Worldwide Interoperability for Microwave Access
xDSL X-Digital Subscriber Line	WIPO	World Intellectual Property Organization
	xDSL	X-Digital Subscriber Line

### **Financial Terminology**

### Operating profit

Gross profit less research and development expenses, selling, general and administrative expenses, plus other operating income, less other operating expenses

### Working capital

Current assets less current liabilities

#### Liability ratio

Liability 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, interest income, investment income, gain on disposal of fixed and intangible assets, and other non-operating income.

#### **Exchange rates**

Exchange rates used in consolidation of financial statements:

CNY/USD	2009	2008
Average rate	6.8310	6.9292
Closing rate	6.8255	6.8353

Copyright © Huawei Technologies Co., Ltd. 2010. All rights reserved. NO WARRANTY THE CONTENTS OF THIS MANUAL ARE PROVIDED "AS IS". EXCEPT AS REQUIRED BY APPLICABLE LAWS, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE

**HUAWEI TECHNOLOGIES CO., LTD.** 

Huawei Industrial Base

www.huawei.com

Shenzhen 518129, P.R.China Tel:+86-755-28780808

ACCURACY, RELIABILITY OR CONTENTS OF THIS MANUAL.

Printed on environmentally friendly paper.

10% post-consumer content, 90% controlled wood, acid-free & chlorine free paper.

MANUAL.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO CASE SHALL HUAWEI TECHNOLOGIES CO., LTD

BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS, BUSINESS,

REVENUE, DATA, GOODWILL OR ANTICIPATED SAVINGS ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS