

# china

MONTHLY NEWSLETTER

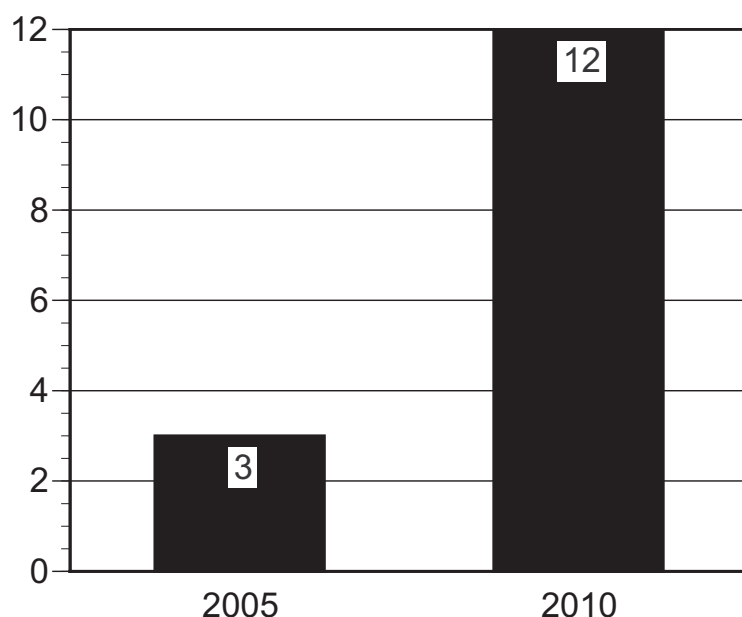
T E L E C O M



Vol. 13 No. 12

December 2006

**China digital set-top box market  
(millions of units)**



Source: In-Stat

## TOP NEWS

### Number of fixed-line users in China reaches 370 million

China's Ministry of Information Industry stated that the number of landline users in China had reached 370 million. The nation's mobile-phone base reached 440 million, taking

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**China Telecom** Newsletter is published monthly by Information Gatekeepers Inc.

320 Washington, Brighton, Massachusetts 02135, USA. Fax: (617) 782-5735. Editorial telephone: (617) 782-5033.

Circulation telephone: (617) 782-5033. (800) 323-1088 (Outside MA)

**Publisher:** Dr. Paul Polishuk **Editor:** Dr. Hui Pan **Managing Editor:** Bev Wilson

**Circulation Mgr:** Jaime Perez **Subscription rates:** \$695 per year, U.S. and Canada; \$745 per year elsewhere.

Discounts available for multiple subscriptions.

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the overall telephone volume to over 800 million. The MII also said that the Chinese telecom industry grew from July to September. Revenues from the postal and telecom business reached \$67 billion in the period, an increase of 11 percent compared to the same period a year ago. Total subscribers reached 280 million in September and are likely to go past 300 million by this year's end.

### **China Netcom to switch from H.264 to AVS for IPTV**

China is conducting trials for IPTV in five cities, of which one trial uses AVS, whereas the others use H.264. Netcom said that it would change over to AVS from H.264 after the codec trials finish. This month, the Chinese government will begin another round of tests for AVS, which should finish in January 2007. Netcom said that it would favor equipment suppliers who agree to upgrade its system with AVS free of cost in return for potential long-term contracts. In addition, Netcom plans to use AVS-based IPTV in 20 cities in 2007, and expects 6 million IPTV users in five to seven years, or 40 percent of its present broadband users.

The technical performances of H.264 and AVS are believed to be almost the same. However, some chipmakers are skeptical. Unlike MPEG-4/H.264, AVS might not charge participation fees for using codec in subscription-based services, title-by-title duplication of content, or free over-the-air broadcasts.

### **China Mobile, China Netcom, and China Telecom sign deals to purchase TD-SCDMA handsets**

China Mobile, China Telecom, and China Netcom have reportedly signed deals with 15 mobile-phone manufacturers to purchase around 9,000 TD-SCDMA mobile phones. It forms a part of a trial for the homegrown 3G technology. The sale price for the mobile phones is \$315 per handset. Twelve of the 15 manufacturers happen to be domestic firms,

which include Levono, ZTE, Datang, LG, Samsung, and Motorola. These three companies are intending to give orders for an additional 10,000 TD-SCDMA mobile phones next month.

### **China Unicom adds 1.29 million new subscribers in October 2006**

China Unicom added 1.29 million new subscribers in October, compared to 1.23 million new subscribers in September. 924,000 subscribers were added to the GSM network, compared to 894,000 new GSM additions in September.

The GSM subscriber base thereby increased to 104.04 million. The CDMA subscriber base increased over the month by 361,000 subscribers, from 35.40 million to 35.76 million. The operator had 139.8 million subscribers at the end of October.

## **SUBMARINE CABLES**

### **China Telecom, China Netcom and China Unicom join Asia-Pacific consortium to build \$500 million next-generation optical cable directly linking US and China**

China Telecom, China Netcom and China Unicom signed a construction and maintenance agreement with a consortium that includes Korea Telecom, Chunghwa Telecom and Verizon Business to build the first next-generation undersea optical cable system directly linking the US mainland and China.

The new system, to be named Trans-Pacific Express (TPE), will use the latest optical technology to provide greater capacity and higher speeds to meet the dramatic increase in demand for IP, data, and voice communications with the Asia-Pacific region.

The new fiber-optic cable can support the equivalent of 62 million simultaneous phone calls, more than 60 times the overall capacity of the existing cable directly linking the United States and China.

While TPE will initially provide capacity of up to 1.28 terabits per second (Tbps), the system will have design capacity of up to 5.12Tbps to support future Internet growth and advanced applications such as video and e-commerce. In another first, individual customers can access the cable system at wavelengths of up to 10 Gigabits per second (Gbps), the equivalent of nearly 121,000 simultaneous phone calls.

Verizon Business is the only US-based member among the initial parties of the consortium. The TPE cable also provides more diversity from other undersea routes and more efficient connections to a number of countries in Asia where Verizon Business has large business customers.

"This state-of-the-art cable will support high-speed traffic to the world's fastest-growing region — the Asia-Pacific," said Fred Briggs, Verizon Business executive vice president of operations and technology. "Our leadership in this project builds on our important existing relationships in China, further recognizes the emergence of China as a diverse communications hub for Asia, and reflects our company's commitment to help U.S. and other global companies compete worldwide."

Construction of the new cable system, which will extend more than 18,000 kilometers, will begin in the first quarter of 2007. Completion is scheduled in the third quarter of 2008. The project represents an investment by consortium members of more than US\$500 million.

"In addition to a diverse route directly to China, this cable will add capacity and the higher-speed service customers are demanding," Briggs said. "We also will improve provisioning intervals and reduce latency for traffic between the United States and many countries in the region."

The cable will have a landing point provided by Verizon Business at Nedonna Beach, Oregon, on the US West Coast and will land on the China mainland at Qingdao and

Chongming. TPE will also have landings in Tanshui, Taiwan, and Keoje, South Korea.

## FIBER OPTICS

### **Ericsson secures optical backbone network contract with Central China Power Grid**

Ericsson has been selected by Central China Power Grid Co. Ltd. (CCPG) as the sole supplier for its East-West Corridor Optical Transmission Project. Ericsson will be providing 10G and 2.5G SDH equipment and related services.

Under the contract, Ericsson will supply its most advanced Optical MultiService transport and switching platforms to build an optical transmission backbone network for CCPG.

Upon completion of the network, the transmission capacity of Central and South Western provinces in China will be greatly enhanced, local electric resources utilized, and local telecommunications improved. Most significantly, it will help improve the supply of power to economically booming areas of Central and South Western China.

The East-West Corridor Optical Transmission Project is the most important one of CCPG's 11th Five-Year Plan. The optical transmission network to be constructed will pass through Hubei and Sichuan provinces and Chongqing Municipality, covering 55 stations and 1,500 kilometers. The entire project is due to be completed and put into operation by 2009.

Mats H Olsson, president, Ericsson Greater China, said, "The contract has further strengthened our long-term solid relationship with China's power industry. With our world leading optical solutions and experiences, we will be able to support CCPG in providing safe, secure and high-performance power services to over 380 million users across Central and South Western China."

Ericsson has so far supplied the SDH OMS3200 series, OMS1600 series, OMS1200 series, SMA series3/4, and PCM to China's

major power companies, including China Southern Power Grid Corporation, State Grid Corporation of China, and its subsidiaries covering North and East China, as well as to numerous provincial and local power companies.

The contract highlights the benefits of the Marconi acquisition to Ericsson's customers, who value having a strategic partner and a provider of full-service broadband solutions including cutting-edge microwave and optical transport networks, broadband access, and IMS.

### **Beijing Power selects ECI Telecom to upgrade its communications system for 2008 Olympics**

ECI Telecom announced that Beijing Power has chosen ECI to upgrade its optical communications network in preparation for the 2008 Olympics. ECI's proven track record of supplying highly reliable solutions for power companies, both in China and around the world, helped ECI win this competitive bid. This follows another 2008 Olympics-related contract that was awarded to ECI earlier this year by Beijing Subways to upgrade its communications system.

In preparation for the Olympics, Beijing Power is building new power stations, connecting multiple Olympics sites and upgrading its current communications infrastructure. ECI's XDM optical solution will be used to expand this network, providing Beijing Power with additional bandwidth capacity to handle peak demand during the Olympic Games.

This highly reliable and scalable network will be used for internal communications and for data communications in order to monitor the power stations and generators.

The network will be managed by ECI's LightSoft network management system, enabling Beijing Power to easily provision and control new services.

"As hosts to the world's most important sporting event, we can't afford to take risks with our communications infrastructure," said Mr. Liu Run Sheng, director of Beijing Power's Dispatching Center. "Of all the companies we evaluated, ECI offered the most robust and reliable solution. Moreover, ECI is well-established in China and came to us with excellent references."

"We're proud that our optical solution was once again chosen by a major utility company in China for this high profile event," said Aviel Tenenbaum, president of ECI Telecom's Asia Pacific Regional Business Unit. "This flexible solution gives Beijing Power the ability to support the huge bandwidth requirements for the 2008 Olympics, ensuring that their critical communications run reliably."

### **ZTE GPON system on show at ITU Telecom World 2006**

ZTE exhibited the ZXA10 GPON (Gigabit passive optical network) system at ITU Telecom World 2006, along with its newest wireless, access, core, and terminal products.

The ZTE ZXA10 C220 optical line terminator (OLT) GPON system and F series terminals provide stable, high-quality optical access for new services such as IPTV and Home Gateway.

The ZTE GPON system conforms to ITU-T G.984 standards, with the ability to handle high-density, high-bandwidth, and high-volume traffic, supporting high-quality multicast and DBA and providing high-bandwidth data and Internet access, VoIP, IPTV, and CATV services.

ZTE produces a series of OLTs and ONTs (optical network terminators) meeting the requirements of FTTH, FTTB, FTTO, FTTCab, and other applications. The ZXA10 GPON system can also support EPON (Ethernet passive optical network) and GPON mixed-inserts in one frame.

ZTE's EPON system was exhibited. It conforms completely to IEEE 802.3ah, providing

a high-quality optical solution. First implemented at the end of 2004, ZTE's EPON products are now widely used in the Guangdong, Shanghai, Guangxi, Hubei, and Shanxi branches of China Telecom; the Sichuan and Guangdong branches of China Netcom; and with ITESS in The Netherlands. The ZTE EPON system covers applications of FTTH, FTTO, FTTB +LAN, FTTCab, and mixed-inserts in MSAN/MSAG.

### **ZTE wins WDM deal**

ZTE has exclusively won a contract to build five national WDM trunk lines for China Netcom as part of the operator's 2006 long-haul transmission network improvements. This agreement follows the successful construction of five national trunk lines for China Netcom in 2005.

The five new national trunk lines will cover 10 Chinese provinces. With deployment of the network, China Netcom will achieve greatly increased network capacity on the backbone layer and improved operational capability, enabling it to compete more strongly in the highly competitive Chinese market.

ZTE will supply its Unitrans series ZXWM M900 DWDM equipment to build the network. With the adoption of multiple industry-leading technologies such as ERZ, large-power EDFA, enhanced FEC, dynamic power equalization, distributed dispersion management, automatic compensation of line attenuation, and Laman amplifiers, the equipment solves problems such as long-term wavelength stability in large-capacity and long-haul transmission, low signal-to-noise ratio, and diversified spares. This enables single-span transmission over 300km and super-long-haul non-REG transmission over 5000km, delivering high reliability and security over the entire network.

ZTE optical networking products have been deployed by 130 operators in over 70 countries. According to the latest statistics from telecoms industry analyst firm Ovum-RHK, at the end of June 2006 ZTE's long-haul DWDM

system installations ranked in the top three in the world, and ZTE was the fastest-growing mainstream optical network vendor between 2004 and 2006.

### **PMC-Sierra introduces first end-to-end EPON silicon solution with key China Telecom features**

PMC-Sierra Inc. announced the availability of the industry's first EPON optical network unit (ONU) and optical line terminal (OLT) silicon devices that support China Telecom-defined algorithms and features for the Chinese telecom market. The new PAS6301 ONU for customer premises equipment and the PAS5201 OLT for central office equipment together provide an end-to-end EPON solution. The two system-on-chip (SoC) devices are the first to be designed to meet new China Telecom standards that define data encryption and decryption algorithms, quality of service procedures, and classification protocols, making them ideal for emerging high-volume deployments in China. These devices extend PMC-Sierra's product leadership in high-volume EPON devices by providing the first enhanced Forward Error Correction (FEC) in both ONU and OLT devices, enabling higher split ratio and longer physical links in the access network. In addition, the PAS6301 includes voice-over-IP service support to lower the cost of providing voice over fiber. Both devices support large packet buffers for higher-quality IPTV broadcast capabilities, which is a significant improvement over previously available devices.

"We are pleased that a market leader such as PMC-Sierra has introduced EPON devices that support the features that we have deemed important for our marketplace," said Director Wang Zuo Qiang of the Network Technology Department of China Telecom. "We have worked with the industry to define a complete set of features and algorithms so that equipment deployed in China will be compatible with our requirements."

"These new EPON SoCs demonstrate PMC-Sierra's commitment to all Asian markets," said Victor Vaisleib, general manager of the FTTH Business Unit at PMC-Sierra. "They provide key feature integration for supporting China Telecom FTTH deployments as well as providing extended feature sets that result in a lower BOM cost for the system vendors."

"PMC-Sierra is first to market with end-to-end EPON product enhancements that comply with important market-oriented specifications," said Jeff Heynen, directing analyst for broadband and IPTV with Infonetics Research.

"According to our research, PMC-Sierra is the volume leader in FTTH devices with millions of devices deployed in Japan. These new devices will position them to support future deployments in China as well."

Samples of the EPON PAS6301 ONU and PAS5201 OLT devices are available now. The PAS6301 ONU is available in a PGBA 456 package, and the PAS5201 is available in a BGA 376 package. For more information, contact a PMC-Sierra sales representative at <http://www.pmc-sierra.com/contactSales>. A comprehensive support package, including datasheets and application notes, is available at [www.pmc-sierra.com/ftth-pon](http://www.pmc-sierra.com/ftth-pon).

### **NeoPhotonics appoints Michael Sophie to board of directors and chair of audit committee**

NeoPhotonics, a supplier of optical networking components for long-haul, metro, and access (such as FTTX) networks, announced the appointment of Michael J. Sophie to the company's board of directors and chair of the audit committee.

Mr. Sophie currently sits on the boards of directors for McData Corporation, a provider of storage networking solutions; BCD Semiconductor, an analog and mixed signal IC products company; and Postini Inc., a provider of on-demand message management services.

Mr. Sophie also serves as audit chair for each of these companies.

Mr. Sophie recently served as EVP and COO, and previously as SVP and CFO, of UTStarcom Inc. of Alameda, California, where he had financial and operational management responsibility for the company with annual revenues in excess of \$2 billion. At UTStarcom, a manufacturer of telecom equipment for use in worldwide markets, with specific focus in mainland China, Mr. Sophie had direct managerial responsibility for accounting, finance, information technology, investor and public relations, legal, human resources, marketing and sales, and supply chain. He also coordinated UTStarcom's highly successful \$216 million initial public offering in 2000 and effectively positioned the company to investors during the company's rapid growth.

Previously he held high-ranking financial positions with P-Com Inc. and the Loral, Fairchild Imaging Sensors Division.

"We are pleased to welcome Mike to the Board and are confident that his leadership experience will prove invaluable to the company's growth and our strategic planning, especially with regards to various finance, accounting and control posture objectives," said Tim Jenks, chairman and CEO of NeoPhotonics.

"NeoPhotonics has enjoyed impressive growth over the last two years and has made a number of acquisitions that position the company well for sustained growth in various sectors of the telecommunications industry," said Sophie. "I look forward to assisting the Board as the company enters the next stages of its development."

### **INTERNET**

### **Beijing Quan Tong Chang to launch 'Intragroup Call'**

Beijing Quan Tong Chang Information Services (Beijing QTC) will soon be introducing a broadband phone service called the

“Intragroup Call” in the Beijing Tianzhu Airport Industrial Zone. The company expects to make a profit of \$1.5 million every year. Tianzhu Zone and Beijing QTC will work in partnership to launch this “Intragroup Call” promotion. The company intends to install the broadband phone platform using the Internet, replacing regular phone networks for transmitting calls. The first installation will be done at the management office building in Tianzhu Zone, Blue Sky Mansion. Eventually it will be applied to big and mid-sized enterprises.

Beijing QTC is also planning to build broadband phone networks with the largest covering area in a period of eight months. The company expects to increase its annual sales by about \$1.5 million.

### **China VoIP expands**

Citing growing demand for its voice over Internet services, Jinan Yinquan Technology Co. Ltd., a wholly owned subsidiary of China VoIP & Digital Telecom Inc., announced that it has launched a major, system-wide expansion program. The company said it plans to significantly increase server capacity, add equipment in cities and provinces that are targeted for expansion, increase the number of available phone numbers, replace certain equipment to increase speed and efficiency, and add additional staff at current and future locations.

Jinan Yinquan, a technology company offering VoIP services in the People's Republic of China, has been developing telecommunication solutions for China's burgeoning Internet industry for more than half a decade.

“Our mission is to become the premier provider of VoIP services in the People's Republic of China,” said Li Kunwu, president and CEO of China VoIP & Digital Telecom Inc. “To accomplish that goal we need to always be several steps ahead of our growth so that we will never be in a position that we cannot

adequately service our subscriber base. Therefore, we are adding two new servers to our current infrastructure, creating additional capacity for 500,000 new users. This brings our total infrastructure to 27 servers. All of our new servers will be installed in China Tie Tong's equipment room, who provide us with the necessary access to bandwidth, network infrastructure and E1 interface. Expansion programs such as this will be virtually ongoing.”

### **3TNet launches new broadband information network**

3TNet, a broadband information network which integrates radio, TV, telecom, and Internet, has been launched in various parts of China. 3TNet can also provide video-on-demand services. This will allow Chinese Internet users to access interactive broadband services at speeds of around 41Mbps. The majority of Chinese families accessing broadband services are provided speeds of less than 10Mbps, according to the Ministry of Science and Technology. Via video-on-demand, users can order films along with many interactive digital services like tele-medical and tele-education services. More than 30 Chinese companies, scientific research institutes, and universities like China Telecom, the Institute of Acoustics of the China Academy of Sciences, and Shanghai Media Group participated to develop the network. It will help to reduce information technology costs.

## **WIRELESS**

### **Nokia signs contract with Chinese Guangdong MCC on GPRS packet core network expansion**

Nokia has announced the signing of a GPRS packet core network expansion contract with Guangdong MCC Ltd., which will make Nokia the leading GPRS provider for the company. As per the terms of the contract, Nokia will provide its intelligent GPRS packet core

solution for the eighth GPRS expansion of Guangdong MCC. The core solution consists of SGSN, Nokia Flexi Intelligent Service Node, and Nokia Charging Gateway. The solution also supports the high-tech content charging functionality and provides an easy migration path to Nokia Combi SGSN, as the 3G access support capability can be obtained with simple memory and interface upgrades.

The multivendor, multitechnology Nokia NetAct network and service management system, including Nokia NetAct Traffica, will support the network; Nokia will also provide network planning, implementation, and integration services. The network will be serving more than 11 million data subscribers in the Eastern Guangdong province ranging from Shenzhen to include DongGuan and Huizhou by December 2006. Nokia and Guangdong Provincial Government signed a MoU in October 2006 in Finland, which names Nokia as an important player in the information industry development of Guangdong province.

### **ZTE's new generation 'green' base stations reduce power consumption**

ZTE launched its ZXG10 8000 base stations family at ITU Telecom World 2006. ZTE's "green" multi-carrier 8000 base stations family integrates all the technical advantages of third-generation base stations.

Because it adopts a multiple-density frequencies module, the power consumption is lower and the dimension is smaller. An optimal balance between capacity and coverage is achieved, supporting the smooth evolution to 3G base stations and future networks.

"The key issue in today's rapidly developing market is that of proprietary solutions," said Mr. He Zhaogang, ZTE's GSM product manager. "If any technology, product or solution is to truly take off, it must integrate with legacy systems and systems yet to come. It goes without saying that these solutions will increasingly feed into the 'green' trend and aim

for a happy balance between capacity demands and the environment, integrating with one another to ensure minimal product waste."

The new base stations support all frequencies of GSM — 850/900/1800/1900/EGSM — fully satisfying operator requirements, aided by a dynamic resources pool structure which enables fast construction and cost savings.

The adoption of Netspeed technology will largely increase coverage and data qualities, as well as increasing network construction speed and transmission abilities.

The ZTE ZXG10 8000 outdoor base station family is suitable for harsh environments where operators have difficulty providing equipment rooms.

The flexible networking modes help operators to build economic networks, and by using ZTE base station products, operators will easily achieve seamless coverage from cities to suburbs, from towns to rural areas, and from roads to grasslands.

ZTE also demonstrated solutions such as its BSC-plus solution and its FMC solution, which directly increase network value and help operators achieve a competitive edge.

### **Beijing Mobile uses AsialInfo**

AsialInfo Holdings Inc., a provider of telecom software solutions and IT security products and services, announced that it has signed a contract to develop Phase III of Beijing Mobile's Business Intelligence (BI) system. The Phase III BI project will enhance Beijing Mobile's competitive capabilities by improving data quality, broadening subject domain applications to enable Beijing Mobile to offer more personalized services.

"AsialInfo's leading business intelligence systems help telecom operators analyze their user data and develop services tailored to customer needs," said Steve Zhang, president and chief executive officer of AsialInfo. "We have been investing in business intelligence R&D for

several years now and our BI systems and service guarantees are world class. Currently our BI systems support more than 150 million users and over 15 terabytes of data.”

Mr. Zhang also noted that AsiaInfo’s BI system has been successfully deployed for 13 of China Mobile’s provincial subsidiaries.

As a leading telecom operator in China, Beijing Mobile’s business and user volume has increased significantly in recent years, and the operator is expected to reach 14 million users by the end of 2007.

A sophisticated BI system that provides in-depth analysis of market and user data is integral to servicing such a large user base. Prior to this agreement, AsiaInfo successfully constructed Phases I and II of Beijing Mobile’s BI system, establishing a unified data platform and nine major analytical functions.

### **Intelsat renews China Central Television contract for global programming distribution**

Intelsat announced that China Central Television (CCTV), the national broadcaster of the People’s Republic of China, renewed a multiyear contract for the global distribution of its programming.

CCTV is also utilizing Intelsat for its international backhaul transmission of the Asian Games from Doha, Qatar, back to Beijing.

A long-standing customer since the launch of PAS-2 in 1994, CCTV became the world’s first global Mandarin Chinese television service when it expanded its services internationally via the PAS-3 satellite in 1995.

Intelsat currently provides full-time program distribution services for CCTV via its PAS-1R Atlantic Ocean Region satellite, PAS-9 Atlantic Ocean Region satellite, and PAS-10 Indian Ocean Region satellite.

Intelsat also provides CCTV with capacity on its Galaxy 3C satellite for direct-to-home (DTH) services in the United States. This renewal contract also expands CCTV’s C- and Ku-band capacity agreement.

## **MERGERS AND ACQUISITIONS**

### **Huawei accepts 3Com offer to purchase Huawei’s entire stake in H3C**

Huawei, a provider of next-generation telecommunications network solutions for operators around the world, announced that it has accepted a bid offer from 3Com to purchase Huawei’s entire stake in their joint venture, Huawei-3Com (“H3C”).

In accordance with H3C’s shareholders’ agreement, the bid process was initiated by 3Com on November 15, 2006, and a bid offer was accepted by Huawei on November 28, 2006 (Beijing time). H3C will become wholly owned by 3Com after the completion of the transaction.

Mr. Guo Ping, senior vice president of Huawei Technologies, said, “The divestment will further enable Huawei to focus its efforts on its core business, strengthen our leadership position in the ALL IP-based FMC (Fixed and Mobile Convergence) solutions market, and create long-term value and potential growth for our clients.

Over the past three years, 3Com and Huawei have contributed a great deal to the development of H3C. H3C has become one of the leading global suppliers of IP networking products and solutions and we wish them every success in the future.”

Huawei will continue to comply with its commitments under the existing joint venture agreements.

### **Hutchison courts suitors**

Hutchison Telecommunications International Limited states that it has been approached by various potentially interested parties regarding a possible sale of its equity interests in Hutchison Essar Limited, the company’s mobile operations in India.

No agreement with respect to such possible sale has been entered into to date. The company reiterates that there is no assurance that a sale may result from these approaches.

**BUSINESS****Motorola Inc. to open another new research center in China**

Motorola Inc plans to open a research center in China to target next-generation wireless technologies.

It would focus on important technologies used in wireless broadband equipment and aid the firm in developing worldwide standards.

The executive vice president of Motorola, Gregory Brown, said that Motorola is looking to strengthen its alliance with Chinese parents, as China is emerging to actively develop standards in future mobile communications technologies.

The center will also improve Motorola's cooperation with local firms and universities. Motorola has 18 R&D centers in China, with around 3,000 engineers, and is the biggest R&D base by a multinational firm in China.

**Hong Kong's telecoms regulator OFTA grants EFTNS license to Tricom Asia**

Hong Kong-based telecom regulator OFTA has granted an External Fixed Telecommunications Network Services (EFTNS) license to Tricom Asia, enabling it to operate telecom services through VN-HK, its 1,050km undersea fiber-optic network, which links Hong Kong and Vietnam.

Since China Telecom won a license in 2005, this is the lone EFTNS license in Hong Kong. Tricom Asia is planning to invest in telecom solutions in the emerging markets in Asia-Pacific. It had formed its Hong Kong-based division in May 2003.

**Telecom sector rings in changes**

If the number of times a CEO visits any given market is an indication of its importance, then China must be very significant for Australian telecom giant Telstra.

Since Sol Trujillo took over the helm of Telstra in July 2005, he has visited China four times, and his visits have paid off.

In August, Telstra acquired a 51 percent stake in Beijing-based real estate portal Soufun.com for US\$254 million through its directory and advertising subsidiary Sensis, thus entering the nation's booming Internet market.

Industry sources said the firm is also considering establishing an alliance with China Telecom, the nation's largest fixed-line operator, which operates in much the same fields and has similar plans to boost its broadband, wireless, and Internet businesses.

Telstra's ambition in both basic and value-added telecom services in China, as shown from its interest in China Telecom and Soufun, is a typical example of foreign companies' interest in the world's most populous telecom market since the nation joined the World Trade Organization (WTO) five years ago.

"Joining forces with Chinese operators and bringing value is good, but one should not take control," said Igal Brightman, global managing director of technology, media, and telecommunications with the consulting giant Deloitte.

According to China's commitment to the WTO, the maximum stake that foreign investors can hold in telecom joint ventures has been lifted from 35 to 49 percent, while they are no longer restricted to 17 large cities.

When China was negotiating its WTO entry, its telecom industry remained in its infancy; mobile phones were regarded as a luxury product by most people, and they needed to wait for almost one month to have a fixed-line phone installed.

As a result, with their financial and technological strength, foreign operators thought China's WTO membership would give them access to a hugely lucrative market.

Since China's WTO accession in December 2001, Chinese operators have made dramatic progress and spent hundreds of billions of dollars, partly prompted by the activities of international equipment vendors such as Ericsson and Motorola.

China has therefore become a place where global telecom equipment vendors test their best products.

In addition, China's fixed-line subscribers rose twofold to 370 million, and mobile subscribers grew three times to 450 million.

Now, they have found out it is not wise to build their own networks, with equity investment becoming the dominant form of tapping the benefits of the world's largest market in terms of subscribers.

China Mobile, the world's largest mobile operator, teamed up with Vodafone; China Unicom, a smaller competitor of China Mobile, formed a joint venture with SK Telecom from South Korea; China Unicom, the second-largest fixed-line operator, brought Spanish counterpart Telefonica on board as its largest strategic investor.

The only firm left for foreign investment among the top four operators is China Telecom, which has many large international operators pursuing it, such as Telstra, Japan's NTT, and France Telecom.

"China is a very unique market: just like its economy, no other country has gone from having the most primitive communication tools to the most advanced telecom system in the world in such a short period of time," said Charles Yen, managing partner of China northern region with Deloitte.

Yi Mingyu, a senior analyst with CCID Consulting Co. Ltd. under the Ministry of Information Industry, agreed with Yen and said foreign investors and operators must have a realistic attitude when operating in the Chinese market. Brightman from Deloitte said that when foreign investors come, they must find areas where they can add value, but Chinese operators are now already very strong and technologically sophisticated, so the opportunities for foreign participants to have a dominant say are minimal.

One area in which they can offer value and attract Chinese counterparts is their

international expertise, as Chinese operators are trying to expand to overseas markets and increase the share of value-added services for higher profits.

That is why Vodafone, Telefonica, and SK Telecom have become strategic investors. Vodafone and Telefonica both have strong international businesses in Europe, Asia, and Latin America, while SK Telecom has rich experience in developing value-added services.

Brightman said new opportunities may arise with technological breakthroughs such as the third-generation (3G) mobile communication system, which has a higher efficiency and a faster Internet connection speed.

China is expected to issue 3G licenses very soon. What services operators bring to consumers will be the key to their success in this business. Areas like cost-efficiency and content on a 3G network may be something that foreign operators and investors should use to attract Chinese operators and consumers.

*Source: China Daily*

### **TCL joins HomePlug Powerline Alliance board of directors**

Driving the worldwide acceptance of high-speed networking over powerlines, the HomePlug Powerline Alliance announced that TCL has joined the HomePlug Implementers' Forum board of directors. TCL is the world's largest manufacturer of television sets and a global supplier of consumer electronics products. With the addition of TCL, the HomePlug Powerline Alliance continues to align the world's leading electronics manufacturers around the global HomePlug family of standards. The HomePlug Powerline Alliance now features the top three global television suppliers — LG, Samsung, and TCL — on its board of directors.

### **Cisco places China bet**

Cisco announced that it has made a strategic investment of US\$50 million in China

Communications Services Corporation Limited (CCS). Cisco is the largest foreign strategic investor in CCS.

CCS is the specialized telecommunications support businesses arm of a major telecommunications group in China. CCS has been reorganized and spun off to form a separate independent entity, with China Telecom Group, China Mobile, and China Unicom also as shareholders. CCS is now publicly traded on the main board of the Hong Kong Stock Exchange.

Under the terms of the agreement, Cisco and CCS will jointly provide managed telecommunications services, such as network operation and administration, to enterprise customers in China. Additionally, the two companies will provide customers with new network solutions, including IP infrastructures, digital video, and 3G platforms and applications.

"We are pleased to be working with Cisco to bring advanced telecommunications services to enterprise customers in China," said Li Ping, chief executive officer of CCS. "This is an exciting time for CCS as we plan to capitalize on the growing demand of high value-added voice and data supporting services across the country. We expect Cisco will play an important role in helping us realize our plan."

"China is an extremely important market for Cisco, and in cooperation with CCS, we intend to help make China one of the most connected countries in the world," said Owen Chan, senior vice president of Cisco's Asia Pacific business. "By working with CCS, we hope to help Chinese businesses adopt and deploy new productivity-enhancing communications services."

### **Global fixed-line operators share NGN construction experiences**

The Network Evolution Summit, jointly sponsored by ZTE and China Telecom, was held in Hong Kong's Disneyland hotel, December 6, 2006.

More than 300 senior executives and experts from China Telecom and 70 other major telecommunication operators from around the world attended the event. The main topics of the summit were the role of NGN technology in network transformation, China Telecom's network transformation opinion and experience, experiences of partnership between telecoms operators and equipment providers, and operation innovation and development in the telecoms industry.

During the summit, China Telecom and ZTE celebrated one year of stable operation of the China Telecom's long-distance NGN project. Delegates from FT, TMI (Telecom Malaysia International), and other top operators also shared their network construction and maintenance experiences.

China Telecom is the one of the largest fixed-line network operators in the world and has extensive operational experience in fixed-line, wireless PHS, and broadband data networks. Ms. Zhao Huiling, vice president of China Telecom's Beijing Research Institute, shared China Telecom's views of, and strategy for, network transformation.

Ms. Zhao said that China Telecom's network transformation is highlighted by its launch of the NGN-based long-distance backbone project, which was awarded to ZTE as sole equipment supplier. The project was started in May 2005 and now covers 31 provinces and autonomous regions throughout China. It is, so far, the largest fixed NGN network in the world in terms of number of nodes and its 300 million subscribers. The launch of the NGN backbone further improves China Telecom's quality of service in those provinces, secures revenue from long-distance voice traffic, and provides much more efficient, and more varied, services.

Reviewing the latest approaches to network transformation, Ms. Jane Chen, vice president of ZTE, analyzed current telecoms network structures and future network

development trends, and pointed out that operators should pay more attention to end-users' multi-play service requirements.

As an example, she discussed ZTE's F3G (Fast Triple Gain) solution, which is designed to address multi-play services. As an end-to-end networking solution, F3G fully addresses the requirements of service construction, deployment, and management during network transformation.

During the summit's Q&A session, chaired by Mr. Wang Xuejun, vice president of Yankee Group Asia-Pacific, delegates from operators including FT, and TelkomSA Ltd. shared their opinions on how to construct a highly efficient and profitable telecom network.

"This summit was jointly sponsored with China Telecom to give us an opportunity to share with the world's leading operators the lessons that have been learnt in developing the world's largest NGN fixed line network," said Jane Chen. "Our aim was to share the knowledge acquired in this process and to give operators the chance to share their experiences from other major markets, with the aim of enhancing global knowledge of, and interest in, NGN networks."

## COMPANY NEWS

### **Huawei signs deal worth \$38.4 million with German operator**

China's biggest telecom equipment-maker, Huawei Technologies, signed a deal with German operator Versatel Holding Deutschland GmbH worth \$38.4 million. According to the Memorandum of Understanding signed in Beijing, Huawei will build a fiber-optic communications network based on Internet Protocol (IP) for the third-biggest fixed-line operator in Germany. For the first time, Huawei will provide the technology for a complete network for a German operator. Versatel has around 700,000 subscribers, and its revenues are likely to reach \$883 million. Versatel CEO Peer Knauer stressed the need for a

dependable partner that would help the operator face the challenging issues confronting the operator.

### **Uganda to receive a grant of \$120 million from Huawei**

Uganda will receive from China a grant of around \$120 million for developing the national information communication technology (ICT) backbone infrastructure. On Chinese Prime Minister Jiabao's visit to Uganda, an e-Government project MoU (Memorandum of Understanding) was signed with Huawei Technologies, the biggest telecom equipment manufacturer in China. State Minister for ICT Mr. Allintuma Nsambu said that this grant would help in providing fast telecom services at less costly rates. The government intends to create a new ICT backbone to trigger new economic growth, improve trade, and offer better communication choices to the Ugandans. Huawei will do the job of installing, supplying, and putting the technologies in place to set up an e-government system and extend the communications network.

### **Huawei picks Xelerated**

Xelerated, a provider of network processing, announced that its Xelerator X11 network processor has been selected by Huawei Technologies for the next-generation packet-based multiservice products for metro networks.

"Huawei selected the Xelerated X11 network processor (NPU) because the Xelerated NPU is an integration of high-performance, programmability and low cost, best suited for packet-based multi-service products," said Chen Junhua, president of the data-communication product line, Huawei.

The X11 NPU will be deployed in the next-generation packet-based product family to meet the key requirements from multiple global operators. "We are very pleased to have been chosen by Huawei on this vital, high-volume platform, and believe that our X11 NPU and

future-generation products will provide Huawei with the flexibility to meet the changing demands of operators around the world,” said Bill Franciscovich, Xelerated’s VP of sales.

The X11’s unique, highly focused data-flow architecture provides guaranteed line-rate performance with programmable feature flexibility to track changing standards and the different requirements of multiple geographies.

### **UTStarcom sings deal with Maxim Telecom of Pakistan**

Telecommunication equipment manufacturer UTStarcom Inc. has signed a distribution deal with Pakistan-based Maxim Telecom. No financial details were provided by the company. The deal will include offering the whole range of UTStarcom’s handsets and also Internet protocol (IP)-based broadband technology. The vice president of the Europe, Middle East, and Africa region at UTStarcom, Youssef Kassissia, said that since foreign investments in Pakistan account for 29 percent of all investments, this deal would help the company to enter an expanding market in the country.

### **Huawei named supplier of WDM optical metropolitan network for Telecom Italia**

Huawei Technologies Co., Ltd. (“Huawei”), a provider of next-generation telecommunications network solutions for operators around the world, announced that it has been selected by Telecom Italia to carry out Wavelength Division Multiplexing (WDM) technology projects. The first Chinese telecommunication equipment supplier selected for Italian telecom programs, Huawei was awarded the contract to supply optical transport technology after the company underwent Telecom Italia’s stringent evaluation process.

In addition to Telecom Italia, Huawei’s other successful partnerships with European mainstream operators include British Telecom, where Huawei is a preferred vendor in the

transport and MSAN domain for the 21CN program; and a CWDM/DWDM project for Dutch operator KPN, in which Huawei is the exclusive vendor..

“We are excited to be part of Telecom Italia’s rollout plan for WDM optical metropolitan networks,” said Mr. Qiao Xiaoping, managing director of Huawei Italy. “Although Huawei and Telecom Italia are working together in the optical transport domain for the first time, Huawei’s leading technology in optical network, rich experience in commercial development of equipment and rapid response will allow us to provide high-value, customer-focused solutions.”

Huawei’s Metro WDM products provide abundant interfaces, which can support services access and aggregation with multiple data transfer rates and different protocols. The unique GE ADM technology guarantees the flexible grooming of GE service on a WDM network, and saves wavelength and fiber resources. Based on the company’s leading-edge technologies and experience in commercial application of products worldwide, the Huawei Metro WDM solution has become a popular choice for constructing an efficient transport network for IP DSLAM, IPTV, and GE VPN, which is widely deployed in over 10 countries and regions.

### **Huawei releases the industry-first FMC IMS Solution: IMS 3.0**

Huawei Technologies Co. Ltd. announced the commercial introduction of its IP Multimedia Subsystem (IMS) 3.0 solution that provides an open architecture for the development of multimedia services.

Facing the challenges of intense competition and limited innovation of new services, Huawei IMS 3.0 is a solution that many carriers are looking for. Huawei IMS 3.0 solution is the first commercial fixed-mobile convergence (FMC) solution in the industry that complies with both 3GPP (3rd Generation Partnership Project) and TISPAN (Telecoms & Internet converged

Services & Protocols for Advanced Networks), and provides an open architecture over which service providers, platform providers, and terminal providers can work together to introduce diversified multimedia services.

With the solution, carriers can create a subscriber-focused architecture based on FMC and CT-IT convergence, which opens up network and service capabilities and promotes a healthy environment for IMS applications.

Based on a common hardware and software platform, Huawei's IMS solution can help simplify the network deployment process and decrease capital expenditures (CapEx) and operating expenditures (OpEx) for carriers. Huawei and its partners have released scale commercial use of services, such as voice call continuity (VCC), IP Centrex, and Blended Services.

These services can help carriers accelerate their steps from the existing network to an FMC network smoothly, protecting customers' investment efficiently.

The VCC service, in particular, takes the lead in realizing bidirectional senseless handover. The guarantee of quality of service (QoS) and unified session control and user database will bring to subscribers a high-quality experience that is different from traditional Internet service.

"With the deployment of the IMS 3.0 solution, we believe that this open, converged All-IP architecture will become a platform for innovations, through which carriers, consumers and our partners in services, platform and terminal domains will benefit," said Mr. Ding Yun, president of Huawei core network.

"Carriers will easily be able to consolidate resources, information and customer requirements, and at the same time continue to release cutting-edge services."

Huawei has been promoting the IMS industry chain, together with over 100 industry-leading partners in service, platform, access, and terminal domains. In December 2004,

Huawei established joint labs with a number of partners, providing an environment for interoperability tests and service experience and delivering competitive solutions for carriers.

Mike McHugh, vice president and general manager, BEA WebLogic Communications Platform, BEA Systems Inc., said, "Both BEA and Huawei bring their unique strengths to this relationship. Recently, we completed IMS and SIP AS interoperability testing that demonstrated Huawei IMS and BEA WebLogic SIP Server compliance with open standards. BEA has been integrated into the Huawei IMS eco-system and together they can provide an innovative service development environment for third-party development.

This is designed to present our mutual customers with a great opportunity to leverage IMS technology and rapidly design, develop and deploy revenue-generating customer services. These services can then become part of a reusable palette that helps further speed up service design and delivery."

"We have successfully assisted large Service Providers around the world in deploying enhanced VoIP services for both business and consumer offerings and we bring this experience to our partnership," said Marco Limena, president and CEO of Sylanro Systems Corp. "I am convinced that combining Sylanro's feature server with Huawei's core network and integration expertise is a winning combination for both flexibility and time-to-market."

Huawei has always been working on migration to an all-IP network. In 2003, Huawei released V3 for its softswitch in Geneva, igniting the core network's migration toward an all-IP network.

Over the past three years, Huawei has deployed over 800 softswitch-based networks, helping over 100 carriers with their all-IP goals. The release of IMS 3.0 solution is a giant leap in the FMC evolution, strengthening Huawei's position as an industry leader in the IP core network domain.

**ZTE debuts the world's first F3G multimedia solution**

ZTE Corporation, a global provider of telecommunications equipment and network solutions, has launched the world's first F3G (Fast Triple Gain) multimedia network solution, which was previewed during the recent "Network Evolution Summit 2006" jointly hosted by ZTE and China telecom.

The ZTE F3G solution is an end-to-end converged 3G network construction solution. Instead of the current industry approach of simple, stacked voice, data, and video (triple-play) networks, F3G converges IPTV, fixed-line, and mobile telecoms services onto a single service platform, decreasing operators' operation costs and providing one platform for the provision of both current and future innovative services. The ZTE F3G solution was developed based on ZTE's development of China Telecom's intelligent fixed-line NGN network over the last 12 months and ZTE's extensive R&D programs focused on next-generation telecoms systems. "Multiple-Play and convergence are the major current trends of the telecommunications industry," said ZTE's vice president, Ms. Chen Jie. "End user demand for Multi-Play services will become more and more important to telecom operators. ZTE's proven NGN based F3G solution will meet this fast growing requirement and speed up returns for operators, customers and vendors."

As the largest NGN manufacturer in China, ZTE's has successfully constructed many backbone networks, including the DC1 Project for China Telecom, a 9 million-port NGN migration for Shanghai Telecom — the largest local NGN network in China — and a 6.6 million-port NGN migration for Guangdong Telecom, the second-largest local NGN in China.

**ClearTalk selects ZTE USA's 3G digital wireless solution**

ZTE USA Inc., a subsidiary of ZTE Corporation, announced that ClearTalk

Wireless, a provider of cost-efficient personal communications services in five states within the United States, has selected ZTE's All-IP CDMA2000 platform to deliver high-speed, high-quality third-generation (3G) wireless voice, data, and multimedia services to subscribers in select markets.

"Subscribers today are demanding better, faster and cheaper advanced wireless services and a 3G foundation is essential for meeting the demands of our customers and continuing to attract new ones," said Glenn Ishihara, president of ClearTalk.

"After an extensive evaluation process, we found that ZTE's solutions were the best available for our current needs.

They represent superior technology and a comfortable price point.

We are confident that the All-IP CDMA2000 platform will empower us to significantly improve the customer experience and further grow our business.

The fact that ZTE also has a handset division was very important to us, as we plan to jointly develop applications that are delivered over both the client (handsets) and server (network).

ZTE has shown a unique willingness to work closely with us in this regard."

In addition to supporting CDMA2000-based services, ZTE's All-IP CDMA 2000 platform will provide ClearTalk with a smooth migration path towards offering EV-DO Rev.

A-based services, which provide faster data transmission speeds and a better quality of service (QoS).

3G refers to an advanced set of wireless applications beyond voice, such as multimedia, data, video, and Internet applications. CDMA2000 is the industry's dominant 3G standard.

The EV-DO Rev. A standard, the next generation of CDMA2000 technology, promises to deliver even more advanced multimedia applications at a faster speed while allowing for

enhanced network capacity. In today's competitive market, the ability to extend 3G services to subscribers enables carriers to differentiate their services and generate a higher ARPU (average revenue per user).

In order to do so, carriers must put network equipment into place that will enable them to extend and support 3G services on CDMA 2000, with EV-DO.

"At ZTE, we are committed to creating technology innovation that will position our customers to capitalize on current and future market demands," said Jack Yang, executive vice president of sales and marketing, ZTE USA Inc.

"In the US, CDMA2000 with EV-DO Rev. A is quickly becoming the most advanced wireless standard for delivering advanced services that open up new revenue doors for carriers.

Our All-IP CDMA2000 platform gives carriers in the U.S. and all over the world the foundation for delivering high speed, superior quality services that attract new subscribers and keep existing ones."

With the new ZTE platform, ClearTalk's subscribers will experience improved voice and call quality and longer battery life for phones.

Subscribers will also have access to advanced camera, text and multimedia messaging, ringtone, gaming, and high-speed wireless Internet applications.

ZTE's All-IP CDMA2000 platform powers high-speed 3G broadband wireless services including data, voice, and multimedia applications, while also offering a migration path to EV-DO Rev.A-based services.

ZTE CDMA products have been successfully deployed in more than 60 countries with over 100 operators, delivering a global capacity of 50 million lines for commercial use.

ZTE has built over 50 CDMA2000 1xEV-DO systems for commercial or trial use in more than 40 countries worldwide

## MARKET INTELLIGENCE

### China's IP PBX market likely to reach \$479 million in 2010

According to a report from research firm In-Stat, the IP PBX market in China is going through a good phase and is expected to increase from \$164.1 million in 2006 to \$479.5 million in 2010. In-Stat analyst Kevin Li said that new solutions are being developed that adequately address the customers' concern about security and reliability of carrying voice on an open data network. Traditional PBX revenue would reduce 31.8 percent in China CAGR through 2010.

### Chinese market to increase

The mobile video market in China will take off in 2008, driven by interest in the Beijing Olympics. A new study from ABI Research forecasts total mobile video users at more than 32 million in 2008; about 27 percent of these consumers will use broadcasting technology, and 73 percent will use unicast streaming technology, while a number of viewers are likely to use both. In 2006, SARFT, the Chinese State Administration of Radio, Film, and Television, announced two handset-related standards. DAB is likely to be the first phase of mobile multimedia broadcasting standards development in China. DAB paves the way for upgrading to China's proposed mobile multimedia broadcasting standard, T-DMB, a terrestrial implementation of SK Telecom's mobile video format.

Because both standards are voluntary, there are questions surrounding their effect in the market. "It is likely that local media groups and TV stations will deploy DAB initially, and implement T-DMB at a later date," said ABI research director Jake Saunders.

"The Chinese government will give preference to a standard that will be used in the 2008 Olympics, and DAB has been listed as one of the broadcast services that will be available at the Beijing Games."