

# IRG WMR



## IRG Technology, Media and Telecommunications and Life Sciences Weekly Market Review

*Weeks of 17 December - 30 December, 2006*

*For more information on IRG, please email [communications@irg.biz](mailto:communications@irg.biz) or visit [www.irg.biz](http://www.irg.biz).*

### **Hong Kong (HQ)**

No.1-2A, 17/F, The Centrium,  
60 Wyndham Street, Central,  
Hong Kong

Tel: (852) 2237 6000  
Fax: (852) 2237 6100

### **Singapore**

5 Rhu Cross, #04-16  
Olivia Block, Singapore  
437434 Singapore

Tel: (65) 6325 1191  
Fax: (65) 6348 9583

### **Japan**

JT Building 15Fl, 2-2-1  
Toranomon, Minato-ku,  
Tokyo, Japan 105-0001

Tel: (813) 5114 8395  
Fax: (813) 5114 8396

### **Korea**

37/F, Asem Tower, Samsung-  
dong, 158-1, Kangnam-gu,  
Seoul, Korea

Tel: (822) 6001 3840 ext. 3841  
Fax: (822) 6001 3711

### **Philippines**

2/F, State Condominium Bldg.,  
186 Saclcedo St. Legazpi Village,  
Makati, Philippines

Tel: (632) 728 5307  
Fax: (632) 728 5307

ideas

reach

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Equity Market Indicators					
Index	Closing Level (12/29/2006)	% Change 1 Week Ago	% Change 1/1/2006	% Change 1/1/2005	% Change 2005 Low
S&P 500	1,418.30	0.5%	13.6%	17.0%	24.7%
Dow Jones Industrial Avg.	12,463.20	1.0%	16.3%	15.6%	24.5%
Dow Jones Tech. Index	412.68	0.8%	10.0%	16.1%	32.1%
Dow Jones Telecom. Index	260.08	1.3%	29.0%	19.4%	31.9%
NASDAQ Composite	2,415.29	0.6%	9.5%	11.0%	26.8%
The Street.com Net	247.29	0.4%	17.6%	18.7%	41.7%
Japan Nikkei 225	17,225.83	0.7%	6.9%	49.9%	59.1%
JASDAQ	86.19	-0.2%	-33.8%	-4.6%	-4.9%
Japan Mothers	1,110.78	-1.9%	-56.3%	-35.5%	-36.1%
Korea KOSPI Composite	1,434.46	-0.2%	4.0%	60.1%	64.7%
Korea Kosdaq	606.15	0.8%	-12.3%	59.4%	55.3%
Taiwan Stock Exchange	7,823.72	2.2%	19.5%	27.4%	38.9%
Singapore Straight Times	2,985.83	1.5%	27.2%	44.5%	44.8%
Hong Kong Hang Seng	19,964.72	3.3%	34.2%	40.3%	49.5%
Hong Kong GEM	1,224.67	1.1%	21.6%	23.9%	41.8%
China Shanghai (A-Share)	2,815.13	14.2%	130.6%	111.6%	165.0%
China Shenzhen (A-Share)	569.58	2.8%	96.4%	73.3%	132.8%
China Shanghai (B-Share)	130.12	3.3%	109.8%	72.0%	153.4%
China Shenzhen (B-Share)	433.32	4.4%	121.5%	97.1%	132.3%

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Technology, Media, Telecommunications and Life Sciences Market Activity						
NASDAQ/NYSE TMT and Life Sciences IPO Filings						
Filing Date	Issuer	Industry Sector	Size (US\$MM)	Description	Book-Runner	Co-Manager
12/19/06	Clearwire Corp. [CLWR.US] (NASDAQ)	Telecom	US\$400.0	Provides wireless broadband services in the U.S. and other countries	JP Morgan/ Merrill Lynch/ Morgan Stanley	Bear Sterns/Citigroup / Jefferies/ Raymond James/Stifel Nicolaus/ ThinkEquity Partners/ Wachovia Securities

NASDAQ/NYSE Equity Markets: TMT and Life Sciences IPO Pricing						
IPO Date	Issuer (Exchange)	Description	Size (US\$MM)	Offer Price	Price on 12/29/06	% Change From Offer
12/19/06	Melco PBL Entertainment [MPEL.US] (NASDAQ)	Develops, owns and operates casino gaming and entertainment resort facilities	US\$1,145	US\$19.00	US\$21.26	11.9%
12/18/06	Solarfun Power Holdings [SOLF.US] (NASDAQ)	Manufactures and sells photovoltaic cells and modules in China	US\$162	US\$12.50	US\$11.69	-6.5%
12/18/06	Trina Solar [TSL.US] (NASDAQ)	Manufactures solar-powered products including photovoltaic wafers, ingots and modules	US\$82.5	US\$18.50	US\$18.90	2.2%

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Asian Equity Markets: TMT and Life Sciences IPO Pricing						
IPO Date	Issuer (Exchange)	Description	Size (US\$MM)	Offer Price	Price on 12/29/06	% Change From Offer
12/27/06	Shinyang Engineering [086830.KS] (KOSDAQ)	Manufactures parts for mobile phone and molds for various industrial products	US\$11.7	KRW 9,100	KRW 9,320	2.4%
12/26/06	Marumae Co. Ltd. [6264.JP] (Tokyo Stock Exchange)	Manufactures and markets parts for LCD manufacturing machines	US\$9.5	¥470,000	¥700,000	48.9%
12/19/06	Pentamico Inc. [088020.KS] (KOSDAQ)	Designs, produces and markets video codec chipsets, which provide video and audio compression, decompression solutions	US\$11.0	KRW 10,200	KRW 9,200	-9.8%
12/20/06	Soucenet Corp. [4344.JP] (Tokyo Stock Exchange)	Produces and sells utility software and software products for training purposes	US\$13.1	¥220,000	¥450,000	104.5%

Asian Markets: TMT and Life Sciences Convertibles						
Issuance Date	Issuer [Equity Ticker]	Description of Issuer	Maturity Date	Size (US\$MM)	Per US\$10,000 converts to	Convertible Until
12/18/06	Bluecord Technology Corp. [043610.KS]	Specializes in manufacturing semiconductor equipment, such as clean room control and wafer sorters	1/3/08	US\$4.3	3,332 shares	12/3/07

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## Weekly Highlights

### International

#### *Mobile/Wireless*

- **According to research firm Informa Telecoms & Media, the mobile entertainment market will more than double over the next five years to reach US\$38.1 billion in 2011.** The study notes that even as music services such as ringtones, full track downloads and ringback tones will continue to generate the highest proportion of revenues seen in the mobile entertainment industry, mobile TV service revenue is poised to surge over the next five years, as it grows from US\$178 million to more than US\$1.8 billion in 2011. The report states that music and images still dominate the market accounting for 64 percent of revenues in 2006. But while mobile music will continue to grow, the market for wallpapers, avatars and other images will shrink. By 2011, images will have fallen to fourth place, behind mobile games and video. Informa Telecoms & Media said that mobile games and mobile video will account for close to half of the mobile entertainment market's growth over five years' time compared to only one-quarter of mobile entertainment revenues in 2006.

#### *Hardware*

- **Worldwide PC shipments posted a 9.1 percent growth in the third quarter of 2006 despite registering no growth in the U.S., according to International Data Corporation (IDC).** The study noted that even as the U.S. saw demand slow considerably in the third quarter, growth in other regions was better than expected, keeping third-quarter results in line with forecasts and limiting the impact of slower U.S. sales on worldwide growth projections for the coming year. The research firm said that overall PC shipments in the U.S. were flat year on year in the third quarter versus more than 5 percent growth in the first half of 2006 and roughly 10 percent annually for 2003-2005. Outside the U.S., the markets showed a very different scenario, with third-quarter shipments were up 13.5 percent, in line with projections for 2006 and 2007. Although growth projections went down below 10 percent for 2008-2010, the largest change in the forecast was a reduction of less than half a percent growth in 2009 with other periods almost unchanged. The research firm said that growth in PC shipments remains strong despite slower growth in the U.S. in the third quarter and in Europe and Japan in the second quarter. According to IDC's Worldwide Quarterly PC Tracker, the market is moving toward portable PCs and emerging markets even faster than expected.
- **According to iSuppli, the global market for liquid crystal display televisions is expected to remain hot next year, despite some cooling in sales.** The study said that LCD-TV shipments are expected to rise by 57 percent next year to 62.5 million units, compared with 39.7 million units that shipped this year. This year, sales went up by 95 percent from 2005. The slowdown is expected to be even more pronounced in terms of revenue, as manufacturers compete on price. Factory revenue would increase by 20 percent next year to US\$53.5 billion, up from US\$44.7 billion this year, according to iSuppli. Next year's projected increase represents a decline of 56 percent compared with 2006, when revenue soared 76 percent over 2005. The research report indicated that LCD-TVs with screen sizes of 40 inches or more will be the focus of retailers and manufacturers, as the cost of the televisions declines and availability increases. Manufacturers are seen as shipping 2.4 million units in the 40- to 41-inch range by the fourth quarter of next year, up 60.3 percent from the same period this year. iSuppli sees shipments of LCD-TVs in the 42- to 44-inch range are expected to reach 1.1 million by the last quarter of next year, an 87.7 percent jump from 2006.

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## Japan

### *Internet*

- **According to the country's Ministry of Internal Affairs, the number of subscribers to high-speed fiber-optic network services in Japan topped 7 million for the first time ever at the end of September.** The ministry explained in the report as ascribable to growing replacement demands. The report said a total of 7.1 million were subscribing to fiber-optic services as of the end of September, up 848,953, or 13.5 percent, over the three months earlier. The data showed more subscribers favoring faster fiber-optic services over asymmetric digital subscriber line and other broadband Internet access services in relatively large cities. The ministry report noted that the number of subscription to ADSL services went down by 0.7 percent in the three months through September to 14.3 million for the second consecutive quarterly.
- **Yahoo Japan said it has joined the Wi-Fi hotspot business and begun offering its 6.3 million registered users in Japan access to a nationwide wireless LAN network.** Yahoo said the network makes use of the hotspot network built by sister company Softbank Telecom, which currently offers around 3,500 access points throughout the country. Many of the access points are located in cafes, railway stations, and hotels. The service is available to users holding a Yahoo Premium membership to the portal, which costs 294 yen (US\$2.5) per month and brings with it access to a number of member-only services including bidding and selling on the company's leading auction site. The company presently has 6.3 million such members. Yahoo Japan already offers its name to a hotspot service, which is only available as an option to customers signing up for Softbank BB's Yahoo BB broadband service. The new service announced does not, however, require subscription to a wired broadband provider. Softbank Telecom is a subsidiary of Softbank, which is a major shareholder in Yahoo Japan.

### *Media, Entertainment and Gaming*

- **A portal site, dubbed 47NEWS, carrying news provided by a total of 52 newspaper companies across Japan, will open soon, featuring a function to search news from a map of Japan on its web site.** The portal site will display news in the Japanese language written by some 10,000 reporters of the 52 newspaper companies based in the country's 47 prefectures. The offering marks the first online news site of such a scale in Japan that will allow consumers to search news from domestic newspapers on a single website. Other features of the website include a keyword ranking service that shows what is the most written about theme of the day's news. By clicking the word, users can see a series of news reports related to the word. Photos taken by the newspapers will also be shown on a Japan map and users can vote for their favorites. Videos will also be available in the portal site. Kyodo News will provide overseas and major city news for the top news section, and local newspapers will provide news stories from the prefectures. Press Net Japan, which is involved in operating the website, said that 47NEWS created under the network of the 52 newspaper companies across Japan is seen as boosting the ability of local newspapers' to transmit information.
- **Publishing house Kotonoha announced that it will offer book downloads employing the same technology that is used to purchase online music.** The publisher said the books-on-tape will be cut in sections of up to eight minutes each. Kotonoha has a current catalog of 100 titles, with the company aiming to sell each of its works to 1,000 customers per year. Downloadable books are already available in the market but this will mark the first time that a publisher has offered audio books on mobile phones. Electronic publishing is a growth industry in Japan, with a particularly strong

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market for manga cartoons sold via mobile telephone. An earlier development saw leading publisher Kadokawa entering into a partnership in electronic publishing with Japan's top mobile operator NTT DoCoMo and electronics giant Matsushita, which has launched an "electronic book" with a color screen and multimedia functions.

- **Boston.com, the web site of The Boston Globe, announced the signing of a content-sharing agreement with an established Japanese language baseball site.** Under the agreement, excerpts of baseball coverage in the newspaper, on Boston.com and on the Boston Dirt Dogs fan site will be translated into Japanese and posted on Go-RedSox.com. The Globe and Boston.com are owned by The New York Times Co., which also is a part owner of the Red Sox.

## *Software*

- **The Tokyo Stock Exchange (TSE) announced its selection of Fujitsu to develop its next-generation trading system, saying that the next-generation system will serve as the foundation for the public securities market.** The selection follows a period of open competition for the contract that began in August. The exchange said it has selected Fujitsu to develop a system with functions at the world's highest level in terms of speed, reliability, and scalability. The TSE also said it believes that the construction of a next-generation trading system will help make its market more reliable and convenient for market users, particularly investors and trading participants.
- **Microsoft Corp.'s Japan unit revealed that it will offer users of its new Vista operating system the ability to print out digital photographs through kiosks in thousands of Seven-Eleven Japan Co. Ltd. convenience stores across the country.** The service is linked to the photo album software in Windows Vista and begins with a user selecting the photos to be printed. The photos are then uploaded to a server operated by Fuji Xerox Co., which manufactures and operates the machines in 7-Eleven stores. The companies said the offering is for users who do not have home printers or who want to distribute a number of copies of the same image after an event. The companies said the machines that will be used for the Vista printing service were installed into all 7-Eleven outlets in 2005 and offer a range of services including copying, photo printing from memory cards, printing out of tickets purchased online and faxing. As of the end of November, there were more than 11 thousand 7-Eleven stores in Japan.

## *Hardware*

- **Marumae Co., a Japanese maker of manufacturing equipment for LCDs, semiconductors, and solar batteries, announced that it has received approval to list on the Tokyo Stock Exchange's Mothers market.** The company will offer 2,400 shares to the public in its IPO. Of those, 2,000 are newly issued shares and 400 are shares currently held in private. Marumae will offer all the shares through the book-building method. The company said it expects to net 862.5 million yen (US\$7.2 million) from the offering. Of the IPO proceeds, it plans to use 316 million yen (US\$2.6 million) for capital spending, 257 million yen (US\$2.1 million) for repayment of debt and the remaining for working capital. For the current fiscal year through August, the company forecasts a parent pretax profit of 260 million yen (US\$2.1 million), net profit of 153 million yen (US\$1.2 million), and sales of 1.3 billion yen (US\$11 million). Last fiscal year, the company posted a parent pretax profit of 141.1 million yen (US\$1.1 million), net profit of 84.8 million yen (US\$713,000), and sales of 930.8 million yen (US\$7.8 million). Monex, a major online brokerage house, is the lead underwriter of the offer.
- **Sharp Corp., the country's largest maker of LCDs and mobile phones, announced the doubling of its production of large-sized LCD screens in January in a bid to meet demand for its Aquos flat-panel televisions.** The company said its new line in central Japan will double Sharp's

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large-screen output to 30,000 glass substrates a month. The glass plates can each make eight 40-inch panels or six 50-inch screens. Earlier in October, Sharp raised its annual sales forecast for LCD panels to 1 trillion yen (US\$8.7 billion) from a previous projection for 980 billion yen (US\$8.2 billion). Sharp said it's focusing on gaining market share overseas. The company gets about 22 percent of sales from LCD panels, and about 40 percent from the division that makes the LCD TVs and mobile phones. According to DisplaySearch, some 42 percent of LCD TVs sold in Japan during the quarter ended June 30 were made by Sharp, compared with Sony Corp., which had an 18 percent share.

- **Canon Inc. and Toshiba Corp. announced that their decision to consider delaying or even altogether scrapping their plan to build a US\$1.7 billion display panel plant in Japan.** The decision stems in part from a patent dispute with Nano-Proprietary Inc. In 2004, Canon and Toshiba formed a joint venture, SED Inc., in a bid to develop and make surface-conduction electron-emitter display (SED) panels, which are thinner and consume less energy than liquid crystal display (LCD) and plasma panels. In 2005, Texas-based Nano-Proprietary filed a lawsuit against Canon, claiming that the use of its patented flat-panel technology at SED Inc. is not covered by any license agreement with the Japanese company. Canon looks to SED TVs as a generator of growth even as analysts said that Toshiba could announce its decision on the plant in January. Construction of the plant was scheduled to begin early next year.

## *Telecommunications*

- **Boston-based Buyout-firm Bain Capital LLC and private-equity firm Japan Industrial Partners announced that it has offered US\$550 million to buy Japan's SunTelephone Co, a distributor of telecommunication equipment.** The announcement was confirmed by SunTelephone president. Under the deal, shareholders would get 1,120 yen (US\$9.4) a share, a 19 percent premium over the average closing price of the shares over the last six months. This year, Bain raised a US\$10 billion global- buyout fund. It made its first Japanese investment as an end to more than seven years of falling prices in the world's second- biggest economy encouraged businesses and consumers to spend more. SunTelephone was established in 1948 and has focused on telephone-exchange equipment since 1962. It leases other products as well. Japan Industrial Partners was founded in November 2002 and buys units of large Japanese companies. Earlier in June, Bain acquired MEI Conlux, Japan's biggest maker of devices that recognize coins and bills used for vending machines.
- **The country's Ministry of Internal Affairs and Communications (MIC) reported that the number of subscribers to fixed-line telephone services posted a 3.6 percent decline year on year to 49.5 million as of the end of this September, marking a drop below the 50 million mark for the first time since the survey began in March 1989.** MIC ascribed the drop to a growing number of people and corporations switching to use of cut-rate Internet protocol telephony services. The report showed also that subscriptions to IP phone services registered a surge of 33.1 percent to 13 million during the same period. According to ministry data, the total number of subscriptions to mobile phone services including cellphones based on a personal handy-phone system and non-PHS phones climbed by 5.4 percent to 98.6 million.

## *Semiconductors*

- **Elpida Memory Inc. announced that it has initiated the mass production of computer memory using cutting-edge 70-nanometer processes, with the shipment taking place by March of next year.** Elpida, which makes dynamic random access memory (DRAM), said that starting capacity would be few thousand wafers per month, eventually raising it to a 70-nanometer

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production capacity at its plant in western Japan, depending on demand. Earlier Elpida and Taiwanese partner Powerchip Semiconductor Corp., announced that they plan to invest up to US\$15.5 billion on a DRAM memory chip joint venture, with the two firms indicating that they will together work to develop 50-nanometre processes. Elpida and Powerchip also revealed their plan to list the joint venture in three years, targeting a market most likely outside the country.

## Korea

### *Internet*

- **Skype Technologies revealed that it began selling various types of products that support voice over Internet protocol, or VoIP, though Internet Auction Co., South Korea's largest online auctioneer.** The company said the products range from Bluetooth phones to Wi-Fi phones, headsets and UBS phones, with Skype saying the products will retail for up to a 43 percent discount. Skype is a peer-to-peer telephone service that operates over the Internet. VoIP services enjoy significant competitive advantage in long distance calling over traditional land-line providers and is said to be three times cheaper in city-to-city and overseas calls, which account for around 10 percent of an average individual's call traffic.
- **KT disclosed that it is planning to invest 350 billion won (US\$375 million) in contents next year, an investment that is seen as more than two times bigger than this year.** The company said it is aiming to build fund and partnership investment and M&A, is rising as the issue in the contents market next year. KT said it will invest 150 billion won (US\$160.7 million) in IPTV and KFT will invest from 90 billion to 100 billion won (US\$96.4 million-107.1 million) in contents. SkyLife said it will increase the investment in contents to 100 billion won (US\$107.1 million) next year. KT's move to enforce contents of UCC and TV messenger is seen as securing the competitiveness of IPTV, setting up digital entertainment as four growth engines of next year. KTF is planning the contents distribution business covering diverse platforms escaping from the simple mobile platform.
- **According to the Korea Statistical Office, online commercial transactions in Korea have surpassed 100 trillion won (US\$107.1 billion) in volume in a single quarter.** The report said the Korea the value of e-commerce transactions exceeded 104 trillion won in the third quarter, up 9 percent from the second quarter. An official says more companies are turning to such transactions to trim costs. By type, business-to-business accounted for nearly 90 percent of the transactions, and by item, agricultural produce took up 40 percent.
- **NHN Corp.'s Naver said it has extended an Internet search and advertising agreement with Yahoo! Inc., two days after competitor Daum Communications Corp. switched to Google Inc.** The agreement allows Yahoo to show ads on Naver, an Internet site with e-mail and blog features that accounts for more than half the Internet search market in South Korea. Analysts are saying that NHN may contribute US\$44 million in sales to Yahoo next year under terms of the previous agreement. NHN also announced that it will end an outsourcing contract with IBM Corp. for network operation. Earlier in June 2004, the two firms signed the 10-year deal under which IBM has managed NHN's customer queries and complaints, gaming support and inbound calls from portal advertisers. The company said it made the decision as it is now capable of running networks without outside help. Industry observers, however, believe that the decision was made because of a technical glitch at the IBM-controlled network, which caused service disruption on its portal site in July.

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- **The country's Ministry of Information and Communication (MIC) said the number of high-speed Internet subscribers now exceeds 14 million.** The Information and Communication Ministry says more than 14 million people had high-speed Web connections last month, up 67,000 from October. The number is expected to rise further to 15 million next year. KT had the largest market share of 45 percent, followed by Hanaro Telecom with 26 percent and LG Powercom with 8 percent.

## *Mobile/Wireless*

- **Samsung Electronics announced its securing of a deal with Beijing Airway Communications to launch a Korean mobile Internet platform, called WiBro, in China.** Established in 1998, Beijing Airway offers various telecom services including a fixed-line Internet. China Netcom is the country's No. 2 landline telecom carrier. Spokespersons of Samsung Electronics refused to confirm the deal with Airway and negotiations with China Netcom. Industry observers see the WiBro penetration of China is projected to give much-awaited momentum to Korea's homegrown Internet-on-the-go services, which are described as struggling to take a root here. In a separate development, SK Telecom announced its forming of a strategic alliance with Samsung Electronics to expand their mobile phone business abroad. Under the agreement, SK Telecom said it would use three million Samsung mobile phones next year for its business at home and abroad, especially in the U.S. and Vietnam. SK Telecom, which controls more than half of South Korea's wireless market, has expanded abroad as it seeks to meet strong domestic competition.
- **KTF Co. announced its decision to invest 1.2 trillion won (US\$1.4 billion) next year in rolling out high-speed downlink packet access, or HSDPA, technology.** The company said it expects to complete a nationwide single bandwidth network using HSDPA technology by March next year. The plan is seen as a move to gain an upper hand over rival SK Telecom Co., which will likely expand its HSDPA coverage to all cities and towns within the first half of next year. KTF launched commercial HSDPA services in 50 major cities nationwide last June and expanded the service to 84 cities in September. HSDPA, or 3.5G, allows up to 14.4 megabits per second in download speeds and 2 Mbps in upload speeds, as well as high-quality video calling. The new technology allows users to download data seven times faster than the 3G wideband-CDMA platforms and enables handset makers to produce slimmer and cheaper models. KTF, which will also offer convergence services, forecasts revenues to increase from the current 4.5 trillion won (US\$4.8 billion) to 13 trillion won (US\$14 billion) by 2015. Out of the projected 13 trillion won (US\$14 billion), 7 trillion won (US\$7.4 billion) will be generated from core voice and data services. The remaining 5 trillion won (US\$5.3 billion) will come from "infotainment" – the fusion of information and entertainment – and 1 trillion won (US\$1 billion) from overseas business.
- **Industry sources said that BlackBerry maker Research in Motion is in talks with a major Korean telecoms firm to relaunch its wireless email service in Korea.** The country's telecom and messaging markets are dominated by local firms and technologies, and the BlackBerry has so far failed to gain a foothold in the country. The source indicated that leading local mobile telephone operator SK Telecom could launch a BlackBerry service in Korea during the next few months, even as SK Telecom stated that the service would be aimed primarily at foreign business users and U.S. armed forces personnel stationed in the country, rather than at South Korean citizens. Based on recent official statistics, this would suggest a total target market of fewer than 200,000 individuals. Earlier, another local telecom operator, KT's Powertel business communications subsidiary, rolled out a trial BlackBerry service for its customers in June 2006, but has signed up fewer than 2,000 subscribers.

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- **TU Media Corp., an operator of satellite mobile broadcasting service and a subsidiary of telecom giant SK Telecom Co., announced that the number of subscribers to its service has topped the 1-million mark even as the figure falls short of its target of 1.2 million for the full year.** The number of subscribers to its fee-based satellite digital multimedia broadcasting (S-DMB), which was launched in May 2005, topped 370,000 last year. TU Media said it plans to launch more channels and new services next year. The DMB service market is facing competition as terrestrial-DMB service providers launch their businesses. Along with S-DMB service, the T-DMB service is seen as a new growth engine for local telecom companies, including mobile handset manufacturers.
- **SK Telecom announced its selection of InterDigital Communications Corporation to develop an advanced mobility solution for nationwide session continuity.** The mobility solution will support nationwide handover for SK Telecom's customers when moving between WiBro and UMTS networks throughout the country. InterDigital's solution will include both the system design and the software solution for dual mode WiBro/UMTS terminal units. With this mobility solution, InterDigital and SK Telecom are driving demand for the next generation of converged wireless devices and providing a leading edge solution for the wireless industry migration to access independent Internet Multimedia Session (IMS) networks. In addition to the technology development, the agreement provides for potential collaboration on future projects.
- **LG Telecom Ltd. announced that its subscribers topped 7 million, with the company ascribing the growth to effective distribution strategy and customer-specific fee systems.** The operator's net subscriber increase hit 490,000 this year, which represents about 27.3 percent among a combined number of new mobile-phone customers in a domestic market boasting an 82 percent wireless penetration rate. The company said its performance shows its enhanced competitiveness, despite unfavorable market circumstances.

## *Media, Entertainment and Gaming*

- **Nexon announced that the first Nintendo version of a hit Korean online game is set to hit the market in early next year, with Nexon stating that it would co-publish a Nintendo Dual Screen title of its hit online role playing game Maple Story.** The company plans to co-launch the new title with Nintendo Korea in January next year. The deal is expected to help the online firm expand the customer base into Nintendo DS users worldwide. Monthly sales are also forecast to top the 20 billion won (US\$21.4 million) mark, up from some 6 billion won (US\$6.4 million). Nintendo expects the deal to give a boost to its marketing campaigns across the world. Nintendo DS comes with Wi-Fi features, and adoption of online games continues picking up steam in Japan. The partnership is seen as moving into Nintendo's next-generation game console Wii, generating a new business model between the two sides. Nexon said it is already developing a Wii version of its online game Mabinogi. Maple Story is a leading Korean online game enjoying popularity across the world, including Japan, Taiwan North America and Europe.
- **Digital music player maker Reigncom announced its partnership with Eins Digital, provider of online music site JukeOn, to launch Korean iTunes service.** This marks the first partnership between an online music service provider and a digital music player maker. The two companies said that they would open Plus 3 site for users of iRiver'player, with Eins Digital operating Music Store section of the new site. In the past, MP3 player makers mostly opened their own online music sites or formed ASP deals with music service providers. The new Plu3-Music Store service is modeled after Apple's hit iPod, but content will be provided by music service provider not by a manufacturer. Reigncom will be providing the music service platform, while Eins Digital delivering content.

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## *Software*

- **Shinhan Bank and SK Telecom announced that they will establish Network Access Control (NAC) solutions to enhance their internal information security system.** According to industry source, Shinhan Bank established NAC solutions on user PC groups recently accessing the network to block network security threats such as worm, virus and etc. in advance by enforcing the internal network user security policy. SK Telecom has commenced working on the project since last August to block the company network access of external unauthorized persons and users, who are short of the internally specified security level, and to enforce the security policy. After test application for 1,000 users by the year-end, SK Telecom is expected to expand the solution company-wide for 15,000~20,000 users next year. Both companies have introduced Symantec's Sygate products.

## *Telecommunications*

- **SK Telecom announced its plans to increase investment in its affiliate, TU Media, which offers cell phone-based video services, dubbed satellite digital multimedia broadcasting (DMB).** A company source indicated that a board meeting will be convened to make the decision. SK Telecom has a 29.6-percent share in TU Media, which retains a total of 218.4 billion won (US\$234 million) in paid-in capital. Current laws allow SK Telecom to rack up the stake to 33 percent, allowing the company to funnel about 6 billion won additionally into TU Media. However, the amount channeled by SK Telecom may be higher as TU Media is currently trying to attract a new investor, thus racking up the total paid-in capital. Furthermore, SK Telecom will be allowed to channel an additional 83 billion won (US\$89 million) into TU Media if the National Assembly passes the bill that eases the stake limit to 49 percent from the current 33 percent. TU Media started satellite DMB services midway through last year and its customer base is projected to pass the 1 million mark later this month. Satellite DMB enables people on the road to enjoy seamless video, CD-quality audio and data via in-car terminals or handheld gadgets such as mobile handsets.

## *Ventures/Investments*

- **KT announced that it will lead a consortium for the construction of a communication cable that connects the Korean communication network with China, Taiwan and the U.S.** The cable will be built by Tyco. Members of the consortium include Verizon Communication Ltd. of the United States, China Telecom, China Netcom, China Unicom and Chunghwa Telecom. The cable consortium had explained that after having concluded an agreement with the seabed cable suppliers, including ASN, NEC and Tyco via an international bid, KT completed a business deal with Tyco. Construction of the seabed cable is due to begin in December and continue for 20 months, with the service expected to become available from 2009.

## **China**

### *Internet*

- **China Netcom announced its entering into an agreement with VeriSign on the launching of root domain name mirror servers, an offering aimed at giving more convenience to Chinese users.** Under the agreement, the domain name lookups for Chinese netizens visiting .com and .net no longer need to be processed by domain name servers in overseas countries. The overall results are accelerated online surfing speeds and guaranteed online security. The setup of the mirroring servers is implemented by China Netcom and Verisign under the direct leadership of the country's Ministry of Information Industry. Before this cooperation agreement, the domain name analysis service for

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Chinese users regularly visiting .com and .net websites has been provided by domain name servers located outside of China.

- **eBay.com and Tom Online announced a joint venture agreement in China that sees the two companies combining their expertise to build a new China marketplace in 2007.** The move is seen by observers as intensifying their competition with the country's top auction website, Taobao.com. Under the agreement, eBay will have a 49 percent stake in the joint venture, and Tom Online will have a 51 percent stake. Both companies will make financial contributions to the venture, including a US\$40 million cash contribution from eBay and US\$20 million in financing from Tom Online. If mutually agreed, the two companies can equally share in an investment of up to an additional US\$10 million. In addition, eBay will also contribute its EachNet subsidiary, while Tom Online will contribute local management expertise, technology, and brand. The formation of a joint venture is seen as creating synergy among user communities and distribution channels. The agreement is also expected to boost product innovation capabilities on a local platform, and promote mobile integration. eBay said it does not expect this partnership to have a material impact on eBay's financial guidance as issued in connection with its third quarter earnings release in October this year. In related news, Alibaba.com, China's largest online market, disclosed that it is talks with eBay to share each other's user-base globally
- **Tencent disclosed that it has filed a lawsuit against auction website Taobao.com, accusing Taobao of infringing its copyrights by allowing sellers to sell QQ numbers and Q coins on the Taobao web site at unreasonable market prices.** QQ numbers and Q coins are part of the virtual currency system that Tencent provides to its users. In the suit, Tencent has demanded that Taobao.com stop the users' "illegal" behaviors. Tencent said it also asked Taobao to state clearly the measures it is going to take against the "illegal" behaviors of users within ten days. Observers see the resolution of the case as providing a legal basis for solving conflicts arising out of the use of QQ numbers.
- **Rumors are circulating indicating that Google is about to acquire CMFU.com, a Chinese literature web site owned by Shanda.com.** Reports are saying that the president and CEO of Shanda, Chen Tianqiao, has expressed interest in working with international brands. Shanda's top official has been reported as really interested in the deal. Unnamed sources stated that a third party auditing firm company has proposed a recommended price of US\$400-600 million for CMFU.com. No comment came from Google about the amount and the transaction.
- **A government source indicated that China's population of Internet users has risen by 30 percent over the past year to 132 million.** The figure was up from 123 million at the end of June, according to the government's China Internet Network Information Center. It said the number of Chinese customers with broadband access has grown to 52 million. The Internet agency said the rapid rise in Internet use has propelled growth in China's online commerce, advertising and games industries.

## *Media, Entertainment and Gaming*

- **CDC Games, a business unit of CDC Corporation announced its signing of a definitive agreement to make an investment of 1.5 billion won (US\$1.6 million) in Gorilla Banana.** With the deal, CDC Games will become the company's second largest shareholder. In addition to the exclusive rights for distribution in China of Gorilla Banana's first game, Red Blood, CDC Games will also have exclusive rights to distribution in India. Company officials view India as the world's next emerging games market and this expansion will further distance CDC Games from its legacy

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competitors in China. This is also viewed as the first step in a continuing expansion that will leverage the global infrastructure established by the CDC family of companies including offices in over 30 countries and more than 400 software engineers and developers in India. Gorilla Banana is an independent, online games development company founded in February 2006 whose founders were formerly game directors at NCsoft. Gorilla Banana will launch their first game Red Blood, a free-to-play MMORPG (massive multiplayer online role-playing game) based on an immensely popular comic book series in Korea, in 2008. The free-to-play model is very familiar territory for CDC Games. CDC Games pioneered the free-to-play, pay-for-merchandise market for online games in China.

- **China's State Administration of Radio, Film and Television (SARFT) released an advisory on the punishment faced by online TV stations and video web sites which show online programs without the government's approval.** The rule covers those who sell online or advertisements with fake government documents. According to relevant Chinese rules, these online TV and video stations will be fined between 10,000 yuan (US\$1,280) and 30,000 yuan (US\$3,842). SARFT says that companies must not cooperate with any of these illegal online TV stations by any means, and advises all broadcasting institutions and publications not to report on these online stations or provide platforms for their information release.
- **Linktone, a wireless value-added services firm, announced the signing of an exclusive partnership with Hainann Satellite, the parent company of Travel Channel.** Hainan Satellite is a TV station with coverage in all 31 provinces throughout China and an audience of more than 300 million viewers. As the exclusive provider of wireless value added services for Hainan Satellite interactive programming, Linktone will continue with its strategy of developing new media initiatives while delivering a differentiated product. Under the agreement, Linktone will be the exclusive partner to Hainan Satellite providing interactive WVAS for all its television programming. In addition, Linktone will provide product development, technical support, as well as 24-hour customer service support for Hainan Satellite. The Travel Channel China is a leading nationwide television channel for travel information throughout China.
- **According to the Motion Picture Association, Hollywood movie studios have won a lawsuit in China over the posting of movie clips on the Internet.** The group said a unit of Sohu.com Inc., which runs some of China's most popular Web portals, lost a suit over copyright infringement after it posted digital files of motion pictures for downloading. The report indicated that the Beijing First Intermediate People's Court ordered Beijing Sohu Internet Information Service Co. Ltd. to pay damages and costs of 1.1 million yuan (US\$139,000). A Sohu.com spokesman in Beijing, however, stated that the company did not have any knowledge of the litigation, and officials at the Beijing court were not available for comment.

## *Mobile/Wireless*

- **Reports indicate that NetEase.com is bringing down the number of its employees at its wireless department even as no reason for the cuts was given.** Sina said in a report that NetEase was planning to focus on channels with more "commercial value". NetEase, along with rivals Sina Corp and Sohu.com, has been working to diversify revenues for the past two years as the market for their core wireless services has matured and mobile carriers squeeze commission rates. Industry sources said that revenue from wireless business or mobile value-added services went down by 53 percent to 72 million yuan (US\$9.2 million) last year from 2004, accounting for 4.4 percent of total sales, compared with 17 percent in 2004. No comment was given by NetEase regarding the news. The

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company has about 1,600 employees, with its workers at its wireless unit found mainly in Beijing, Shanghai and Guangzhou.

- **ABI Research predicts that the total Chinese mobile video users will reach more than 32 million in 2008.** The study points to about 27 percent of these consumers using broadcasting technology, with 73 percent employing unicast streaming technology. The report also indicates that a number of numbers will likely use both technologies. In 2006, the Chinese State Administration of Radio, Film, and Television, announced two handset-related standards. DAB is seen as becoming the first phase of mobile multimedia broadcasting standards development in China. ABI Research seen DAB as paving the way for upgrading to China's proposed mobile multimedia broadcasting standard, T-DMB, a terrestrial implementation of SK Telecom's mobile video format.
- **BenQ announced the signing of a collaboration agreement with China-based Datang Telecom Technology and Industry, licensing Datang's TD-SCDMA terminal solutions to produce TD-SCDMA handsets, which will mainly be sold in the China market.** The partnership sees Datang as enabling BenQ to use DTivvy-series TD-SCDMA solutions, with features including compatibility with GSM and GPRS standards, support for SMS (short messaging service), MMS (multimedia service), e-mail, WAP, Internet browsing, MP3 and MPEG-4 playback. TD-SCDMA is one of the world's three 3G standards (the other two are WCDMA and CDMA2000) developed by the China Academy of Telecommunications Technology, Datang and Siemens AG. Industry observers point out that working jointly with Datang is important for BenQ because China is expected to release 3G operating licenses in 2007 and the 2008 Summer Olympic Games in Beijing is expected to generate large demand for 3G services and handsets. After Inventec Appliance, BenQ is the second Taiwan-based handset maker to adopt TD-SCDMA. BenQ's competitors in the TD-SCDMA market also include Samsung Electronics, LG Electronics and many China-based makers and vendors, such as Datang, TCL, ZTE, Huawei Technologies, Amoi, Ningbo Bird, Lenovo and Haier.
- **A digital music services firm 5Fad, announced the signing of a partnership contract with BrainMedia to launch a mobile streaming service for users in China.** The service is expected to allow clients to access 3G quality services on their existing 2.5G mobile data network. Controlling about 80 percent of the original music market on the mainland, 5Fad is the holder of one of the largest number of original music copyrights in China. BrainMedia is the leading provider of a codec technology for low bit-rate encoding and has developed a platform specifically designed for wireless music delivery. BrainMedia's technology enables the user to create high quality audio content at the lowest bit-rate available for China's current 2.5G wireless network.
- **Mobile value-added service firm Kongzhong, a mobile value-added service firm, announced the launching of a wireless job service in tandem has launched a service in cooperation with Zhaopin.com, an online job recruitment website in China.** Kongzhong's new service features a whole range of wireless functions including post inquiry, job information, professional training, hunter service, talent testing and personal job wanted ads. With the offering, mobile phone users can easily receive the job information by logging into the job channel on the home page of Kongzhong.com with their mobile phones. All the information on Kongzhong's job channel comes from Zhaopin.com.
- **Comba Telecom Systems, a provider of wireless equipments, revealed its plans to invest more in its wireless transmission business, a move aimed at tapping the development of China's 3G telecommunications services and the strong growth in developing countries.** For the six months to June, its wireless transmission business, including digital microwave systems, registered a massive surge to HK\$20 million (US\$2.5 million), accounting for 3.4 percent of sales, against 0.5

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percent posted a year earlier. The Guangzhou-based Comba earlier secured a contract from China Telecom to set up SDH networks in Guangdong. The company declined to disclose the value of the contract even as it revealed Ericsson and Alcatel as solution providers. In September, the firm reported first-half turnover posting a 42.7 percent rise to HK\$589.5 million (US\$75.7 million) from last year, boosted by increasing sales to China Mobile. Its net profit grew by 26.8 percent to HK\$45.5 million (US\$5.8 million), with revenue from China Mobile accounting for 65 percent of Comba's first-half sales and China Unicom giving 22 percent.

## *Hardware*

- **Skyworth Digital Holdings, China's second-largest television manufacturer by sales, reported a 21 percent rise in its revenue for its first half, boosted by strong growth in sales of LCD televisions.** The company reported its sales growing to HK\$5.6 billion (US\$720 million) for the six months ended September compared with HK\$4.6 billion (US\$591.4 million) a year earlier, its net profit registering a 211 percent surge to HK\$28 million (US\$3.6 million) from a restated HK\$9 million (US\$1.1 million). Skyworth Digital said its core profit went up to HK\$57 million (US\$7.3 million) from HK\$43 million (US\$5.5 million) a year earlier, excluding exceptional losses in both periods. Its sales of LCD televisions posted a massive 171 percent rise to HK\$1.9 billion (US\$224.3 million) in the first half, accounting for 34.6 percent of revenue, compared with 15.4 percent a year earlier. The company said its domestic sales posted a 20.7 percent growth to HK\$4.8 billion (US\$617.1 million), which stands for 86.3 percent of revenue. A report by researcher Gfk Asia states that Skyworth was overtaken by Hisense as China's leading TV maker in October as its market share fell to 9.6 percent. Hisense now leads on revenue, with 9.8 percent market share while Konka leads on volume with 13.9 percent.
- **Rumors are circulating that PC giant Dell is negotiating with local Chinese computer manufacturer Founder in a bid to acquire the Chinese computing business.** Industry sources mentioned that the CEO of Dell has expressed his aim to acquire Founder's PC business in May 2006 during a visit to Dell's production base in Suzhou. The report stated that the president of Founder was apparently not satisfied with the price Dell offered at that time. Industry analysts see Dell's acquisition of Founder as helping the global PC giant take back its advantage in direct selling in the China market, a position observers think it is losing at present.
- **Lenovo has announced a free computer recycling service in mainland China. The firm's recycling service is available to users of Lenovo brand laptop computers desktop computers and servers, as well as ThinkPad laptops and ThinkCenter desktop computers.** Lenovo says that both business and individual clients can send those types of computers to Lenovo's recycling sites across the country, or they can ask Lenovo's staff to come fetch the devices from their homes or offices. Lenovo will entrust a third party to process and dispose of these collected computers according to relevant Chinese laws and environmental rules, and it will undertake all the relevant cost involved during this process. Free recycling services have drawn great attention from the world's PC leaders, with Dell having initiated a free recycling service in China for its customers.
- **An agreement among the three main TFT-LCD manufacturers in China – TFTSVA, BOE Technology Group and Kunshan Longteng – sees the three companies jointly setting up a professional company as a unified platform for each of their TFT-LCD services.** The three companies cite the lack of funds and limited scale of each company as the main reasons for the parties to decide to integrate their businesses. At present, SVA produces 90,000 LCD each month, BOE 60,000 and Kunshan Longteng about 30,000. The combination of their business will make them more

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competitive in the global market. The new company will be registered in Shanghai and serve as a unified platform for each of the three parties. Currently, the three companies are working on the organization and strategy development for the new company. They said an agreement leading to business integration is expected to be completed by June of next year.

- **China Security & Surveillance Technology, a provider of digital surveillance technology in China, announced its plans of acquiring two Chinese security and surveillance companies.** The company said non-binding letters of intent have previously been signed with Shenzhen Hongtianzhi Electronics Company and HighEasy Electronic Technology. Hongtianzhi is one of China's top security camera manufacturers. Wuhan-based HiEasy will provide China Security with advanced compression technology to enhance the company's product offerings and user functionality by facilitating video and audio transmissions over telecommunications infrastructure networks. Industry analysts see the acquisitions as enhancing China Security's presence in the domestic market by making it one of the only vertically integrated providers, while also facilitating the company's planned expansion into new international markets. Hongtianzhi is expected to record approximately US\$12 million in revenues and US\$3 million in net income for 2006. The company's management anticipates revenues from the Hongtianzhi business to grow to approximately US\$20 million for 2007. HiEasy is expected to record an estimated US\$3.2 million in revenues and US\$0.6 million in net income for 2006. Management expects revenues relating to the HighEasy business to grow to approximately US\$5 million in 2007. The purchase price for HiEasy and Hongtianzhi is expected to be approximately US\$10 million and US\$30 million, respectively.

## *Ventures/Investments*

- **SmartPay has announced the recent completion of a Series B round of equity financing. The terms of the financing allow RRE Ventures, Evolution Capital, Lunar Group Capital and other existing shareholders to provide equity financing to the company resulting in total proceeds of approximately US\$10 million.** The company says it will use the proceeds to capitalize on its expansion and emergence as a leader in the growing Chinese payments market. SmartPay says it will utilize the proceeds of this financing to expand services and accelerate the growth of key performance metrics. In addition, the company will allocate a certain portion of the proceeds to ongoing exploratory work into new partnerships and a future public offering. The company provides remote payment services to consumers and intermediaries in China. The company focuses on merchants with large, recurring transaction volumes including mobile and utility billings, airline ticketing and other transactions, with the company using mobile and fixed telephones devices to process these payments, including SMS, WAP and IVR.

## *Telecommunications*

- **China Mobile, China Unicom and China Telecom released data indicating an increase in the number of users for all the three major telecom companies.** Of the three telecom operators, China Mobile received 4.6 million new users in November which resulting to a total number of user reaching 296.4 million by the end of the month. China Unicom registered an increase of 1.3 million new users, of which 930,000 were GSM users and 373,000 were CDMA users, with its total user number reaching 141.1 million by the end of November. China Telecom increased by 690,000 new users in the month, which added its total telephone users to 222.4 million.
- **The country's Ministry of Information Industry (MII) announced the setting up of an emergency plan with telecom operators, including China Telecom and China Netcom to repair the seabed cable damaged by the earthquake in Taiwan.** MII said that the earthquake has

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affected the Mainland's international communication links and has caused disruptions in voice and data transfers. At present, China Telecom and China Unicom are pressing on repairing the damaged cables, but it is still not known when the things can resume to normal. In Taiwan, Chunghwa Telecom says soon after the outages on its China-US links and the southern section of the SMW3 cables, the company had the traffic fixed on the restoration routes APCN and APCN2 cables in accordance with its contingency plan. Chunghwa Telecom says it has contacted cable ship companies for prompt repairs. Four cable ships will be dispatched to the outage areas and repair work will begin in January 2007. The recovery is scheduled to be completed in around three weeks.

## *Information Technology*

- **PacificNet's Epro subsidiary announced that it has been selected by China Unicom's Shanghai Branch to provide CRM consulting and call center training services.** Under the agreement, PacificNet Epro is tasked with boosting the CRM service level and telemarketing management capability of China Unicom's customer service center called the 10010 Information Hotline. The agreement covers a number of key areas that include customer service and telemarketing management, development of outsourcing telemarketing programs, call center workflow design, business management, project Return on Investment (ROI), customer affinity, designing effective telemarketing scripts, and enhancing customer service agent capabilities.

## **Taiwan**

### *Telecommunications*

- **Against the recent earthquake that disrupted telephone and Internet service across Asia as well as the U.S., Taiwan's largest telecom company revealed its decision not to invest more in backup lines to protect against similar disasters.** A top official of Chunghwa Telecom Co., Taiwan's largest telecommunications company, said the occurrence was so rare there is no need to spend more money on lines. The telecom crisis stunned Asia and demonstrated how tightly the region is bound together by hundreds of undersea fiber-optic cables. South Korea's largest telecom company, KT, said it worked through the night with Singapore Telecommunications Ltd., or SingTel, to restore damaged lines. According to SingTel, Internet access to international Web sites, as well as services for Blackberry mobile devices, had been fully restored. In Japan, major carriers KDDI Corp. and NTT Communications said most fixed-line phone services were running. In Manila, the Philippine Long Distance Telephone Co (PLDT) and its mobile unit Smart Communications said they had restored "sufficient capacity to handle normal" international voice and Internet data traffic. China, however, seemed to be have problem getting its services up to speed.

### *Mobile/Wireless*

- **Chunghwa Telecom (CHT) and Google announced the signing of an agreement to provide Google mobile search services through emome, CHT's platform of value-added services for mobile communications.** Under the agreement, CHT will integrate emome with Google's Internet search engine at the end of January 2007, allowing CHT's 8.4 million subscribers of mobile communication services and 4.0 million HiNet (ADSL) users to use Google mobile search service beginning in the first quarter of next year. The partnership marks the first cooperation with Google, with CHT hinting at further cooperation. Chunghwa Telecom Yellow Pages Media, CHT's subsidiary to be founded early next year, is likely to cooperate with Google in the operation of an on-line keyword-search advertising business, local industry sources indicated. In related news, CHT expects

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the number of its 3G subscribers with 3G handsets to increase to 1.5 million by the end of 2007 and therefore plans to procure nearly 1.1 million 3G handsets next year. CHT currently has nearly 850,000 3G subscribers, with about 400,000 of them using 3G handsets.

- **First International Telecom (Fitel) is expected to hold a meeting of its board of directors to discuss the increase of its capital.** Industry watchers believed that potential investments from two U.S.-based companies will be among topics to be discussed at the meeting. Fitel is the only operator of low-power PHS (personal handy-phone system) mobile communication services in Taiwan. The president of the Fitel said that the company's capital is currently about NT\$3.6 billion (US\$110.5 million). After the company receives the second grant from the government-sponsored Mobile Taiwan program to install WiMAX base stations in Taipei, it is aiming to generate some NT\$1.8 to NT\$2 billion (US\$55.2 million-US\$61.3 million) in capital. Aside from the Carlyle Group, reports point to Goldman Sachs, Kohlberg Kravis Roberts & Co (KKR) and the Blackstone Group as potential investors.

## *Media, Entertainment and Gaming*

- **GigaMedia Limited (GigaMedia) announced that it has licensed its real money MahJong and other Asian game software to the Carmen Media Group, a global leader in online entertainment.** The Carmen Media Group operates a portfolio of top online entertainment sites worldwide and is licensed in Gibraltar. Under the terms of the non-exclusive license, Carmen Media will have the right to offer GigaMedia's MahJong and other Asian game software on a real money basis. GigaMedia Limited is a major provider of online entertainment software and services. GigaMedia develops software for the online entertainment markets, including the global online gaming market. GigaMedia's FunTown game portal is a leading Asian casual games portal and the world's largest online MahJong game site in terms of revenue. GigaMedia also operates a broadband ISP providing Internet access services to consumers and corporate subscribers in Taiwan. The Carmen Media Group is a leading global entertainment group. The Carmen Media Group maintains a portfolio of entertainment brands, consisting of five online casinos, three online multiplayer poker rooms and two online sportsbooks which form part of Belle Rock Entertainment as well as its European focused brand Betway.

## *Hardware*

- **Chi Mei Optoelectronics, Taiwan's leading thin-film-transistor liquid crystal display (TFT-LCD) manufacturer, revealed its plan to invest an additional US\$31.2 million in China.** The company's board of directors had approved the expansion projects pending approval from the government, a company spokeswoman said. The expansion projects call for an investment of US\$30 million in a new facility in Chi Mei's LCD module manufacturing complex in Ningbo of China's eastern Zhejiang province. So far, Chi Mei has injected US\$90 million in the Ningbo complex with a current monthly capacity of one million units. The company said it will invest another US\$1.2 million in a backlight module component plant. Apart from the Ningbo base, Chi Mei is building another LCD module plant in Guangdong province for US\$30 million. The company said its Fushan plant, is scheduled to begin operations in the fourth quarter of 2007 with a monthly capacity of 1.3 million units.
- **There is a rumor indicating that Tsann Kuen Enterprise (TKE), Taiwan's largest 3C retailer and a manufacturer of small-size electric home appliances, has plans to work with Foxconn (the registered trade name of Hon Hai Precision Industry) to develop the channel market in China.** TKE denied having any such plans. Earlier in 2005, TKE left the Chinese market and the firm

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said it has no short-term plan to return to China. The firm said it is concentrating on its Taiwan channel business, with its China Business focused on small-size home appliance production.

## Hong Kong

### *Telecommunications*

- **A company official said that City Telecom aims to becoming the most expensive Hong Kong broadband service provider by the end of next year.** The medium-sized operator is looking to push up its revenue by focusing on high-end users and phasing out price-sensitive mass subscription. Earlier, the company raised the tariff for its subsidiary Hong Kong Broadband's standard service this year by about 30 percent to HK\$168 per month (US\$27), an amount it looks to increasing by about 50 percent next year. Hong Kong Broadband's plan for its standard 10 megabit per second downloading and uploading connection is about HK\$100 (US\$13) less than PCCW's eight Mbs service. The company, which also offers 25 Mbps and 100 Mbps high-speed connection for high-end users, had 220,000 broadband customers at the end of August, which represents about 12.9 percent of the total subscribers in Hong Kong. Market leader PCCW had 608,000 at the end of June. City Telecom reported that its net loss for the year ended August narrowed to HK\$92.2 million (US\$11.8 million) as its operating margin improved and service tariffs rose.
- **Rumors circulating that the Indian mobile business of Hutchison Telecommunications International would be sold soon to private equity funds for more than HK\$100 billion (US\$12.8 billion) caused Hutchison's shares to rise to a new high.** One speculation pointed to Reliance Communication, India's second-largest mobile operator, partnering with U.S.-based private equity firm Blackstone Group to offer at least US\$14 billion for Hutchison Essar. Vodafone, the world's largest mobile phone operator, is also rumored to have submitted an offer for Hutchison Essar of India placed at between US\$ 17-18 billion. Hutchison Telecom holds a 67 percent stake in Hutchison Essar. Hutchison Telecom declined to comment on the news. The Indian business is the major revenue stream of Hutchison Telecom, accounting for 45 percent of the group's HK\$15.6 billion (US\$2 billion) turnover for the six months ended June this year. The firm said no agreement in respect of such possible sale has been entered into up to today's date.

### *Media, Entertainment and Gaming*

- **Network CN Inc., a Chinese travel and media network company headquartered in Hong Kong, announced that it has exercised the option to acquire the remaining 40 percent of the Shanghai media project it began with Guiding Media last month.** Under the deal, Network CN paid US\$3 million for the rights to the remaining portion of the project. A top official of Network CN said that the deal expands the firm's ownership of the LED project as it sees great opportunity in China's outdoor advertising market. Earlier in November 2006, the company began a business agreement with Guiding Media Advertising Limited, a company incorporated in China, to manage and operate approximately 120 LED outdoor advertising panels in Shanghai. Through the terms of the business agreement, Network CN and Guiding Media Advertising may operate the network of outdoor panels for a 20-year period. Network CN expects to market advertising space to high-end brand names wishing to reach Shanghai's growing group of consumers. Network CN Inc.'s vision is to build a nationwide network in China to service the needs of its customers.

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## *Internet*

- **A survey by Hitwise said that Google, which started a sales operation in Hong Kong at the end of last year, increased its share of the city's online search market to 36 percent last month from 26 percent in January, in the process narrowing the gap on market leader Yahoo Hong Kong.** Google initiated its sales operation in Hong Kong at the end of last year only. Yahoo Hong Kong held on to its top position with 38 percent share last month, a decline of 12 percent since January when it had half of the market Hong Kong. Google's market share has surged from 26 percent in January. Microsoft's MSN search doubled its market share over the year, accounting for 12 percent last month from 5 percent in January. Google's gain was mainly ascribed to the launch of several free applications that included software for Internet security and an online photo album Picasa. Google now has more than 1,000 advertisers, which range from small and medium-sized firms to large portals. Google also secured a partnership with Next Media's atnext.com through the Google AdSense program. Atnext, an Internet portal, has put Google search on its website and will share advertising revenue with the company. According to a survey, online advertising accounts for about 3 percent over the total advertising market in Hong Kong.
- **Pacific Internet Limited, Asia Pacific's largest telco-independent Internet Communications Service Provider by geographic reach, announced that its wholly owned subsidiary, Pacific Internet (Hong Kong) Limited, has launched a Data Center Service in China.** The service is specifically tailored to serve Hong Kong enterprises with cross-border communications needs across the Chinese mainland, Hong Kong and the Asia Pacific region. The launch of Pacific Internet's Data Center Service is seen as bridging Internet interoperability between the Southern and Northern parts of China, facilitating data transfer and securing seamless connections within the Chinese mainland and the rest of the world. Pacific Internet's China Data Center Service currently covers 10 POPs including Shenzhen, Beijing, Shanghai and other cities in the Pearl River Delta, where most of Hong Kong enterprises' branch offices and factories in China are located. They can now empower their businesses through this best-in-class co-location service. Pacific Internet (Hong Kong) Limited is a wholly owned subsidiary of NASDAQ-listed Pacific Internet Limited. Pacific Internet offers the full range of IP-based communications solutions, including data, voice, security, messaging, remote access, hosting and cross border connectivity for business users in Hong Kong and Greater China.

## *Mobile/Wireless*

- **ABI Research sees Hong Kong mobile operators as being active in mobile video streaming. Their international operations backgrounds allow them to provide diversified content to users.** PCCW's experience in operating its IPTV business will boost its performance in the 3G market. ABI Research forecasts approximately 715,000 mobile video users in Hong Kong in 2008, of which 99 percent will be streaming users. In Taiwan, ABI Research forecasts that there will be over 1.5 million mobile video users in 2008, with 97 percent receiving content via streaming.

## **Singapore/Malaysia/Philippines/Indonesia**

### *Media, Entertainment and Gaming*

- **Singapore Press Holdings (SPH) announced its entry into a new medium by delivering on-demand news clips on broadband TV.** The publisher of The Straits Times said it will provide video clips of breaking news on the M2Btv broadband TV service run by home-grown firm M2B World from next month. Under the new offering which comes after its launching of Stomp online portal, the

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new SPH channel will compile video content from The Straits Times Interactive, Stomp and AsiaOne. There will also be international video news clips licensed from AP Digital, a division of news agency The Associated Press. Viewers will, however, need a broadband connection to tune in, compared with StarHub's cable TV or MediaCorp's free-to-air broadcasts. M2Btv uses a broadband connection to deliver programs to homes. Broadband users need to subscribe and connect a set-top box, a device that is loaned out for free, to his TV set. In June, SPH launched Stomp, a website which invites readers to be "citizen reporters," sending in photos and information of newsworthy events.

## *Mobile/Wireless*

- **Globe Telecoms, a major telecommunications firm in the Philippines, said it is considering abandoning its third 3G frequencies awarded to them if the country's National Telecommunications Commission (NTC) pushes through with the bidding of licenses and franchise for 3G operators.** The company announced the decision after the Philippine legislature recently invalidated the contract awarded to 3G license holders and to conduct bidding because government is incurring losses amounting to from 15 billion pesos (US\$303.5 million) to 25 billion pesos (US\$505.8 million) as a result of the way the NTC is handling the awarding of the licenses.
- **Ozura Mobile, a wholly owned subsidiary of Nextnation Communication and a leading international publisher and developer of mobile entertainment, announced the launching of the Cicak-Man Mobile Game in an integrated media collaboration with KRU and DiGi Telecommunications Sdn Bhd.** Powered by Ozura's proprietary mobile gaming platform, the Cicak-Man mobile game is compatible with more than 450 different mobile handsets. The mobile game is supported by a suite of mobile content that includes wallpapers and ringtones and is backed by a comprehensive marketing campaign sponsored by DiGi. Ozura is also a specialist in the development and provision of mobile gaming engines (platform). The company creates games for mobile phones based on J2ME, BREW and Symbian platforms. DiGi is Malaysia's fastest growing mobile operator focusing on innovations, simplicity and best value to enrich lifestyles through DiGi Prepaid, DiGi Postpaid and DiGi Business.

## **United States/Canada**

### *Internet*

- **The founder of Wikipedia, the online encyclopedia that allows users to edit information found there, announced the move to develop a Wiki-based search engine seen as competing with established commercial search engines.** The company said the search engine is to be dubbed "Wikiasari," or "Wikia," for short. The Wikimedia Foundation of St. Petersburg, Florida, which manages the web site Wikipedia.com, emphasizes that the search engine project is not associated with the foundation.

### *Media, Gaming and Entertainment*

- **Sony BMG Music Entertainment revealed that it will pay US\$4.25 million to resolve part of the investigations into problems caused by music CDs loaded with hidden anti-piracy software.** Under the terms of the settlement, the record company also agreed to reimburse consumers whose computers were damaged while trying to uninstall the anti-piracy software. Customers will be able to file a claim with Sony BMG to receive refunds of up to US\$175. Sony BMG also agreed not to distribute any CDs loaded with copy-protection software that hindered computer users from easily

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locating it or removing it from their PCs. The office of Massachusetts Attorney General initiated the brokering of the multi-state agreement. Sony BMG is a joint venture of Sony and Bertelsmann.

- **News Corp announced its decision to acquire NBC Universal's 25 percent stake in two entities that run the international operations of the National Geographic Channel on cable TV.** NBC Universal is a unit of General Electric. In its regulatory filing, News Corp said it was acquiring the stakes in NGC Network International and NGC Network (UK) for an undisclosed sum. The deal is seen as boosting News Corp's stake in NGC Network International to 75 percent, with the rest held by National Geographic Television. With the present development, the British unit is now owned 25 percent by News Corp, 25 percent by National Geographic Television, and 50 percent by British Sky Broadcasting Group, a satellite broadcaster.

## *Mobile/Wireless*

- **Research In Motion reported a higher preliminary third-quarter that and an even better fourth quarter, which the company ascribed to the strong demand for its BlackBerry handheld e-mail devices.** RIM reported an earning of US\$176 million for the three months to December, up from a profit of US\$120 million in the same period a year earlier. The company reported a 49 percent climb in its revenue to US\$835.1 million. The company, however, said its results are preliminary as it is in the middle of reviewing its stock-option granting practices, with the expectation to making all required filings by March. RIM said about 875,000 BlackBerry subscriber accounts were added during the third quarter for a total subscriber account base of about seven million. Earlier in September, RIM told the markets to expect 800,000 subscriber additions. RIM's BlackBerry Pearl device, launched earlier this year, helped boost the strong quarter. The Pearl, which has a digital camera and expanded capabilities for handling videos and photos, was designed in an effort to widen its appeal to average consumers. The company forecast revenue for the fourth quarter in the range of US\$900 million and US\$940 million, and predicts additions to its subscriber account additions in the range of 950,000 and 975,000.
- **Cingular Wireless LLC, the nation's largest cell phone provider, has made a deal with MySpace.com that will allow MySpace users to access their profiles through Cingular phones.** Under the agreement, cell phone users will be able to go to their MySpace.com page to edit it, post photos and get messages. The deal is seen as also expanding Cingular's work with MySpace.com, which includes letting bands use a service called MySpace Mobile Music to create ringtones. Earlier this year, MySpace.com set up a partnership with Helio, a cell phone venture of South Korea's SK Telecom and Earthlink.
- **Industry sources said that Sprint Nextel Corp. is close to choosing Nokia as its third primary equipment provider for its U.S. next-gen wireless network.** Earlier this summer, Sprint picked Motorola Inc. and Samsung Electronics as its other two providers. Sprint disclosed that it plans to spend US\$3 billion on the WiMax network over the next two years. Sprint intends its project to be the largest WiMax project in the world, and aims to launch in trial markets by the end of 2007. Its 'third partnership' was also pursued by Alcatel-Lucent and Nortel Networks Corp., who see the technology as a huge growth area.

## *Software*

- **Red Hat, a leading provider of the open source Linux operating system and services, reported a 37 percent decline in its third-quarter profit sank, ascribing the drop to stock options expenses and tax provisions.** For the three months to last month, Red Hat said its earnings went down to US\$14 million from US\$24.6 million in the same period last year. Excluding stock options expenses and income tax provisions, its profit totaled US\$29.6 million. For its revenue, Red Hat

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posted a 45 percent growth to US\$105.8 million from US\$73.1 million in the year-earlier quarter. Analysts expected US\$104.2 million in sales. Earlier in October this year, shares of Red Hat went down by 24 percent on the news that Oracle would move onto Red Hat's domain by way of selling maintenance services for Red Hat products. Red Hat distributes the open-source Linux system free, with the company generating earnings from its sale of service and support.

- **Oracle's quarterly profit registered a rise of 21 percent to US\$967 million for the three months to last month, compared with net income of US\$798 million at the same time last year.** The firm said its revenue for fiscal second quarter went up by 26 percent to US\$4.1 billion from US\$3.2 billion at the same time last year. Oracle's stock price has climbed nearly 50 percent this year, driven by robust earnings growth. The latest performance marked the fourth consecutive quarter in which Oracle's profit has increased at least 20 percent, delivering on a management promise when the company began its acquisition of other software makers in a series of deals valued at more than US\$20 billion so far. Industry observers note that Oracle has been getting its financial targets by maintaining its leadership in the database software market while boosting its sales of business applications products that help companies, government agencies and schools automate a wide range of tasks. Its takeover of PeopleSoft and acquisition of Siebel Systems made Oracle not only a direct rival of SAP but also made applications software its current primary growth engine. Oracle's sales of application licenses totaled US\$340 million in the latest quarter, a 28 percent increase from the same time last year compared to its sales of Oracle's database and so-called "middleware" software, which posted only a percent rise to US\$867 million during the quarter.

## *Hardware*

- **U.S.-based Redback Networks disclosed that it has agreed its acquisition by LM Ericsson in a deal valued at US\$2.1 billion in cash.** Redback Networks makes routers needed to direct data over broadband networks. Analysts said the deal showed a need among service providers to upgrade their networks. Redback, which makes routers used to connect computers to the Internet and are increasingly used to simultaneously handle the data, voice, and video downloads demanded by consumers, sees the deal as allowing both companies to capitalize on the need of Internet providers and telecom companies to upgrade their networks to handle the massive bandwidth requirements of those services. The acquisition agreement sees Ericsson paying about US\$25 per Redback share. The deal is expected to be completed in early next year and will have Redback's management team in place. The agreement will see the company operating as a wholly owned subsidiary of Ericsson.
- **Industry sources indicated that Apple Computer gave chief executive Steve Job's 7.5 million stock options in 2001 without the required authorization of the company's board.** Media reports also show that records showing that a full board meeting had taken place to approve the remuneration, as required by Apple's procedures, were later falsified. The reports said that the records were being reviewed by the U.S. Securities and Exchange Commission as it decided whether to pursue a case against Apple or any individuals. Earlier, Apple said it expected to restate financial results for some periods after identifying irregularities in its stock options accounting. Apple spokesman Steve Dowling declined to comment. He said the company was providing details from its options probe to the SEC but was not discussing the matter with the public.

## *Telecommunications*

- **The U.S. Federal Communications Commission approved AT&T Inc.'s acquisition of BellSouth Corp. in what is considered the largest telecommunications takeover in U.S. history.** The commission said it has unanimously approved the US\$86 billion buyout following the

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company's offering of new concessions for consumers and competitors, with AT&T promising to observe "network neutrality" — meaning not favoring Internet content providers who pay the company more money — and to offer US\$19.9 per month stand-alone digital subscriber line service. Under the concession, AT&T said it will also divest some wireless spectrum. The combination of AT&T and BellSouth will have operations in 22 states. AT&T estimates, however, that about 10,000 jobs will be phased out over three years. The two companies combined are seen as generating some US\$117 billion in revenue. The tandem will operate 68.7 million local phone lines across the country. The buyout will also give AT&T complete control over Cingular Wireless, the nation's largest wireless telecommunications provider, which it had jointly owned with BellSouth. AT&T is in the process also trying to roll out TV service in a bid to compete with cable operators.

## Europe

### *Mobile/Wireless*

- **Swisscom revealed its decision to buy back a 25 percent stake in Swisscom Mobile from Britain's Vodafone Group in a deal valued at 4.2 billion Swiss francs (US\$3.4 billion).** Swisscom sees the acquisition as increasing Swisscom's annual profit by about 180 million francs (US\$147.6 million) starting next year. Industry observers see the debt-financed purchase as more costly than the analyst expectations of about 3.5 billion to 3.7 billion francs (US\$2.8 billion-3 billion). The deal is also expected to enable Swisscom, which is majority held by the government, to strengthen its domestic position after the government blocked foreign takeovers. For Vodafone the proceeds will allow it to reduce debt, with the mobile giant saying it expected to record a gain on the sale of about 100 million pounds (US\$195.8 million) for the year to March next year. Vodafone also said the deal would not materially affect its mobile revenue and profit margin outlooks for this financial year even as the purchase could make an impact on Vodafone's cash flow outlook as it no longer received dividends from Swisscom Mobile. Earlier in August, Swisscom sold its 25 percent stake in Belgium's Proximus to partner Belgacom for 2 billion euros (US\$2.6 billion). Before that, it sold its struggling Japanese business to Softbank, marking its turnaround from an expansionist strategy it has maintained for years.
- **Opera announced its plans to put its browser on Samsung phones. Opera Mobile offers keypad shortcuts that users can customize; an autocomplete function for URLs; smooth scrolling; and the unique ability to open as many as four windows at once.** Opera Mobile also filters content through Opera's servers. The compression leads to faster browsing and lower monthly bills for customers whose phone companies charge them by the amount of bandwidth they use. Opera started out as a research project in Norway's largest telecom company, Telenor, in 1994, and branched out into an independent development company named Opera Software ASA in 1995. Opera Software develops the Opera Web browser, a high-quality, multi-platform product for a wide range of platforms, operating systems and embedded Internet products. In a separate development, Opera Software said it has incorporated a new phishing filter into its Opera Web browser to block sites bent on stealing financial information or other sensitive data from unsuspecting users. Branded as Fraud Protection, the antiphishing filter is designed to provide the user with real-time detection as it attempts to identify suspected fraudulent sites.

### *Hardware*

- **French electronics firm Thomson announced that it had reached a definitive agreement to sell its consumer electronics accessories activities outside Europe and the rights to the RCA and**

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**other names to Audiovox Corporation.** The business develops, markets and sells under the RCA, Jensen, Acoustic Research and other brand names. Under the deal, Audiovox will pay Thomson approximately US\$50 million and will also make payments in connection with the sales of RCA-branded consumer electronics accessories during the five years following the closing of the transaction.

## *Information Technology*

- **IBM and Siemens announced that they have secured a 7.1 billion euro (US\$9.3 billion), 10-year contract to modernize and manage the non-military IT systems of Germany's armed forces.** Under the deal, Siemens will receive a 60 percent share of the deal, considered to be the biggest contract ever won by the German industrial conglomerate. U.S. computer services group IBM will receive the rest. The agreement will see the two companies co-managing the project, jointly holding 50.1 percent in the consortium running it. The German government holds the remaining 49.9 percent. Industry sources said the two companies could sign the contracts by the end of the year.

## *Telecommunications*

- **The Italian Communications Ministry announced that the country is set to join the growing number of countries adopting the super-fast wireless broadband after the government said it will start selling licenses for WiMAX-capable frequencies by June 2007.** Analysts said that the planned sale is expected to generate between 100 million and 200 million euros (US\$132 million-264 million) for the Italian state. Tiscali said it has successfully tested WiMAX technology and sees with favor the opening up of frequencies in the country. A source at broadband provider Fastweb, which has already tested the technology in northern Italy, said the company also considers WiMAX a potential opportunity. WiMAX licenses are being sold in other European countries such as France, Germany and Greece. A spokesman for 3 Italia, owned by Hutchison said the mobile phone company was not interested in WiMAX if it turned out to be the equivalent of ADSL fixed-line broadband. The source said 3 Italia was testing an enhanced version of UMTS that would perform much of what can be done with WiMax. Telecom Italia was not immediately available for comment.

## *Internet*

- **Internet gambling group PartyGaming said it is in advanced talks to acquire the gaming assets of smaller rival Empire Online in a deal industry sources valued at around US\$40 million.** PartyGaming said it was also in negotiation to buy part of Empire, which confirmed it was selling gaming assets to become an investment company. Industry source said that PartyGaming could enter a software licensing deal with Playtech which already powers Empire's sites.

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## Other Economic Data

### Currency Exchange Rates

Currency	Units	Current Rate (on 12/29/06)	% Change 1 Week Ago	% Change 1/1/2006	% Change 1/1/2005	% Change Last 12 Mth.
Japanese yen	¥/US\$	119.0700	0.2%	1.1%	16.0%	1.1%
Hong Kong dollar	HK\$/ US\$	7.7778	0.0%	0.3%	0.1%	0.3%
Chinese renmenbi	RMB/ US\$	7.8051	-0.1%	-3.3%	-5.7%	-3.3%
Singapore dollar	S\$/ US\$	1.5379	-0.2%	-7.5%	-5.7%	-7.5%
South Korean won	KRW/ US\$	930.0000	0.2%	-7.9%	-10.2%	-7.9%
New Taiwan dollar	NT\$/ US\$	32.5900	0.1%	-0.7%	2.7%	-0.7%
Australian dollar	US\$/A\$	0.7886	0.7%	7.6%	1.1%	7.6%
New Zealand dollar	US\$/NZ\$	0.7039	0.5%	3.0%	-2.0%	3.0%
Philippine peso	PHP/ US\$	49.0100	-0.6%	-7.7%	-12.8%	-7.7%
Euro	US\$/€	1.3199	0.5%	11.4%	-2.6%	11.4%
British pound	US\$/£	1.9589	0.0%	13.7%	2.1%	13.7%

### Fixed Income Prices and Yields

Note	Currency	Current (on 12/29/06)		1 Week Ago		4 Weeks Ago	
		Price	Yield	Price	Yield	Price	Yield
US 30-year	US\$	95.1563	4.81%	95.9375	4.76%	99.2188	4.55%
Japan 30-year	¥	104.4230	2.25%	105.7320	2.18%	104.5980	2.24%
Hong Kong 10-year	HK\$	109.0350	3.72%	107.9980	3.85%	108.9230	3.74%
China (06/16)	US\$	113.5600	3.03%	113.6900	3.01%	113.9500	2.99%
Singapore 10-year	S\$	101.0790	3.15%	101.5990	3.11%	101.9450	3.08%
South Korea 20-year	US\$	108.5860	5.19%	109.1220	5.14%	108.9310	5.13%
Australia 15-year	A\$	150.8640	2.63%	151.6510	2.57%	154.5760	2.35%
New Zealand (12/17)	NZ\$	100.6090	5.92%	101.4330	5.82%	102.4700	5.70%
Philippines 20-year	PHP	137.4300	7.78%	136.3300	7.86%	141.9700	7.47%
India 30-year	INR	95.8230	7.76%	96.0100	7.75%	97.2836	7.63%
UK 30-year	£	100.7600	4.20%	100.8450	4.20%	104.0050	4.02%
Germany 30-year	€	99.1600	4.05%	99.8040	4.01%	103.5390	3.80%

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