



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

Week of 15 January - 21 January 2006

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



Week of 15 January- 21January 2005

Table of Contents

Weekly Highlights	3
International	3
Japan	4
Korea	7
China	10
Taiwan	12
Hong Kong	12
Singapore/Malaysia/Philippines/Indonesia	13
United States/Canada	14
Europe	16

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



Week of 15 January - 21 January 2005

Weekly Highlights

International

Internet

- **Pyramid Research said that carrier margins are expected to experience a decline over the course of the year, most notably on the fixed line side.** It expects fixed carriers to see reduced EBITDA margins in 2006, largely as a result of the continued decline in voice revenues, and the increased influence of alternative carriers offering VoIP, or online VoIP players such as Skype and Yahoo! In addition, the world's mobile subscriber base is expected to exceed the 2.5 billion subscriber mark by the end of 2006. The expansion is being attributed to regions like Asia, contributing almost 1 billion users, and Africa/Middle East adding three times as many subscribers as Western Europe. 2006 will be particularly important for how carriers will drive this expansion. The research firm is looking to the Asia Pacific, at operators with regional aspirations like Singtel and Hutchison, those with an interest in growth markets, such as SK Telecom and Telekom Malaysia, and non-Asian operators such as Vodafone and Telenor. The battleground will expand from the two giants of the region, India and China, to the other high-growth emerging markets, including Indonesia, Vietnam, Bangladesh, Pakistan and Thailand.
- **The International Federation of the Phonographic Industry (IFPI) said sales of music via the Internet and mobile phones continued with its surge last year.** The London-based IFPI said record company online revenues reached US\$1.1 billion last year, up from US\$380 million in 2004. Music fans around the globe downloaded 420 million single tracks last year, more than double the 156 million downloaded the previous year. The IFPI added that the legitimate music business was gradually gaining ground on digital piracy. It cited research showing that in Europe's two biggest digital markets, Britain and Germany, more music fans were now legally downloading music than illegal file-swapping. The IFPI said that in the U.S., single-track downloads doubled year on year to 353 million units last year, while album downloads climbed to 16 million and accounted for nearly 3 percent of the total US album market. In Europe, Britain was No. 1 with 26 million single-track downloads, followed by Germany, with 21 million and France, 15 million. IFPI also called on the ISPs to join the fight against music piracy, which it claims greatly diminishes the profits of its 1,450 member record companies across the globe.

Mobile/Wireless

- **According to analysts, the world cell phone shipment is expected to post a mere 10 percent growth this year, a performance that is attributed to sluggish demand in developed countries.** The report from Samsung Economic Research Institute (SERI) stated that CDMA and GSM cell phones will go through a stagnation period, while WCDMA will rapidly grow especially in Europe and Japan. SERI also reported DRAM would see sluggish sales, while NAND flash sales will grow. DRAM prices are expected to decline by 30 percent in 2006, forecasted the report.

Semiconductors

- **IDC forecasts the worldwide VoIP semiconductor market to post a growth to over US\$2.4 billion in 2009, with a compound annual growth rate of 38.9 percent for 2004-2009.** The report says both opportunities and threats are emerging for current semiconductors selling into VoIP systems. IDC said VoIP equipment vendors must look for opportunities to differentiate their offering and

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



Week of 15 January - 21 January 2005

deliver tailored solutions. IDC also said the carrier segment (media gateways and soft switches) and the consumer segment (broadband gateways) will account for the bulk of the dollar shipments in 2009.

Japan

Internet

- **Under investigation for allegedly misleading investors Livedoor Co., is suspected of having disguised cash buyouts of at least three more firms as stock swap deals.** The Company appears to have illegally booked revenue generated by the deals as profits. The new information comes on the heels of earlier allegations that Livedoor provided false information on the purchase of two companies in October 2004 and included income from the transactions in its profit statement. The Company's subsidiary, Livedoor Marketing Co. is also under investigation by the authorities on similar charges. In a separate report, Livedoor Co. issued a denial on the allegations about a subsidiary providing misleading information about the takeover of a publishing company Money Life. The company also denied violating rules on disclosure set by the Tokyo Stock Exchange. The claim was contained in a statement setting forth the findings of the company's internal investigation into the matter. Livedoor said the investment partnership that bought Money Life stock before the subsidiary acquired the publishing company was a different organization than its affiliated investment partnership.
- **Fuji Television Network Inc. said it will likely reconsider its business cooperation with Livedoor Co. if alleged securities law violations by an affiliate of the Internet services firm prove to be true.** Livedoor Marketing Co., which was then ValueClick Japan Inc., is under investigation for allegedly releasing false information in 2004 concerning a corporate acquisition and misrepresenting its earnings. Tokyo prosecutors raided Livedoor's headquarters and other sites. Fuji TV and Livedoor last spring vied for control of Nippon Broadcasting System Inc. The TV broadcaster agreed to acquire a 12.7% stake in Livedoor for 44 billion yen (US\$381.7 million). As part of a business tie-up, the two firms also agreed to work together to bolster Livedoor's public wireless LAN business. Even if the share-sale restriction is removed, however, Fuji TV is unlikely to immediately sell its stake because, according to a Fuji TV official, such a move could have a serious impact on the market.
- **Softbank Corp. said it expected to be admitted into the Japan Business Federation or Nippon Keidanren.** Softbank applied for membership late last year, with sponsorship from Sony Corp's chief corporate adviser. Admission into Keidanren is expected to elevate Softbank's social standing and public trust in the firm, which will be the key to further expansion of its ADSL Internet access service, as well as the success of its cellular phone service to be launched in the near future.

Mobile/Wireless

- **Vodafone KK said that it will begin offering cellular phones made by Samsung Electronics.** Vodafone will offer a Samsung handset for third-generation wireless services that at 14.9mm thickness is the thinnest 3G phone in the world. The handset will feature software for viewing text stored as Word, Excel, PowerPoint and PDF files. Buttons on the back will be used to operate it like a portable music player to play computer-downloaded songs. Vodafone plans to release the handset in mid-March and expects it to retail for around 15,000 yen (US\$130). For Samsung, this is the first time its handsets will be available in Japan. South Korean phone maker Pantech Co. already provides handsets to KDDI Corp. for the au cellular service, and as early as this spring LG Electronics Inc. is expected to start supplying handsets to NTT DoCoMo Inc.

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



Week of 15 January - 21 January 2005

- **Usen Corp. plans to initiate four free-of-charge music channels for NTT DoCoMo Inc. FOMA 3G cellular phones.** These channels will be playing popular artists' songs and other music 24 hours a day, reusing Usen's cable music service content. Usen said it aims to generate revenue from the service by selling music CDs and ring tones, as well as running commercials on some channels. Usen said it hopes that its music channels will have gathered some 1 million listeners by the end of the first year, and that 50,000 or so of them will buy ring tones or CDs. Usen offers 440 cable music channels, mostly for restaurants, stores and other commercial sites.

Media, Entertainment and Gaming

- **Fandango Inc., a Japanese entertainment content distributor, said it has received approval to list on Hercules, the Osaka Securities Exchange.** The company, a subsidiary of Yoshimoto Kogyo Co., said it will offer 700,000 shares to the public in its initial public offering, all of which will be newly issued. Daiwa Securities SMBC, the lead underwriter of the offer, also has a green shoe option, allowing it to offer an additional 100,000 shares in the event of exceptional demand. The company said it expects to net 3 billion yen (US\$26 million) from the IPO. The company said the proceeds from the IPO will be used for the development of new entertainment content. For the current fiscal year through March 31, Fandango forecasts a group pretax profit of 1.7 billion yen (US\$14.7 million), a net profit of 569 million yen (US\$5 million) and revenue of 10 billion yen (US\$86.7 million). Last fiscal year, the company posted a group pretax profit of 874 million yen (US\$7.5 million) a net profit of 566 million yen (US\$5 million) and revenue of 5.5 billion yen (US\$47.7 million).

Hardware

- **IBM Japan Ltd. said it had lowered the price for midrange external storage equipment by around 10 percent in an effort to bolster its operations in that segment.** IBM Japan currently is focused on storage devices for use with large computer systems and has 11 percent share in the Japanese market for midrange storage equipment, which is low compared to its position in the North American and European markets. IBM Japan has slashed prices on its DS4800 midrange disk storage system, reducing the list price by about 10 percent from 7.2 million yen (US\$62,000).
- **Applied Co., a Japanese seller of personal computers and PC parts, said it has received approval to list on the JASDAQ Securities Exchange.** The company will offer 320,000 shares to the public in its initial public offering. Of those, 200,000 are newly issued shares and 120,000 are secondary shares. Daiwa Securities SMBC, the lead underwriter of the offer, also has a green shoe option, allowing it to offer an additional 48,000 shares in the event of exceptional demand. The company expects to net up to 740.8 million yen (US\$6.4 million) from the IPO, with plans to use the IPO proceeds for future store openings. For the current fiscal year through March 31, the company forecasts a parent pretax profit of 537 million yen (US\$4.6 million), net profit of 275 million yen (US\$2.3 million) and revenue of 25.3 billion yen (US\$219.4 million). Last fiscal year, the company posted a pretax profit of 474 million yen (US\$4.1 million), net profit of 240 million yen (US\$2.1 million), and revenue of 23.5 billion yen (US\$203.8 million).
- **Toshiba Corp. announced the enhancing of its partnership with Trek 2000 International Ltd., a Singaporean firm that manufactures Universal Serial Bus memory devices, with the firm owning many of the patents on USB flash drives.** Toshiba already invested some S\$8 million (US\$5 million) to increase its capital stake in Trek to 10 percent, with the Japanese company becoming the second-largest shareholder. Toshiba has the option of acquiring another 9.2 percent of outstanding shares for S\$19 million (US\$11.6 million) within 12 months. Through these closer ties, Trek gains a stable source of NAND flash from Toshiba for use in its USB memory devices. The two firms have

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



Week of 15 January - 21 January 2005

also agreed that Trek will manufacture more USB memory devices for delivery to Toshiba. Over the next five years, Trek will produce the devices for Toshiba at a rate of at least 150,000 units a month. The two companies have agreed to collaborate in the development of new products, singling out high-performance value-added items like flash drives equipped with built-in fingerprint authentication functions.

Software

- **Hitachi Systems & Services Ltd. announced that they would initiate sales of software that will make it possible to operate a personal computer from a mobile phone.** The software is for use with mobile phones that use the au service of KDDI Corp. With the application, mobile phones will provide access to all home computer software including e-mail, word processing and spreadsheet software. The new software will be available from Hitachi Systems' mobile-phone-use web site. Downloading the software will cost about 1,000 yen (US\$8). Initially, users will be allowed to first install in their personal computers free software that will send computer screen data to a mobile phone.
- **e-Seikatsu Co., a Japanese software service, said it has received approval to list on the Tokyo Stock Exchange's Mothers market.** The company will offer 7,260 shares to the public in its initial public offering. Of those, 5,100 are newly issued shares and 2,160 are secondary shares. Daiwa Securities SMBC Co. is the lead underwriter of the offer. The company expects to net 776 million yen (US\$6.7 million) from the IPO. Of the IPO proceeds, it plans to use 397 million yen (US\$3.4 million) for capital investment and the remaining 379 million yen (US\$3.2 million) for business expansion. For the current fiscal year through March 31, 2006, the company forecasts a parent pretax profit of 160 million yen (US\$1.3 million), net profit of 80 million yen (US\$694,000), and revenue of 1.1 billion yen (US\$9.5 million). Last fiscal year, the company posted a parent pretax profit of 79 million yen (US\$685,000), net profit of 81 million yen (US\$702,000), and revenue of 622 million yen (US\$5.3 million).

Semiconductors

- **Hitachi Ltd., Toshiba Corp. and Renesas Technology Corp. announced the establishment of a joint planning company that will study the feasibility of an advanced chip production venture.** Although Japanese chip makers are at the forefront of the development of ultra-fine chip-processing technology, they have been losing their competitive edge to overseas rivals as their financial status is weaker than such chip makers as Intel Corp. The three Japanese electronics makers have been considering jointly creating a chip foundry venture that would make chips for its parent firms. Renesas is a chip joint venture between Hitachi and Mitsubishi Electric Corp.
- **IBM Corp., Sony Corp. and Toshiba Corp. announced an agreement that would see them jointly developing production technologies for chips with circuit widths of 32 nanometers, a level of technology beyond the next generation.** The three companies plan to research basic technologies needed to fabricate 32nm semiconductors by gathering technicians at an IBM research facility and production site in New York over the next five years. Currently, the most advanced chips in the market are fabricated using 65nm technology, with major chipmakers working on development of next-generation chips with 45nm circuit widths. Since 2001, IBM, Sony and Toshiba have been jointly developing the Cell Microprocessor, which will be used in Sony's PlayStation 3 game console due out this year. In addition, Sony and Toshiba are already collaborating on development of 45nm process technologies. The companies expect to start fabricating such chips in volume around 2013.
- **Japan said it would slap import duties of 27.2 per cent on computer memory chips made by South Korea's Hynix Semiconductor, a move perceived as retaliation for alleged government**

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



Week of 15 January - 21 January 2005

subsidies. South Korea and Hynix registered their strong objection to the Japanese decision, even threatening to bring the dispute to the World Trade Organization. Experts, however, said the conflict was not likely to affect the market. The tariff is the first Japan has imposed to counter alleged subsidies by a foreign government and marks the first time for the Japanese government to levy such duties on high-technology products. DRAM chips are widely used in personal computers and are Hynix's mainstay products. Last year, the WTO in June ruled that some of Seoul's financial support for Hynix was illegal, citing restructuring loans and debt-for-equity swaps made by state-controlled banks. The present conflict is significant in the face of Korean companies exporting US\$780 million worth of DRAM chips to Japan in the first nine months of last year, a figure that is the equivalent of about 12.1 per cent of the country's total DRAM exports.

Telecommunications

- **NTT Communications Corporation (NTT Com) and Telefonica International Wholesale Services (Telefonica Wholesale), two leading global telecommunications carriers, announced an agreement that will enable the interconnection of their international data networks.** Under the agreement both companies are expected to increase their coverage through an international network covering almost all the Asia Pacific Region, the United States, Latin America and Europe. Telefonica Wholesale will leverage NTT Com's coverage of the Asia Pacific region to expand its global reach, while NTT Com will extend its coverage in Latin America through Telefonica's network. NTT Communications is a subsidiary of Nippon Telegraph and Telephone (NTT) Corporation - one of the world's largest telecommunications companies. Telefonica International Wholesale Services is the organization within the Telefonica Group globally providing international wholesale services.

Korea

Internet

- **CJ Internet announced the signing of a contract that will allow it to publish Entwell's casual RPG game, Nostale.** Through this agreement, CJ Internet also gains the rights to Nostale's mobile service and character-related businesses. CJ Internet's CEO expects Nostale to draw in game players in their teens as well as those in their early 20s.
- **First-person shooting (FPS) games are reportedly enjoying growing popularity through leading game portals including Pimang (Neowiz), Netmarble (CJ Internet), Nexon.com (Nexon) and Yahoo! Game (Yahoo! Korea).** Yahoo! Korea said it plans to launch a test service of 'Head Shot,' a new FPS game developed by Smilegate before an open test service set for the end of the first half of this year. Pimang of Neowiz launched 'Special Force', which brought in some 2 billion won (US\$2 million) in monthly sales. CJ Internet is attracting more than 50,000 simultaneous users with 'Sudden Attack' developed by Game High. Nexon.com saw the number of simultaneous users increase by 70 percent after it released the second episode of 'War Lock' developed by Dream Execution.

Mobile/Wireless

- **Daishin Securities said that more than 40 percent of handsets available on the market in the latter half of this year would be DMB-enabled handsets.** About 70 percent of the handsets will support terrestrial DMB while 30 percent will support satellite DMB service. Experts point to the biggest advantage of terrestrial DMB as being a device that allows the free viewing of programs once users purchase a DMB enabled handset. Currently, terrestrial DMB phones sell at about 500,000 won (US\$509), similar to the cost of a premium handset. The expansion of terrestrial DMB service is closely

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



Week of 15 January - 21 January 2005

linked to the profitability of the domestic handset makers. As of 2005, the average handset price of local handset manufacturers including Samsung and LG was slightly higher than 300,000 won (US\$306); terrestrial DMB phones are likely to sell 30 percent higher than the average phones, bringing more profits to the handset makers. Benefiting from this development are handset parts manufacturers, as terrestrial DMB phones require special antennas, RF tuners, base band chips and other parts.

- **Samsung Electronics, which sold more than 100 million mobile phones last year for the first time, announced its aims to increase sales to 115 million units this year.** Samsung expects that the global handset market will grow from 5 to 10 percent this year. The share of megapixel camera phones, 3G phones, MP3 phones and mobile TV phones will increase sales. Samsung also said that it expected large profits particularly in the first quarter, and emerging markets will rise but market growth will be relying on demand for low cost phones. The 3G market would also keep growing because of WCDMA and HSDPA in Europe, which in turn is expected to increase the sales of premium mobile handsets. Samsung said that slim phones will dominate the market and MP3 player capability would be seen as a basic feature.

Media, Entertainment and Gaming

- **Online advertising in South Korea posted a 30.8 percent rise from a year earlier to 684.1 billion won (US\$692.3 million) last year, according to a survey by the Korea Broadcasting Advertising Corp (KOBACO).** Internet ad companies are even more optimistic about business conditions this year, predicting that online advertising expenditure will grow 35 percent to 850 billion won (US\$866 million), KOBACO said. Analysts said the Internet will continue to play a role as a medium for advertising as it is easy to target specific audiences and measure the rate of response. Last year, search-based advertising proved one of the best things that happened in the Internet ad market, the survey said, as it climbed 48 percent to 320.2 billion won (US\$326.2 million). Ads on mobile devices like handsets also rose 37.5 percent to 55 billion won (US\$56 million), while those on displays such as at public train stations had a 13.3 percent rise to 302.8 billion won (US\$308.4 million). In contrast, broadcasting ads fell 3.4 percent to 2.4 trillion won (US\$2.4 billion) in 2005. Newspaper advertisements are also seen to have dropped off due to the economic downturn.
- **NCSOFT Corp. announced the establishment of NCSOFT Japan KK, 100% owned subsidiary, valued at 100 million Yen (US\$867,000).** NCSOFT Japan's operations will include development and localization of their games serviced via PlayNC, NCSOFT's games service platform. Servicing and marketing activities of all NCSOFT's games will be executed under the operations of NC Japan KK, a joint venture with Softbank Japan. The establishment of NCSOFT Japan is consistent with NCSOFT's "Global Infrastructure, Local Content" strategy of developing best-of-breed local content that leverages its global infrastructure. Accordingly, NCSOFT Japan is expected to expand its horizons into Japan and the Asian markets and will be acting as NCSOFT's Japanese development studio in the future which develops online casual games and MMO games for Japanese and Asian gamers. During the third quarter of 2005, NCSOFT hit a record of 7.6 billion won (US\$7.7 million) in revenue with 3.7 billion won (US\$3.7 million) in operating profit in Japan due to the consistent demands generated from Lineage and Lineage II.

Telecommunications

- **Newbridge Capital declared that it does not plan to sell its stake in Hanaro Telecom, Korea's second-largest communications service provider.** A consortium comprising Newbridge Capital and American International Group Inc. (AIG) invested US\$1.1 billion in Hanaro Telecom. Newbridge

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



Week of 15 January - 21 January 2005

Capital holds 10.7 percent and AIG 13.7 percent. Newbridge Capital is an investment firm dedicated to making direct investments in Asia.

- **Terrestrial DMB phones distributed through LG Telecom and KTF collectively have sold 6,800 units in the first two weeks of sale, with LGT posting 3,800 and KTF 3,000.** Some retail branches are reportedly going through a shortage of supply. With 6 to 7 more models to come on line within the first half, some industry insiders are projecting DMB phone sales of 100,000 units within the first six months of the year. Other sources point to a projection of 300,000 units as SK Telecom will start distributing Terrestrial DMB phones from the end of March.
- **A report indicated that LG Telecom will make revisions on its current tariff plans, which will include the elimination of the caller ID tariff currently set at 2,000 won (US\$2) per month.** The new tariff will also include a discount rate for calls made from 7 p.m. to midnight. However, the monthly fee is expected to increase. All new subscribers will be able to benefit from the new tariff plan and existing subscribers may transfer to the new plan as well. An official at LG Telecom said that the company has been providing trial free caller ID service to some subscribers since the beginning of this year. LG Telecom explained that they have decided to provide caller ID free of charge in order to gain competitiveness in attracting subscribers. Meanwhile, KTF said it is considering various tariff plans in order to make caller ID free but has not yet come to a conclusion.
- **Board members of Dacom Corp., Korea's second-largest fixed-line carrier, approved the company's plan to sell part of its 28.8 percent stake in customer service provider CIC Korea, Dacom said.** Dacom will sell an estimated 10 billion won (US\$10 million) in shares in CIC Korea to Japan's TCI. In a separate filing, Dacom said its board approved its takeover of KIDC.
- **This year, according to Korean telecommunication providers and electronics gadget makers, will be a landmark for information communication advances.** By June, two new types of high-speed Internet service will begin, one by Korea's largest landline telecommunications company KT Corp., and the other by SK Telecom Co., the biggest cell phone service carrier here. KT plans to invest 500 billion won (US\$506 million) in a next-generation portable Internet technology dubbed WiBro this year to provide wider coverage than wireless network services and faster connections than third-generation cell phone services. SK Telecom says it will invest 600 billion won (US\$611.2 million) in a speedy Internet service embedded in cell phones called high-speed downlink packet access. The mobile Internet, KT says, could bridge its fixed-line telephone dominance into the wireless sector. KT, which controlled 93.1 percent of the fixed-line telephone market and 51 percent of the broadband Internet market last year, has not yet gone head-to-head with SK. In the digital broadcasting sector, three service providers are likely to contend for control. KT is planning to launch an Internet-based interactive data broadcasting television service called IP-TV as early as the second half of this year.
- **SK Telecom announced the restructuring of its organization to give a boost to its global business.** SKT said that they are in the middle of a reorganization that focuses on strengthening its global business. SKT also noted that the strategic alliance between KTF and NTT DoCoMo had been an "open secret" in the industry, and the alliance will not have significant impact on the market in the short term. SKT is expected to put more emphasis on Helio, an MVNO service provider in the US, and S-FONE in Vietnam and other foreign investments.

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



Week of 15 January - 21 January 2005

China

Internet

- **The Zhejiang Provincial Government announced a prohibition imposed on Shanghai Media Group (SMG) and China Telecom, which will deter the two firms from promoting and continuing their IPTV business in the province.** SMG is confronted with similar problems in Quanzhou City in Fujian Province, where it was asked to stop its IPTV operations in the province as it was perceived as a threat to the local TV market. Ningbo Telecom is offering the service in partnership with SMG, so far the only media company to have received an IPTV license issued by Chinese regulators in April 2005.
- **According to the China Internet Network Information Center, China's Internet population, already the world's second-largest after the U.S., has surged to 111 million.** The number of Chinese people using the Internet grew by 17 million from the same time last year. The agency said the number of people with broadband Internet access went up by more than 50 percent to 64 million over the past year. The statistics showed a wide gap between Internet use in China's cities and rural areas; only 2.6 percent of people in the countryside were online, compared with 17 percent in cities. China remains a solid No. 2 to the U.S. in terms of Internet population.
- **Keynote Systems, a U.S.-based firm that conducts studies on consumer data for online firms, said Chinese web surfers found the search giant Google in a strong position to challenge domestic rival Baidu.com.** Google came in first in 11 of 13 categories in the survey of 1,200 Internet users despite Baidu's widespread popularity in its Chinese home market, where it remains the preferred search engine for 48 percent of users. The survey covered Chinese-language search sites run by Google, Baidu, Yahoo's Chinese partner Alibaba.com, and Sohu.com. Competitors in China's fast-growing search industry face unusual challenges in dealing with a language based on pictographic characters and distinctive consumer demands. Chinese users judged Google best in searching for news, images and general information. Baidu came out on top in music search, mainly for MP3 recordings, which is a popular activity in China.
- **Beijing-based Qunar.com, which launched its Putonghua-language search engine in May last year, said it aims to be the "Google of travel search".** The Internet start-up is aiming for a US\$500 million company valuation by 2009 in Asia's fast-growing search-related advertising market. Qunar is up against more established firms such as travel portals Zuji.com and Ctrip.com, and search engines such as Baidu.com. Qunar hopes to grab a big chunk of Asia's travel search advertising market, estimated to be worth US\$1 billion travel by 2009. Qunar believes consumers will find its site more attractive than travel portals because the company scans hundreds of travel sites to find the best airfares and hotel deals. More than 40,000 users visit the site daily. Qunar said Google and Baidu include old pages in their search results while Qunar searches real-time information. The niche focus allows Qunar to charge rates two to three times higher than its bigger search rivals.

Media, Entertainment and Gaming

- **Shanda Interactive Entertainment Ltd. announced the signing of a strategic partnership with EMI Music, a leading international independent music company.** Under the agreement, Shanda will offer EMI's music content to its user base through its EZ home entertainment platform as well as its online interactive entertainment portal. EMI Music will also provide additional music related content, including artist information and news updates using Shanda's platform. In another report, Shanda announced the relocation of its online music operation from its Beijing office to its main

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



Week of 15 January - 21 January 2005

offices in Shanghai in an effort to allow greater integration between Shanda's music business and its home entertainment platform.

- **China LotSynergy Holdings, a lottery ticketing systems provider, said it was able to raise HK\$661.5 million (US\$85.3 million) from a top-up share placement, following a company announcement that it would acquire a 50 percent stake in video lottery terminals provider Corich International.** China LotSynergy, formerly an online metal trading platform provider WorldMetal Holdings, disclosed its plan to spend HK\$980 million (US\$126.3 million) acquiring a 50 percent stake in Corich. Through its wholly owned subsidiary Tianyi Electronics, Corich has supplied video lottery terminals on an exclusive basis for 10 years to Beijing Lottery Online Technology, the mainland's sole operator of the electronic lottery ticketing systems, which are controlled by the China Welfare Lottery Issuance and Administration Centre. The company has already spent HK\$204.5 million (US\$26.3 million) acquiring a 90 percent stake in the British gaming systems company Octavian International. In the middle of last year, it partnered with Australia's Tabcorp to form a joint venture that has an exclusive contract with Beijing Lottery Online to develop the nationwide Keno lottery game platform. Deutsche Bank is the sole placement agent for the transaction.

Mobile/Wireless

- **China Mobile (Hong Kong), the Hong Kong-listed arm of the world's largest mobile operator by subscribers, announced the addition of 3.9 million new customers in December 2005.** The figure represents its biggest monthly increase last year, and helped raise the carrier's total number of new customers last year to 42.3 million, an 11 percent increase from the 38.1 million added in 2004. China Mobile recorded its smallest monthly gain of last year in February, when it added some 3.1 million subscribers. Of the China Mobile's customers in December, 3.8 million were prepaid subscribers while 116,000 were contract customers.

Hardware

- **Lenovo Group, the Asia Pacific computer manufacturer giant is said to be seeking a US\$300 million loan with the aim of using the additional capital to partially refinance the loans it took for the IBM PC takeover last year.** ICBC Asia and HSBC are arranging the deal, which is seen as bearing cheaper rates than the previous one. Lenovo secured a US\$600 million loan to replace a similar-sized bridge loan provided by Goldman Sachs last year.

Telecommunications

- **Qiao Xing Universal Telephone Inc., one of China's largest manufacturers and distributors of telecom products, announced its sale of two million shares of common stock at a price of for gross proceeds of US\$13 million.** In addition, investors will receive 4-year warrants to purchase up to 400,000 shares of common stock at US\$8.12 per share. The shares and warrants are being offered under the Company's effective shelf registration statement previously filed with the Securities and Exchange Commission. Worldwide Gateway Co., Ltd. served as placement agent for the offering.
- **Huawei Technologies, China's No. 1 telecommunications equipment maker announced a 40 percent increase in its global sales to US\$8.2 billion last year.** The Shenzhen-based company said its overseas sales accounted for US\$4.7 billion of the total revenues, which represents more than half of the figure. It was the first year in which overseas sales surpassed domestic sales.

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



Week of 15 January - 21 January 2005

Information Technology

- **China Security and Surveillance Technology Inc. announced that it is in the process of submitting the applications for listing on the American Stock Exchange (AMEX).** China Security is the holding company of Golden Group Corp. Ltd., which is a leading manufacturer and provider of homeland security products and surveillance systems in China.

Taiwan

Semiconductors

- **Powerchip Semiconductor, a leading memory chip maker in Taiwan, announced that it is taking over a 12-inch-wafer plant from Macronix International for NT\$5.3 billion (US\$165 million).** The company said they would utilize the unused plant to increase Powerchip's foundry service capacity. The companies also agreed to work together on production processes involving 90-nanometre and more advanced technology for making nonvolatile memory chips, including flash products. Powerchip makes dynamic random access memory and flash memory chips, as well as offers wafer foundry services, while Macronix is a maker of nonvolatile memory chips. The company revealed a capital expenditure this year expected to be doubled to NT\$60 billion (US\$1.8 billion) from NT\$30 billion (US\$934.1 million), making Powerchip the second largest capital spender in the local chip industry.

Hong Kong

Mobile/Wireless

- **The Office of the Telecommunications Authority (OFTA), disclosed its move to withhold new licenses for broadband wireless technologies such as WiMAX until it becomes clearer how the merging of fixed and mobile services will affect the regulatory regime.** The move is seen as conceding to a group of 13 telecommunications and satellite operators that had been questioning the issuance of permits until the regulator addresses other issues. One concern has to do with the interconnection fees mobile operators are required to pay their fixed-line counterparts. The 13 operators have said they could not bid for the spectrum without knowing whether frequencies can be traded or how much mobile and fixed-lined firms will be required to pay each other for interconnection. OFTA expressed its hope to finish its review of the issues in the first half of the year without giving a timeline for the spectrum policy review. The review would be headed by the Commerce, Industry and Technology Bureau.

Information Technology

- **PacificNet Inc., a Hong Kong-based information technology service provider, announced the selection of its subsidiary, PacificNet Epro, by China Telecom's Shanghai Branch for the provision of customer relationship management (CRM) consulting and call center training services.** China Telecom singled out PacificNet Epro as its CRM consulting and training partner with the aim of boosting its service quality and thus generate profit through CRM services, telemarketing and outbound telesales. China Telecom is the largest fixed-line operator in China.

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



Week of 15 January - 21 January 2005

Singapore/Malaysia/Philippines/Indonesia

Internet

- **Swiftroute Pte Ltd, a Singapore-based provider of web hosting services, has announced that it will move its server infrastructure to Equinix's Singapore Internet Business Exchange Center.** The company has made the move in a bid to increase service levels and is expected to save Swiftroute 30 percent on networking costs. Equinix said it would offer Swiftroute an enhanced physical environment better geared to the requirements of its services.
- **AirAsia, a low-cost carrier, announced the signing of an agreement with Galileo, a web-based service provider, in a bid to enable passengers worldwide to book AirAsia tickets via travel agents.** With the partnership, the company expects to post an increase in passenger volume between 10 and 15 percent this year. Previously, passengers could only book their tickets via its Internet system. Galileo International is a global distribution system and is a unit of U.S.-based Cendant Travel Distribution Services, providing travel agencies with access to services, schedules and pricing information. The Malaysia-based airline is aiming to tap the travel boom not only in its home region, but also in the emerging China and India markets. The airline covers most major cities in Southeast Asia.

Information Technology

- **CrimsonLogic, an IT solutions provider, announced that it has secured a 10-year contract from the Singapore government to develop and operate a new national IT platform for trade and logistics.** The system is dubbed TradeXchange and is forecast for deployment in 2007. It is expected to support an estimated 90,000 registered traders in Singapore. As of November 2005, Singapore's total trade was S\$599 billion (US\$368 billion) for the first eleven months of the year. This marks a 13 percent increase from the same period in 2004 when total trade registered S\$529 billion (US\$325 billion).
- **As it opens new offices in Hong Kong, NCS Group, Singapore's leading information technology and communications engineering services firm, announced its plan for its regional expansion.** The company's revenue last year climbed to S\$668 million (US\$410.3 million) from S\$594 million (US\$364.8 million) in 2004, as the group won contracts for various government technology outsourcing projects across the region. Its regional business accounted for 25 percent of annual revenue. NCS was also part of a group of 22 technology services firms deemed qualified to take part in 40 government technology projects. NCS manages other public-sector projects in Hong Kong, which include those at the Commerce and Industry Technology Bureau, the Department of Health, the Education and Manpower Bureau and the Housing Authority. Gartner forecasts the Asia-Pacific technology services market to reach US\$37.6 billion this year, up from US\$34.8 billion last year. NCS is a wholly owned subsidiary of Singapore Telecom Group with more than 12 offices in 10 countries across the Asia Pacific.
- **Siemens announced the launching of its first customer call center in the Philippines, an offering that is seen as primarily targeted at English-speaking global customers.** Siemens Inc, a wholly owned unit of German giant Siemens, disclosed that the company made an investment of 250 million pesos (US\$4.7 million) in the 450-seat call center that would house about 700 people by year's end. The company said Siemens also was looking at other locations in the country for future expansion. Outsourcing is the fastest growing industry in the Philippines, and is forecast to grow to US\$12.4

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



Week of 15 January - 21 January 2005

billion by 2010 from US\$2.4 billion last year. By February, the Philippines will be hosting 150 call center companies, where the number of seats rose to 70,000 last year from 40,000 in 2004, according to the country's Department of Trade and Industry. These figures can be placed side by side with the 3 million seats in U.S.-based call centers and more than 200,000 in India in 2004.

United States/Canada

Internet

- **Google said the company will start selling TV programs through Google Video, providing multimedia content by CBS and NBA basketball games.** The move is seen as radical shift in broadcasting. Google is also considering selling foreign multimedia content over the Internet, showing the sign that the last limits and boundaries for TV are disappearing. Apple also provides online multimedia and music content, and consumers will eventually benefit from heated competition between global companies since boundaries no longer exist for TV via Internet. Experts are saying South Korea is falling behind in the global trend because of regulations and a weak system. To launch their own Triple Play Service, communication companies in South Korea should be allowed to transmit broadcasting programs and cable TV companies should be able to make inroads into Internet phone business. At present, the Korean Broadcasting Commission is perceived to stop communication firms from branching out, and the Ministry of Information and Communication is seen as standing in the way of cable TV firms diversifying. The world is moving towards Internet-based TV, and the nationality of the service provider is no longer an issue.
- **eBay reported a 36 percent increase in its fourth-quarter profit, a result that is higher than most analysts expected, a growth partly attributed to the market expansion in the U.S. and Germany and for the surge in credit card shopping services.** The company said it posted a net income of US\$279.2 million for the period ending on December 31, 2005, compared with US\$205.4 million in the same quarter of 2004. Its sales rose showed a 42 percent rise to US\$1.3 billion from US\$935.8 million. The company said its profit, excluding acquisition costs and other expenses, was US\$340.1 million. eBay forecast revenue to be from US\$5.7 billion to US\$5.9 billion. Both figures were unchanged from its October forecast last year.
- **Yahoo announced a 34 percent increase in its fourth-quarter gross profit from the previous year to US\$928 million.** Yahoo said its operating income for last year posted a 61 percent climb from the previous year to US\$1.1 billion. Gross profit for last year went up by 42 percent to US\$3.2 billion. Revenues for last year were US\$5.2 billion, representing a 47 percent increase over the previous year. Net income for last year more than doubled from the prior year to US\$2 billion. Adjusted net income for the final quarter of last year was US\$247 million. International revenues for Yahoo registered a 73 percent rise to US\$1.5 billion while U.S. revenues climbed 38 percent to US\$3.7 billion for last year. The company said it will focus on enhancing advertising products and focusing on the generation of maximum value for its network.
- **Google demonstrated the continued expansion of its capabilities beyond the online world, by agreeing to acquire a company that automatically connects advertisers with radio stations.** Valued at more than US\$1.2 billion, Google is acquiring California-based dMarc Broadcasting. The media firm creates an automated platform that lets advertisers more easily schedule and deliver ads over radio and keep track of when they air. On the broadcaster side, the dMarc technology automatically schedules and places such advertising, helping stations minimize costs. Under the deal, Google would pay dMarc at least US\$102 million in cash. If performance targets are met, Google

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



Week of 15 January - 21 January 2005

would make additional payments of up to US\$1.1 billion over three years. Google said it plans to integrate the dMarc technology with its highly successful Google AdWords platform, in which third-party websites share revenues with Google for carrying search ads.

Mobile/Wireless

- **Motorola announced an 86 percent increase in its fourth-quarter income, with the boost coming from the surging popularity of its ultra-slim Razr phones to record sales.** The company said its net earnings for the October-through-December quarter were US\$1.2 billion, up from US\$647 million a year earlier. Revenue increased 18 percent growth to US\$10.4 billion, from US\$8.8 billion. The figure, however, is slightly below analysts' estimates of US\$10.5 billion. Motorola said it shipped 44.7 million handsets during the quarter, a 40 percent increase compared with a year earlier. Maintaining a world market share at 19 percent, Motorola is No. 2 to Nokia. The company expects first-quarter sales of between US\$9.3 billion and US\$9.5 billion, compared with the analysts estimated sales of US\$9.3 billion.
- **Sony Ericsson disclosed a record fourth quarter with profits above forecasts, a performance that it attributed to huge demand for camera-handsets and music players.** The firm, which is co-owned by Sweden's Ericsson and Japan's Sony, expects global handset sales to experience 10 percent growth this year from an estimated 780 million phones last year. Growth came from sales of two megapixel camera-phones and the Walkman phone. The company said its fourth-quarter pretax profit went up to US\$250 million from US\$169.8 million a year ago. The results are also seen as above the average forecast of US\$210 million. Profit for the year was US\$623.7 million, up from US\$589.7 million in 2004. Sony Ericsson said its sales climbed to 16.1 million handsets in the fourth quarter, up from 13.8 million in the previous quarter.

Media, Entertainment and Gaming

- **Walt Disney is said to be seriously contemplating the purchase of Pixar Animation Studios.** According to unidentified sources, Disney would pay a nominal premium to Pixar's current market value of US\$6.7 billion. For more than 12 years, Disney and Pixar have been partners, allowing Disney to distribute and co-finance popular and profitable Pixar movies.

Software

- **Intel and Microsoft announced a partnership, considered unprecedented by observers, whereby Microsoft will provide programming from DirecTV, the largest satellite broadcaster in the U.S., to customers' personal computers.** Intel and Microsoft have cooperated on the launch of what they dubbed Triple Play Service (TPS), a package of broadcasting, Internet and phone service. With the package about 30 to 50 percent cheaper than paying the fee for each service separately, TPS is gaining in popularity. The U.K. is the most advanced country in the field of TPS. Over 10 percent of broadband Internet users subscribe to TPS services, and TPS provider Home Choice has secured 240,000 subscribers mainly in London. Satellite cable companies have joined the game, with British Sky Broadcasting acquiring high-speed Internet company EasyNet, and British Telecom (BT) also entering the market. BT's top official said consumers are not interested in which network the content is coming through but in quality.
- **Intel announced a 16 percent increase in its fourth-quarter profit from a year earlier to US\$2.5 billion, amidst slow chip sales for desktop computers.** Intel said its revenues for the October-December period climb 6 percent from a year earlier and 2 percent from the prior quarter to US\$10.2 billion. The results are the climax of a year in which Intel faced more pressure from smaller rival

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



Week of 15 January - 21 January 2005

Advanced Micro Devices. Still, Intel managed to post its third consecutive year of double-digit earnings and revenue growth. Intel supplies the chips for about 80 percent of the world's personal computers.

- **Microsoft said it will invest about US\$100 million annually over the next three to five years in China, the world's second-largest Internet market with 111 million users.** The investment is seen by observers as a response to increasing pressure from rivals Google and Yahoo! The company said the investment would be channeled into the Internet, research and development in mobile communications, and digital entertainment. Microsoft said it established a new research group in Beijing to integrate its online MSN division, technical support and research centers. Microsoft plans to employ 3,000 people in the Microsoft China RD Group Centre by the end of 2008, up from 800 staff currently employed.

Hardware

- **Apple Computer announced a 95 percent rise in quarterly profits, which the company attributed to the huge sales of its iPod music players.** The firm registered more than US\$1 billion in sales through its retail stores. Its net income climbed from US\$295 million a year earlier to US\$565 million for the first fiscal quarter to December 31. Apple said its sales went up by 64 percent to US\$5.7 billion. Its iPod is seen as having caused the shift of Apple from a niche PC maker into the frontline purveyor of digital media. Apple said it sold 1.2 million Macintosh computers during the quarter, a figure representing a 20 percent growth from the year-earlier figure. Apple is in the process of transitioning its Mac line to Intel processors, and it expects to have all of its PCs running on Intel chips by the end of this year.
- **IBM announced earnings of US\$3.1 billion on revenue of US\$24.4 billion in the fourth-quarter of last year.** In the same period of 2004, IBM registered a net profit of US\$2.8 billion, with revenue of US\$27.7 billion. The company's services revenue in the period was US\$12 billion, a 5 percent decline from US\$12.6 billion a year earlier. The fourth quarter marked the first full period in which IBM's newest mainframe was available for sale. Revenue in the mainframe line posted a 5 percent growth. For last year, IBM earned US\$7.3 billion on revenue of US\$91.1 billion, compared to 2004 when the firm saw profits US\$7.4 billion, on revenue of US\$96.3 billion.

Semiconductors

- **Advanced Micro Devices (AMD) posted a profit for the fourth-quarter, which it attributed to huge record microprocessor sales and increasing market share.** For the three months to December 25, AMD said it earned US\$95.6 million on sales of US\$1.8 billion. The present results include AMD's flash memory joint venture with Fujitsu. Excluding one-time items, AMD earned US\$205 million, compared with a loss of US\$30 million in the same period of 2004. AMD earned US\$165.5 million on sales of US\$5.8 billion. That compares with a 2004 profit of US\$91.2 million on sales of US\$5 billion.

Europe

Semiconductors

- **Global semiconductor maker STMicroelectronics, a Geneva-based firm, announced its partnership with Veredus Laboratories, a Singapore medical diagnostics company, to develop a disposable chip capable of detecting the potentially deadly H5N1 bird flu virus.** The chip, which can also test for other forms of influenza, can produce the results within an hour. According to

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



Week of 15 January - 21 January 2005

STMicroelectronics, a prototype has been produced and the chip is expected to be launched commercially later in the year. Trials of the chip will begin in March in several countries.

- **ASML Holding, a Dutch semiconductor equipment maker, pointed to the unpredictability of the world chip market as the main reason for its profit reduction in the fourth quarter of last year.** The firm said its net profit declined to 51.6 million euros (US\$62.6 million) from 108.6 million euros (US\$131.7 million) in the same quarter a year earlier. Its sales went down to 547.9 million euros (US\$665 million) from 785.1 million euros (US\$952.7 million). ASML's main product is the lithography system used by chipmakers like Intel to map out the circuitry of semiconductors. The company said bookings were strong in the fourth quarter, signaling a recovery in the chip market, and said it expected next quarter's profits to rise. ASML disclosed that, for the full year, its net profit posted a 3 percent rise to 311.5 million euros (US\$378 million) from 235.5 million euros (US\$285.7 million) on sales of 2.5 billion euros (US\$3 billion), up from 2.4 billion euros (US\$2.9 billion).

Media, Entertainment and Gaming

- **VNU, the Dutch owner of the ACNielsen research company, announced that it has received a takeover bid from a group of buyout firms, including Kohlberg Kravis Roberts & Co, for as much as 7.3 billion euros (US\$8.8 billion).** This follows two months after shareholders forced the resignation of VNU's chief executive. The group includes AlpInvest Partners, Blackstone Group, Carlyle Group, Hellman & Friedman, Permira Advisers and Thomas H Lee Partners. Observers noted VNU's vulnerability to a takeover since November, when it scrapped a US\$6.3 billion acquisition of IMS Health. The company based in Netherlands said last month it had received offers from a number of groups even as it refused to name the bidders.

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