

ASIA IS A BUSINESS IMPERATIVE... NOW MORE THAN EVER

ASIAN TECHNOLOGY NEWSLETTER

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INTRODUCTION

We hope that you find the *Asian Technology Newsletter* informative. BDA is a corporate finance advisory firm, which helps multinational clients to identify and to execute acquisitions and JVs in Asia. In this issue of our newsletter, we look at some of the largest Japanese players in the fiber optic cable industry.

Please visit our website www.bdallc.com or contact me at ahuntley@bdallc.com to learn more about our services.

Andrew Huntley
Managing Director

CHINA/HK

China Online Inc, a media company focused exclusively on China, and **R.R. Donnelley & Sons Co**, a leading printer announced a partnership to provide Chinese-language versions of Western magazines to China via the Internet. This alliance will allow US magazine publishers to build readership among the 17 million Internet users in China. China Online's entertainment division, ChinaPop, will translate and localize the magazine content and make it available via its Chinese-language entertainment website. (November 17, 2000)

Corning Cable Systems (CCS) announced a JV agreement with **Chengdu Telecommunications Cable Co Ltd**, forming **Chengdu CCS Optical Fiber Cable Co Ltd**. As one of the top four cable producers in China, CCS will provide high-quality products and customer services for the fast growing telecom market in China. (November 17, 2000)

Dah Sing Financial Group will launch Hong Kong's first Internet bank in early 2001. The new venture will offer financial services across the Internet and other electronic channels. A government survey showed that use of electronic business services is increasing in Hong Kong, with more than one-third of the city's households connected to the Internet. (November 24, 2000)

InternetMediaHouse (IMH), one of Germany's largest Internet start-up investment companies, has set up an Asian arm in Hong Kong with a view to invest in the developing regional Internet sector. This

will be its regional headquarters. IMH plans to offer venture capital investment and incubation support services. (November 22, 2000)

Tom.com Ltd, an Internet portal operator, has signed an MOU to buy a 50% stake in **Yazhou Zhoukan**, a weekly Chinese current events magazine, from two units of **Ming Pao Enterprise Corp Ltd**. No financial details were disclosed. The investment will allow the company to offer a “one-stop” package covering the value chain of different media platforms including online, print, outdoor, events and television. It will also leverage Yazhou Zhoukan’s content to supplement its own online content development. (November 22, 2000)

INDIA

BPL Mobile, one of the largest cellular service companies in India, has launched an Internet portal, which can be accessed from mobile phones. The site, miZone, will allow subscribers the flexibility to choose mode of access by making the content available on WAP and with short messaging service (SMS) features. The portal offers services such as weather and general news, banking, stock market and financial news and lifestyle services. miZone will also offer miMail, an email facility, which the customer can use through both a WAP phone and SMS. BPL Mobile has 500,000 mobile phone subscribers spread across 192 cities in India. (October 19, 2000)

Jain Internet (JI), an ISP operating in the convergence arena, has tied up with **Cisco Systems**, the worldwide leader in networking for the Internet, to initiate joint business development. Cisco will offer end-to-end solutions to JI to help build an ISP network in India. Under the agreement, Cisco will provide equipment and services, including 50,000 network access server

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(NAS) ports to JI. JI’s ISP brand, which commenced its free Internet access services in Delhi on July 3, 2000, has a subscriber base of over 76,000. (November 21, 2000)

Jataayu Software Ltd, a subsidiary of **Integra**, a leading software engineering company, has announced the release of jBrowser/WinCE, an independent WML WinCE browser, the first to be launched by an Indian company. jBrowser is WAP 1.1 compliant and compact, occupying about 100KB of memory. A software developer can take advantage of its Application Programming Interface (API) to develop efficient applications for the WinCE environment. In early 2000, Jataayu launched the country’s first WAP browser supporting the Palm Operating System (PalmOS). The Palm browser provides access to WML content on PalmOS based devices and enables users to build applications including Internet, email, messaging, mobile banking, stock trading and other mobile commerce services. (November 18, 2000)

INDONESIA

Indonesia Online sold its web-hosting unit, **PT Global HostNet Indonesia**, to **MIH Asia**, a unit of South Africa’s **MIH Holdings Ltd**. PT Global HostNet Indonesia hosts corporate websites including Astaga.com. The terms of the sale were not disclosed. Indonesian Online’s shareholders include **Batavia Investment Management Ltd**, which holds a minority stake in automaker **PT Asta International**. The HostNet sale will allow Indonesia Online to focus on Astaga.com as a media brand and content provider. (November 22, 2000)

Samsung Electronics, one of Korea’s leading electronics companies, plans to build a cellphone assembly plant in Indonesia with a total investment of US\$10m. The plant will supply cellphones to the Southeast Asian market. The company has also built handphone assembly plants in Brazil and China. SEI has the largest electronics manufacturing plant in

Indonesia with a combined investment of US\$100m.
(October 14, 2000)

acquiring minority stakes in foreign companies.
(November 22, 2000)

JAPAN

Ariba Inc, the California-based software company, has announced that it will ally with **Softbank Corp**, Japan's biggest investor in Internet businesses, in an effort to extend its e-commerce operations for corporate clients in Japan. Softbank and its wholly owned subsidiary, **Softbank Commerce**, will pay a combined US\$40m to buy new shares in Ariba's Japan unit, taking a 40% stake in **Nihon Ariba KK**. (November 20, 2000)

Hitachi, Matsushita Electric, Sony and **Toshiba** plan to form a JV to standardize technology for interactive broadcasting and storage-type data casting. The planned venture will be capitalized at ¥200m (US\$1.8m). Matsushita and Toshiba will each hold a 25% stake, while Sony and Hitachi will each hold 10%. The remaining 30% will be equally divided among 10 firms including **Fuji Television Network**, one of Japan's five nationwide commercial television broadcasters. Advanced TV set-top boxes (STBs) will be manufactured based on the standardized technology and will enable viewers to store entertainment programming on powerful memory devices and allow them to watch programs after their broadcast time and access the Internet via TV sets. (November 24, 2000)

NTT DoCoMo Inc will pay as much as US\$9.6bn for stakes in wireless companies in the US and Taiwan in a bid to extend its lead in providing mobile Internet access. Japan's largest mobile phone company plans to buy about 20% of **AT&T Wireless** for ¥1tr (US\$9.1bn) without citing sources. DoCoMo also plans to buy a similar stake in Taiwan's **KG Telecommunications Co** for ¥60bn (US\$546m). A stake in AT&T Wireless will further DoCoMo's strategy of broadening the use of technology through

KOREA

Korea Electric Power Corp (KEPCO), a state-owned power supplier, is expected to begin test service of high-speed Internet access through power lines by Q2 of 2001. KEPCO will conduct the pilot service for about 100 households in Cheju, an island off the southern tip of Korea. The project was started by the Korean government in December 1999 to develop power line communication (PLC) technology for high-speed voice and data transmission. The government is expected to spend a total of W20bn (US\$17.6m) on this project by 2004, with W7.2bn (US\$6.3m) set aside for the first-phase work that ends in September 2001. (November 14, 2000)

LG Electronics, a subsidiary of the LG Group, will export the CDMA WLL system to Kranoyarsk, Russia. The company announced that it has signed a contract with **Sib Challenge Telecom** of Russia to supply STAREX-WLL systems supporting 150,000 subscribers over the next four years. WLL systems worth US\$3m will be shipped by the end of 2000 with the total shipment in the next four years likely to aggregate US\$40m. In the meantime, LG Electronics exported 30,000 subscriber CDMA WLL systems to Ufa and Tumen in 2000. (November 6, 2000)

LM Ericsson AB of Sweden will acquire a 10.3% stake in **Littauer Technologies Co**, a leading Korean e-business company. It said that with its investment of US\$36m, Ericsson will become the second major shareholder in Littauer Technologies Co, which invests in, develops, and manages a comprehensive network of e-business solutions companies in the Asia-Pacific region. (November 10, 2000)

The **Korean government** will invest a total of W1.9tr (US\$1.6bn) in the IT industry in 2001, a 28.7% increase from 2000. The **Ministry of Information**

and Communication announced that the investment will focus on fostering 200,000 IT personnel and developing fiber optic networking technology. The investment is broken down to W161bn (US\$146m) for nurturing IT experts, W65bn (US\$59m) for developing advanced technologies, W156bn (US\$146m) for building infrastructure and W114bn (US\$103m) for standardizing IT equipment. The increased funding is intended to make up for Korea's lack of IT personnel and to help the country catch up with technologically advanced nations. (November 15, 2000)

MALAYSIA

British Telecommunications Plc (BT) has announced that it will evaluate its investments in Asia before deciding to sell stakes in companies. BT plans to sell assets in order to reduce its debt by £10bn (US\$14bn). A pullout by BT may be bad news for some telecom companies in Asia, which are counting on it to raise money to pay for new licenses, and expand and improve networks. BT owns 20% of Hong Kong's number three mobile operator, **SmarTone Telecommunications Holdings Ltd**; it also owns 24% of Korea's mobile operator **LG Telecom Ltd** and 33% of **Maxis**, Malaysia's second-largest mobile phone company. BT also has a stake in **StarHub Pte Ltd**, Singapore's third largest mobile phone company. (November 13, 2000)

DataOne Asia, a Singapore-based facility management company, has launched an Internet data center (IDC) in Malaysia. DataOne Asia is a subsidiary of Singapore-based, public-listed **Keppel Group**. The company has made an initial investment of RM11m (US\$2.9m) in the IDC, which will be operated by **DataOne (Malaysia) Sdn Bhd**. DataOne Asia is also planning to invest RM25m (US\$6.6m) in a second facility in Malaysia by Q4 2000 to expand its Malaysian operations. In the next phase, which started in November 2000, DataOne Asia will set up IDCs in China, Hong Kong and Taiwan. In March 2001, it will expand into Japan, South Korea and Indonesia. (October 10, 2000)

PHILIPPINES

Globe Telecom of the Philippines introduced its new products, GlobeData and GlobeNet, to 200 domestic corporations. GlobeData is a suite of data services running on a Multi-Service Digital Data Network (MSDDN), the next-generation broadband network. Implemented over a GlobeData network backbone with gigabit data traffic capacity, MSDDN allows a company to quickly develop tailor-made solutions. GlobeNet is a full ISP for business applications that supports the growing needs of businesses for information technology and network solutions (November 22, 2000)

Smart Communications Inc of the Philippines, a cellular operator, and Finland's **Sonera Zed Ltd**, a global leader in "in-phone" services, have launched a new service platform offering a wide package of wireless personalized infotainment, e-commerce services for Smart cellular phone users. Called "Smart Zed," services can be accessed either through text messaging or WAP. Smart handles an average of over 17 million sent messages a day, meaning that one message is sent and one message is received every five seconds. (November 21, 2000)

SINGAPORE

i-STT Pte Ltd, Singapore Technologies Telemedia Pte Ltd (STT)'s Internet subsidiary, and **Microsoft Corp** have teamed up to provide Microsoft software on a subscription basis worldwide. Under the deal, i-STT will host, manage and deliver MS Windows 2000, SQL Server 2000, Exchange 2000, Office and Commerce Server from its data centers in the region. Targeted at ASPs and corporations in the region, i-STT will package Microsoft's software with i-STT's other services such as managed web hosting, collocation and data backup. i-STT has already established data centers in Hong Kong, Singapore and Thailand. Similar facilities will be completed in Malaysia and Shanghai by December 2000. (November 19, 2000)

Omni Industries Ltd, Singapore's third biggest contract electronics manufacturer, and **Venture Manufacturing Ltd** may be takeover targets for **Solectron Corp** after its recent acquisition of a leading maker of electronics parts, **NatSteel Electronics**. Solectron Corp's decision to buy the Singapore company for US\$2.4bn is intended to increase its Asia business. This may put other electronics manufacturers under pressure to win more contracts in Asia to reduce their production costs. (November 1, 2000)

StarHub Pte Ltd, Singapore's third largest mobile phone company, announced that it has doubled its initial planned investment from S\$50m (US\$28m) to S\$100m (US\$57m) to upgrade its mobile network. The additional S\$50m (US\$28m) is to increase StarHub's network capacity to support the 300,000 mobile customers that are expected by March 2001. S\$350m (US\$200m) has already been spent on building the telco's GSM 1800 mobile network. At present, StarHub's mobile network covers 99.9% of Singapore with about 700 base stations installed. (October 17, 2000)

Telstra Corp, Australia's largest telecommunications company, announced that it is keen to forge partnerships with regional mobile phone companies. Telstra is in talks to sell a 9% stake in its mobile phone JV with **Pacific Century CyberWorks Ltd** to **Singapore Telecommunications**, Singapore's largest telecom company. Should Telstra complete the sale, its stake in the JV will fall to 51% from 60%. Telstra is 50.1% owned by the Australian government and aimed to cut 10,000 jobs in two years in an effort to save A\$650m (US\$335m). It has already cut staff numbers by about 26,000 over the past three and a half years. (November 7, 2000)

TAIWAN

Nokia of Finland and **KG Telecom**, a leading GSM mobile operator of Taiwan, have signed an MOU to

cooperate in the development of third generation mobile networks and applications. **KG Telecom** and **Nokia** will cooperate in establishing a service creation center to develop state-of-the-art applications. **Nokia** will supply a fully functional 3G experimental system, which will be used by **KG Telecom** to evaluate, test and demonstrate end-to-end mobile multimedia applications in a working environment. **KG Telecom** recently launched Taiwan's first General Packet Radio Service (GPRS) network supplied by **Nokia**. (October 16, 2000)

Yahoo Taiwan has announced that it will acquire **Kimo.com**, Taiwan's most popular portal. The company claimed 27.4 million pageviews during August 2000. It aims to expand to China within the next 18 months. **Kimo** is the market leader in Taiwan with an 85% market share, ahead of its main competitor **Yam.com**. (November 9, 2000)

THAILAND

Intel Card Industries Co, a local card maker, has formed a Bht50m (US\$1.1m) JV with the **Telephone Organization of Thailand (TOT)** to produce a chip-embedded phone card for the state-owned agency. The JV will initially limit its production to phone cards before expanding to cover other types of cards, including electronic movie tickets. The JV has exclusive rights to make 40% of the phone cards each time **TOT** places an order, while bids will be called for the remaining 60%. (November 16, 2000)

Metro Systems has teamed up with **Microsoft (Thailand)** and **Cable & Wireless Services (Thailand)** to offer Microsoft Exchange 2000 as a hosted application. The service, which pools together the resources of **Metro**, is the first ASP in Thailand to provide Microsoft Exchange. The Exchange 2000 application hosting service will enable organizations to do business on the Internet and to use email with low investment costs. (November 22, 2000)

FOCUS

Japanese fiber optic cable manufacturers

Market Overview: Japanese fiber optic cable shipment is rising steadily on the back of replacement demand and ever-increasing Internet usage. The top four manufacturers reported a doubling of optic cable sales YoY to July 2000. The major Japanese wire and cable equipment manufacturers diversified into fiber optic cables in the early 1980s. Prior to their involvement in fiber optics, these companies manufactured copper and steel cables that were primarily used in the communications and construction industries. Despite their recent focus on fiber optics, metal wire and cable still contributes a significant portion of revenue to the industry. The re-wiring of Japan will drive fiber optic revenue growth into the foreseeable future. Companies interviewed by BDA estimated optical fiber demand to grow between 20% to 30% per annum over the next decade.

Furukawa Electric

Background: Furukawa Electric is one of the largest manufacturers of wire and cable for use in telecom and electronics-related equipment. It is the main operating company within the Furukawa Group. Furukawa currently has subsidiaries and affiliates operating in China (fiber optics), Malaysia (wire and cable), and Thailand (metal pipes for heat exchangers).

Products and Services: Furukawa's product line covers power transmission wire and cable, fiber optic data cables, Internet enabling hardware (hubs & routers), components for semiconductor manufacturing equipment (lead frames, connectors, heat sinks), and heat exchange pipes. Electric wire and cable accounted for 50% of FY99 revenues.

Financials: Furukawa's operating profit (N.B. excluding contributions from JDS Uniphase) doubled in FY99 to ¥21.2bn (US\$196m) from ¥10.7bn (US\$99m) in FY98 thanks to robust demand for the company's optical fiber and WDM-related products. Management expects revenue growth to become

increasingly dependent on optical fiber-related products and WDM-related products, which it expects to grow at 28% and 96%, respectively.

Fujikura

Background: Established in 1885, Fujikura is a manufacturer of fiber optic cable and devices; electric wire and cable; and electric and electronic components and materials. It has four manufacturing plants in Japan, including the Sakura Plant in Chiba (one of the largest cable-manufacturing facilities worldwide), and overseas operations in the US, Brazil, UK, Thailand, China, Singapore, and Malaysia.

Products and Services: Fujikura's main product is optical fiber telecommunication cable. The company's current focus is on strengthening its portfolio of IT related hardware, data communications cables (fiber optic, metal and magnetic) and other Internet enabling hardware (LAN connectors, switches, hubs & routers). Electric wire and cable accounted for 68% of FY99 revenues, followed by information and communication equipment and electronic parts at 27%. Other products include power transmission cables, undersea telecom cables, CATV support hardware and heat exchange materials for semiconductors.

Financials: The company reported FY99 operating profit of ¥9.4bn (US\$87m), down 23.4% from FY98. Revenue also showed a modest decline of 4.5% YoY to ¥324.7bn (US\$3bn). The decline in sales reflected weakness in electric power cables, which offset strong sales in optic fibers. Contributions from the company's information equipment and electronic components divisions also helped offset a further decline in operating profits.

Hitachi Cable

Background: Hitachi Cable Ltd was established in 1918 as a wire and cable production company. In 1956, Hitachi Wire and Cable became independent of Hitachi Ltd, which continues to hold a 50% stake in the company. Hitachi Cable has overseas subsidiaries and affiliates in the Hong Kong, Malaysia, Singapore, Thailand and the US.

Products and Services: The company's expanded product offering includes metal wire and cable (power transmission cable, copper wires and CATV), fiber optic cable and connectors (submarine cables, optical transceivers and WDM demultiplexers) and semiconductor related components (gallium arsenide material). Wires and cables collectively accounted for 44% of FY99 revenue, and IT equipment/electronic components contributed 22%.

Financials: Hitachi Cable's revenue in FY99 fell 6.1% to ¥359.1bn (US\$3.3bn), due to a decline in the core power transmission cable division. Hitachi Cable's recurring profits, however, rose a healthy 37.9% YoY to ¥10.4bn (US\$9.6m) on the back of an increasing profit contribution from its higher margin IT components business (semiconductor packaging equipment).

Mitsubishi Cable Industries

Background: Mitsubishi Cable Industries was established in 1907 as an industrial cable manufacturer. The company belongs to the Mitsubishi group and is affiliated with Mitsubishi Materials Corporation, which holds 29.2% of floating share. It covers the microscopic to aerospace worlds, including telecommunications, aerospace, electronics, medical, and energy utilizations.

Products and Services: Mitsubishi Cable Industries manufactures wire and cable to the electronics and telecommunications industries. Electric wires, cables, electrical works and related products accounted for 65% of FY99 revenues.

Financials: FY99 sales of ¥117.4bn (US\$1.1bn) was 10.7% below results achieved in FY98.

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ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists US companies in expanding their businesses in Asia through JVs and acquisitions. BDA helps clients to find local business and has senior advisors in Bangkok, Jakarta, Kuala Lumpur, Manila, Seoul, Shanghai, Taipei and Tokyo. For further information on BDA's services or on any of the articles in this newsletter, please contact Charles Maynard in New York, Euan Rellie in London, Andrew Huntley in Singapore or Simon Wu in Shanghai.

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