

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

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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 we profile some fibre optics companies in Korea.

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Andrew Huntley
Managing Director

CHINA/HK

China's second-largest mobile communications operator, **China Unicom**, has set up a JV with Hong Kong-based **Hutchison Whampoa Ltd.** The new partnership will focus on telecom consultancy and marketing services in China. The JV, of which China Unicom has a 51% stake and Hutchison Telecom 49%, will also link up marketing and telecom employee training activities. (September 19, 2000)

Mitac Synnex Group of Taiwan has announced plans to invest in a large data center in Shanghai. The company has already acquired sites in Shanghai (to be used as a data-management center) and Kunshan in Jiangsu province (exact use not finalized). The Shanghai center will operate by leasing streamlined servers to clients who will be able to access the supercomputer installed at the group's headquarters for data and software. (August 1, 2000)

Officials in Shandong province have confirmed that Qingdao-based **Hisense Group** and the Jinan-based **Langchao Electronic Information Industrial Group Co** have been discussing a merger for nearly one year. The merger if successful would result in China's largest electronic products manufacturer. The merger will enable the new company to dwarf the Beijing-based **Legend Group**, China's largest computer developer, and the Sichuan-based **Changhong Group**, the largest electrical household appliances producer becoming the leading electronics producer nationwide. Hisense, established in 1994, mainly produces TVs, air conditioners, computers and software. It ranked among China's top ten electronics manufacturers with a sales volume of RMB10.7bn

(US\$1.28) in 1999. Langchao is so far the largest server producer in China. It reported a sales volume of RMB4bn (US\$455m) in 1999. (September 18, 2000)

Quanta Computer Inc of Taiwan has decided to invest NT\$600m (US\$19m) to set up plants in Shanghai. Quanta joins **Acer Inc**, **Inventec Corp**, **Compal Electronics Inc** and **Arima Computer Corp**, Taiwan's four other top notebook computer manufacturers, in locating operations in China. Quanta intends to invest in production bases for notebook computers, motherboards, information appliances and mobile phones in the Shanghai district. It also plans to cooperate with Chinese distributors with a view to marketing its own brand Q-liyt products in the potentially lucrative Chinese market. (September 7, 2000)

Singapore's **Portnet.com Pte Ltd** has, together with the **Port of Dalian Authority and Dalian Container Terminal**, formed a JV to deploy, manage and market the Web-based PORTNET e-commerce and container port management ecosystem, developed by Portnet.com's parent, **PSA Corporation Ltd**, in northeastern China. (September 22, 2000)

Talisma Corporation Pvt Ltd, the electronic Customer Relationship Management (eCRM) solutions company, incubated by **Aditi Technologies**, has sealed its first round of VC funding in the US worth US\$31.5m. The funds will be directed towards product related R&D, infrastructure and facilities and increased sales and marketing efforts. The investment will fuel the company's plans for growth in the Asia-Pacific region, developing new modules and in setting up infrastructure and facilities in India. Talisma's software products provide customers email management, e-marketing and Web-based customer services. (October 6, 2000)

Wipro Ltd and **Software Technologies Corporation (STC)**, a leading California-based provider of e-business integration solutions, have entered into a global partnership targeting commercial and public sector industries. According to the agreement, Wipro will market STC's software services. The alliance includes joint sales, marketing and business development initiatives to better support their joint clients. STC will leverage Wipro's global position and its ability to deliver a full range of professional services, while Wipro will offer STC's solutions covering areas such as ERP, CRM, and Supply Chain Management (SCM) e-commerce. (October 5, 2000)

INDIA

Internet Technology Group, which raised more than S\$50m (US\$28.62m) when it joined the main board of the Singapore bourse in July, will pay US\$7m in cash for a 20% share of **SSI Software Services International Private Limited (SSI Software)**, part of the SSI Group in India. The completion of the purchase is conditional on the SSI Group restructuring itself such that SSI Software becomes the effective sole owner of its current sister companies in the Group. (September 27, 2000)

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INDONESIA

Jafco investment of Asia Pacific (JafcoAsia), a Japanese venture capital company, is offering a total of US\$2m in seed capital for local SMEs in the IT industry. The Singapore-based company launched its e-Incubator Program in cooperation with **PT IBM Indonesia**, which will provide the expertise and technology. The company announced that the US\$2m fund will be divided equally among five startup companies to help develop the IT industry in Indonesia. (September 22, 2000)

Singapore-based ASP, **Freight Real-Time.com**, signed an alliance agreement with **PT Nusa Pamerima Corporation (NPC)** to promote the portal's services to the Indonesian maritime and lo-

gistics company. The two companies will establish a joint venture company with an investment of US\$500,000 to promote subscription-based portal services such as e-cargo management and logistics online applications. The portal is equipped with multi-passwords, assigned codes, firewalls and encryption to ensure data security. NPC will control 51% of the company and Freight holding 49%. (September 4, 2000)

Sun Microsystems Inc of Singapore announced its plan to form a JV with **PT e-Metrodata.Com** to distribute its products and services in Indonesia. In the new US\$5m company to be called **PT Sunmicrosystem Indonesia**, Singapore's leading provider of industrial hardware and software has a 49% equity while **e-Metrodata**, a subsidiary of publicly listed **PT Metrodata Electronic**, controls the rest. The JV is expected to be formed in January and begin operations in the Q1 of 2001. (September 20, 2000)

broadband Internet infrastructure yet, but PCCW is in a position to enter as soon as the infrastructure is in place. (August 11, 2000)

Ericsson of Sweden will be the sole supplier of systems in the initial phase of the 3G mobile phone services that **J-Phone Group** plans to start in Tokyo, Osaka and Nagoya in 2001. By using Ericsson's W-CDMA technology, J-Phone Group will provide its subscribers with wireless multimedia services, Internet/intranet and other IP-based applications, video conferencing and international roaming services. (September 20, 2000)

Matsushita Electric Industrial Co Ltd and **Toray Industries Inc** have reached a JV agreement to manufacture plasma display panels (PDPs). The JV company, **Matsushita PDP Co Ltd**, capitalized at ¥1.2bn (US\$11m), will start making PDPs, TV sets with PDPs, and related parts from June 2001. Matsushita is putting up 75% of the capital and Toray 25%. (October 5, 2000)

JAPAN

Pacific Century CyberWorks Ltd (PCCW) has reached an agreement with the main shareholders of Japan's **Jaleco** to acquire the Japanese game equipment and software developer. Operating via its wholly owned Dutch subsidiary, **CyberWorks International BV (CWIBV)**, PCCW will buy shares through a takeover bid from Jaleco's main shareholders. PCCW will also gain shares through two third-party allotments of new shares by Jaleco. By the end of October, PCCW plans to acquire about 81% of Jaleco's outstanding shares for a consideration of some ¥27bn (US\$250m). Jaleco will be renamed Pacific Century CyberWorks Japan (PCCW-J) and merged with PCCW's existing Japanese subsidiary of the same name. PCCW aims to offer a worldwide, interactive content service called Network of the World (NOW) via broadband Internet and has already begun creating content for this service in Hong Kong and London. With the acquisition, PCCW is making a full-fledged move into the Japanese market. Japan does not have

KOREA

Barunson Co Ltd, a fancy character licensing company, has agreed to acquire 45% of **Ubiz System Co Ltd** for W6.7bn (US\$6m) in stock to expand its business into e-commerce. Ubiz System, which sells e-customer relationship management (e-CRM) technology, earned a net W80m (US\$71,500) on sales of W180m (US\$161,000) in fiscal 1999. Barunson is actively shifting its 15-year-old stationery business into an online and high-tech business after it was acquired by **Miralab Co Ltd**, a Korean incubating company for Internet ventures, in June. Miralab has been widely recognized after it successfully nurtured several Internet ventures, such as **Waawaa.com** (auction for used goods), **Pricekiss.com** (customized auction) and **Stocknote.com** (investment guide). Miralab secured US\$35m in investment from a Hong Kong-based hedge fund to finance its business and turn around Barunson, which has been losing money since 1998. Over the past month, Barunson stocks rose as high

as 10 times to a peak of W288,500 (US\$258) per share. (August 30, 2000)

Hanaro Telecom Inc, a telephone and high-speed Internet service operator, said it plans to spend more than W610bn (about US\$544.6m) over the next three years to strengthen its e-business sector and to attract more corporate customers. Hanaro's e-business sector includes renting high-capacity server computers and providing Web-hosting services to SMEs. Hanaro's business grew at a brisk pace as its service area has widened to 63 cities and 14 territories from four major cities at its inception in April 1999. (September 29, 2000)

Locus Corp, Korea's leading computer-telephony integration company, took over management of **Core Technology System Co Ltd**, a maker of household transformer cores. Locus secured on holding share by acquiring 40.77% of Core Technology. The transaction is estimated at almost W29bn (US\$25m) based on Core Technology's latest closing price of W23,250 (US\$20) per share. Core Technology, which began trading stock late last year on the Kosdaq market, is expanding into the semiconductor equipment devices and Internet-related services businesses, bringing synergy in the merger with Locus. Locus will further develop telecommunications technology, while Core Technology will focus on developing Internet media contents. (August 8, 2000)

MALAYSIA

Sun Microsystems Malaysia Sdn Bhd, **Computer Systems Advisers (M) Bhd (CSA)** and **Millenium Integra (M) Sdn Bhd** signed a technology partnership agreement with **Medical-Online Sdn Bhd** to deliver Java-based healthcare solutions under the Telehealth flagship applications of the Multimedia Super Corridor. The agreement sees Medical-Online (MOL) and Sun working in consortium with Sun's distributors CSA and solutions provider Millennium Integra to design, build and operate the telehealth service. (September 20, 2000)

Australian software and IT services company **Technology One Ltd**, which has been awarded **Malaysia's Multimedia Super Corridor (MSC) status**, plans to form partnerships with Malaysian companies to create new products such as system integrators and the potential to partner with incubator companies. Over the next 12 months, Technology One plans to invest more than A\$500,000 (US\$265,800) into product development and marketing in Malaysia. MSC status brings other privileges such as a five-year exemption from Malaysian income tax, unrestricted employment of foreign knowledge workers, duty free importation of multimedia equipment and access to government research grants. (September 20, 2000)

PHILIPPINES

Telecommunications giant **Philippine Long Distance Telephone Company (PLDT)** and **IBM Philippines** have agreed to work together in their Application Service Provider (ASP) initiatives. IBM will co-locate its ASP initiatives in PLDT's P1.6 bn (US\$34m) Internet Data Center (IDC), where the latter will house its own ASP and will also host, co-locate and manage the computer servers, applications and bandwidth needed by PLDT and its customers for their Internet and multi-media operations. According to a recent Forrester Research report, the application hosting market is expected to reach US\$6.4bn by 2001.

SINGAPORE

Asiabondportal.com announced that **ABN Amro** and **UBS Warburg** have taken equity stakes in the trading portal for undisclosed amounts. Founded by Hong Kong-based **Income Partners Group**, the company plans to revolutionize bond trading in Asia by turning its subscriber-only Website into a cyberbond

exchange. The portal will be launched in mid-October and it aims to be the first multiple-dealer, fixed-income trading platform in the region. The company also launched the "pilot-trading" program of its in-house developed trading engine that allows institutional investors to trade bonds online with the market-makers in the system. (September 26, 2000)

Davnet Ltd formed an alliance with a Singapore JV operated by **Telstra Corp** and **Keppel Telecommunications & Transportation Ltd** to sell Internet and telecommunications services. Telstra, Australia's largest telephone company, and Singapore-based Keppel T&T formed their **Harmony Telecommunications Pte** venture in March to offer fixed voice and data services in Singapore. Davnet, an Australian telecommunications company, jointly sell and will market their products and services. Davnet is expanding in Malaysia, Singapore, Taiwan, and the **US NTT Communications Corp of Japan**, the world's largest telecommunications carrier, owns 49% of Davnet's Australian unit, Davnet Telecommunications. NTT plans to convert that stake into a controlling shareholding in Davnet, the company announced Sept 13. (October 6, 2000)

Finnish company **Wapit Ltd** and Singapore-based **Wrap-IT Ltd** launched the first wireless application service portal called **Wasp-IT** (wireless application service provisions) in this region. The Wasp-IT services are available on WAP (wireless application protocol) and SMS (short messaging service) to GSM mobile subscribers. In Singapore, WRAP-IT has 30,000 subscribers who are using the WAP services and about 650 merchants are expected to utilize this service in their products. Wasp-IT uses a customized mobile technology created by Wapit; WRAP-IT will provide the hardware. The two companies are working with major telecom operators in Asia to offer the service to corporate clients and consumers. (September 19, 2000)

Webvisions Pte Ltd, a leading web hosting company based in Singapore, has expanded to India and Malaysia. The new offices in Mumbai and Kuala Lumpur are the company's first outside its home base. In Mumbai, Webvisions is also building a data center for deploying high-performance Internet hosting solutions as well as sophisticated managed services.

Scheduled to be operational by December 2000, the 33,000 sq foot facility will be followed by two sister facilities in Bangalore and Delhi by June 2001. (September 21, 2000)

TAIWAN

Chung Hwa Telecom completed an equipment-procurement tender for the general packet radio service (GPRS), with **Nokia** winning the contract after submitting a bid of NT\$540m (US\$17.3m). Five overseas telecom makers - **Nokia, Ericsson, Nortel Networks, Alcatel** and **Motorola** - competed for Chung Hwa Telecom's GPRS equipment tender. (August 3, 2000)

IBM Taiwan has plans to form strategic alliances with Taiwan's fixed line network companies to jointly enter the country's Internet Data Center (IDC) market. IBM is setting up three development centers this year in Taiwan. At present, IBM is actively seeking fixed-line network companies to cooperate with its IDC development project. The company is reported to have been engaged in intense negotiations, and is believed to be planning to make public the names of prospective partners before long. (October 3, 2000)

Yahoo Taiwan signed a cooperation agreement with **Gigamedia Ltd** and will ink a similar agreement with **HiNet.com** and **ET Webs Inc** by the end of the year. Yahoo Taiwan will work with Gigamedia to tap Taiwan's broadband Net access market. The portal said that its operations in Taiwan will mostly focus on multimedia audio/video and wireless Net access. The portal has allied with **Chunghwa Telecom, Taiwan Cellular Corp, Far EasTone Telecom Co Ltd**, and **KG Telecom Co Ltd** in the field of wireless Internet access. As to the multimedia audio and video business, the company has formed an alliance with Gigamedia and ET Webs. Analysts predict that Yahoo will use the broadband Gigamedia and ET Webs to develop its non-portal services. (September 5, 2000)

THAILAND

Data Line Thai, the ISP subsidiary of **Datamat**, will sell the majority of its shares to Canadian-based investor **Cyber Venture, Shin Corp's AD Venture** and **Data General**. The final share ownership has not been decided yet. Data Line Thai is currently expanding into the Internet data centre business, while parent company Datamat has announced a deal with AD Venture that will use its infrastructure. Under the new structure, Datamat will keep 20% of Data Line Thai, with the remainder to be divided between Cyber Venture, AD Venture and Data General. New areas of focus include an ASP business and software outsourcing. (September 27, 2000)

Thai Incubator has chosen its first "incubatee" from among 100 candidates as part of expected funding of Bht300m (US\$7m) to at least ten startups over the next 18 months. **Thai Venture.com**, the selected project, is developing an information and service centre for VCs throughout Asia. Thai Venture.com is expected to launch in nine months. The maximum funding for each project is Bht20m (US\$467,000) as well as hardware and software tools, office space and equipment, high speed Internet access and business advice. In exchange, the incubatees give between a 10% and 49% stake in the company to Thai Incubator. (August 9, 2000)

FOCUS

Opportunities in the Fiber Optic Cable Manufacturing Sector in Korea

Market Overview: Korean optical fiber industry's annual output is forecast to reach 4 to 5 million fiber kilometers by Q4 2000. Demand currently exceeds supply in the Korean cable market, spurring growth in the industry, which will last at least until 2010. Daewoo Communication, LG Cable, Samsung Electronics and Thaihan Electric Wire are the market leaders in optical fiber cable market in Korea and

they have an ability to produce both the 'raw' fiber as well as optical fiber cable.

LG Cable

Background - LG Cable has been producing optical fiber and optical fiber cable since 1983. LG Cable is currently expanding its fiber optic cable production capacity to 5m fiber kilometers from the current 1.8m by December, 2000. LG Cable has won and continues to win orders for fiber optic cables from MCI WorldCom and ComQuest.

Products and services - The company manufactures a wide variety of optical fiber cable - single mode, multi-mode, dispersion shifted fiber, loose tube, ribbon slot, underwater cables and optic-related accessories like optical fiber distribution frames, joint closures, cards and connectors. Other products include telecom cables, energy cables, special cables, systems, aluminum materials, rubber products, air conditioning, components, pump, injection molding and agriculture machinery.

Financials - 1999 revenue was W1.8tr (US\$1.7bn), the company listed on the KSE in 1977, however the company only has a market cap of W23bn (US\$21m). Major shareholders include Hitachi Cable (Japan) and LG Information & Communications which hold 9.7% and 6% stakes respectively.

Dongyang Cable & Magnet Wire Co Ltd

Background - Originally a subsidiary of Samsung Electronics, DCMW started production of optical fiber cable and optical LAN cable since 1999.

Products and services - The company's plant manufactures a wide range of cables including: power cable, communication cable, optical cable (direct burial optical cable, self-supporting cable, duct optical cable, flame-retardant optical cable, indoor application, under water optical cable), LAN

Financials - 1999 revenue for optical fiber was W3bn (US\$2.7m). The company expects current year revenue for optical fiber to be W20bn (US\$18m) due to newly winning contracts from Powercom, one of

affiliates of Korea Electric Power Corporation (KEPCO) this year.

Heesung Cable Ltd

Background - Formerly part of the LG Group, the company was renamed and became part of the Heesung chaebol, in 1996. The Heesung group has seven affiliates including Heesung Cable Ltd (the only public company), which obtained an ISO 9001 qualification for the manufacture of Optical Fiber Cable in 1997.

Products and services - The cable company's product range includes power cables, telecommunication cables, optical fiber cables (duct optical cables, flame-retardant optical cable, direct burial optical cable, self-supporting optical cable, under water optical cable, OPGW, breakout optical cable, under carpet optical cable, and FC(PC) connectors.

Financials - The cable company's revenues in 1999 were US\$223m with 1H2000 optical fiber sales totaling W23bn (US\$21m). The market cap of the company is W23b (US\$21m). Two Heesung group companies, Heesung Precision Ltd and Heesung Metal Ltd hold stakes of 10.3% and 5.6% in Heesung Cable respectively.

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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 Frank Zhang in Shanghai.

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