

Telecom Business: Intense Competition to Become Regional Hub

By Overseas Market Information Division, JETRO

Since 1999, competition has heated up in the telecom business to become a regional hub. Hong Kong took the lead in the race to liberalize the business, but Singapore has hit back suddenly with the full liberalization of its telecom market and is refusing to budge an inch. Taiwan has also been gradually liberalizing the telecom business since 1995 and is scheduled to complete the process in July 2001. From now on companies in Asia too can be expected to engage in fierce competition over the issue of business licenses for third-generation mobile phones (see note on page 29). At the same time, tie-ups and groupings of local companies with foreign capital can be expected to unfold.

Competition Involves Three Regional Telecom Hubs

In Hong Kong, liberalization had been gradually implemented since 1995 in such businesses as fixed telecom line networks, mobile phones, and international direct dialing. In particular, as a result of continuous price reduction competition in the fields of mobile phones, Internet service providers, and international direct dialing, enormous rate cuts have been realized.

The pace of liberalization further accelerated in 2000, when Hong Kong issued licenses to a total of 15 companies as businesses that have their own international telecom facilities, such as satellite communication systems and submarine optical fiber cables, and are able to provide international telecom services.

Granting permission for the construction by companies of their own international telecom facilities and equipment means that the strategic options available to telecom companies have been greatly expanded, including the provision at low cost of good

network services, including the resale of leased lines, to mainly corporate customers, including foreign companies. Some leading foreign telecom companies have also been linked with the acquisition of licenses.

Prompted into action by Hong Kong's liberalization of its telecom business, the Singapore government also completely liberalized the telecom market from April 1, 2000, and fully abolished restrictions on the foreign capital ratio of telecom companies. Originally the Singapore government planned to implement complete liberalization of the telecom market from April 2002, but it decided to bring forward the schedule by two years in order to respond sensitively to worldwide moves toward realignment in the telecom business.

In Singapore, with the exception of the Internet service provider business, which was completely liberalized in October 1998, licenses in the basic telecom field were not issued without restriction before. Liberalization had been limited on the premise of maintaining an appropriate competitive environment. As with Hong Kong, however, the present decision means that there are no restrictions on the number of business licenses, as long as no physical obstacles exist.

On the basis of the newly established license qualifications, licenses were issued to 66 companies, including existing ones, in March 2000. Thirteen companies, including MCI Worldcom of the United States and Davnet and Telstra of Australia, acquired licenses as facility base operators, which construct and provide services through their own telecom infrastructure and facilities.

Meanwhile, 53 companies received approval as service base operators, which lease lines from facility base operators and provide such services as

Internet telephone, callback services, Internet service provider businesses, resale of international lines, and value-added data services. The Singapore government estimates that new and expanded investment by these 66 companies will amount to a total of three billion Singapore dollars (approximately ¥185 billion, US\$1.7 billion).

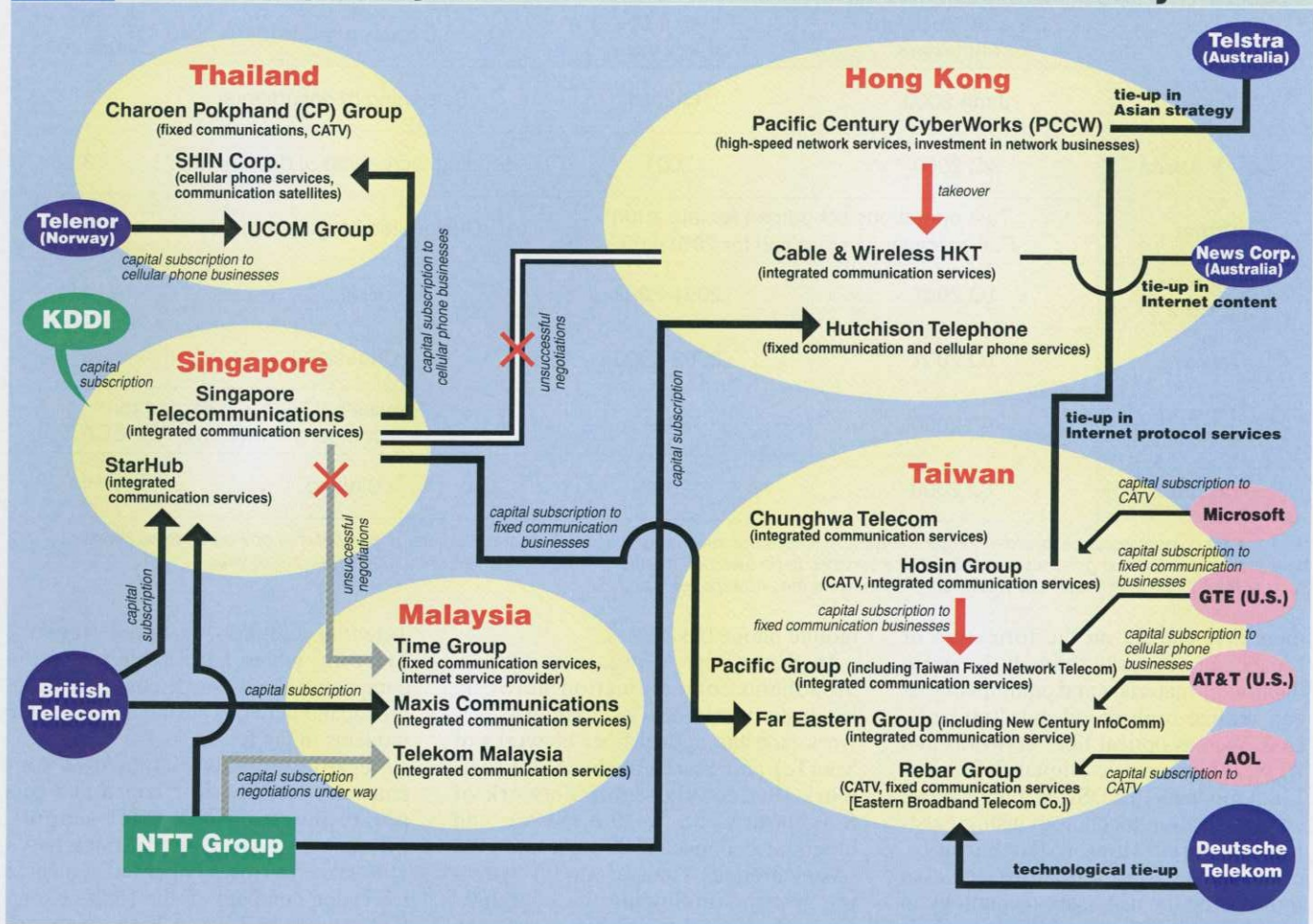
Even though complete liberalization has been carried out, however, the construction of infrastructure and telecom facilities will take time. For the time being, the race among existing companies, such as StarHub (22% owned by Japan's Nippon Telegraph and Telephone Corp. and 18% by British Telecom), which as a rival to Singapore Telecommunications (SingTel) has newly commenced general basic telecom services, will be limited to competition over rates and services. But in the near future a service offensive by foreign telecom companies can be expected in the field of high-speed network and data communications, such as Internet service provider businesses, international direct dialing, and international line resale.

Taiwan is unable to hide its bewilderment at the speed of telecom liberalization in Hong Kong and Singapore. In order to establish its status as a regional telecom hub, Taiwan has been liberalizing the industry gradually, but nevertheless the distance with the leaders is widening.

In Taiwan, as part of the policy of liberalizing the telecom business, the government in March 2000 opened the fixed telecom line market, which for a long time had been monopolized by the 100% government-owned Chunghwa Telecom, and issued business licenses to three companies: Eastern Broadband Telecom Co., Taiwan Fixed Network Telecom, and New Century InfoComm Co. Although these are local private companies or state-run enterprises, they

Figure 1

Major Players in the Asian Telecommunication Industry



also noticeably have tie-ups with leading foreign telecom companies: Eastern Broadband Telecom with Deutsche Telekom (technological tie-up), Taiwan Fixed Network Telecom with GTE of the United States (15% stake), and New Century InfoComm with SingTel (18% stake).

Another highlight of Taiwan's telecom liberalization is the privatization of Chunghwa Telecom. It is an extremely rapid privatization plan, with 33% of total shares going to domestic institutional investors, individual investors, employees of the company, and others by the end of 2000 and a further 33% going to domestic investors and others by June 2001.

Also, Taiwan was scheduled to open resale of the submarine optical cable business by the end of 2000, and this move was attracting the interest of foreign companies. Compared with Hong Kong and Singapore, however, business restrictions are going to continue. For example, foreign investment is limited to less than 20% of capital.

High-Speed Data Transmission Is Key to Competitiveness

In such fields as Internet service providers, international direct dialing, and mobile phones, where it is easy for many new companies to enter in a short

time, there are many examples of the conventional price system collapsing overnight as a result of battles among participating companies to lower rates and offer free-of-charge services. In Hong Kong, after the international direct dialing business was liberalized in January 1999, the cost of a call to Japan has dropped to about one-tenth of what it was.

Of most interest to telecom companies now are the high-speed network business and the data communication service, for which unit service prices are high. These markets are expected to expand greatly from now on. For this reason, existing fixed communication line companies are concentrating

Table 1 Schedule for Next-Generation Cellular Phone Services in Asian Countries

	Date of issuance of licenses	Date of start of services	Licensing methods	Number of licenses
Japan	June 2000	1Q 2001	Screening of documents	3
South Korea	4Q 2000	2001	Bidding, screening of documents	3
China	Test operations scheduled for late 2000 Full operations scheduled for 2001-2002		Designated by government	3?
Hong Kong (See Note 1)	1Q 2001	2001-2002	Bidding	4
Taiwan	1Q 2001	2002-2003	Undecided	5
Thailand (See Note 2)	1Q 2000	2004	Provisional license awarded to new joint company formed by TOT & CAT	
Singapore	1Q 2000	2002	Bidding	4

Note 1: Four companies to be awarded formal licenses. At least eight secondary licensees, or virtual cellular phone network operators, to be chosen.

Note 2: Licenses for next-generation cellular phone services to be awarded to other private companies, with 2004 set as target year

Source: R&A (June 2000) report by KDD Research Institute Inc., newspaper reports

their investments on the formation of broadband networks through the introduction of materials and equipment that can realize high-speed data transmission, such as optical fiber networks and ADSL (Asymmetric Digital Subscriber Line) modems. (ADSL is a high-speed communication technology using existing telephone lines.) Furthermore, cable television companies are also introducing the necessary technology to supply interactive services via their coaxial cable networks.

Hong Kong has taken the lead in this field. In particular, Pacific Century CyberWorks (PCCW), which succeeded in beating SingTel to purchase C&W-HKT, is attracting attention for having gained the upper hand in information supply services and interactive Internet television services through its broadband Internet service, known as the Super Netvigator (with a transmission speed of 1.5 Mbps [mega bit per second]) and its own portal site. Furthermore, as of October 2000, PCCW was engaged in negotiations with the Australian firm Telstra to establish a joint company and thereby strengthen its international competitiveness in Asia in the fields of Internet and

mobile phone businesses.

In Singapore, Singapore One, a broadband communication network, has been constructed as a national network, and the optical fiber networks of SingTel and StarHub, the ADSL network, the coaxial cable network of Singapore Cable Vision (SCV), and others are connected through an ATM (Asynchronous Transfer Mode) switching system. Following the liberalization of the telecom business, the Australian firm Davnet and Pacific Internet, an Internet service provider from Singapore, have announced their entry. The Singapore government is now considering the opening of connections to existing networks of SingTel and SCV. If this plan materializes, more companies will be tempted to enter broadband communication network businesses.

In Taiwan, meanwhile, Chunghwa Telecom was implementing a plan to add 240,000 lines to its broadband network using ADSL technology for a total of 260,000 lines by the end of 2000. Of the three companies that were issued general fixed line business licenses in March 2000, there is a possibility that two companies, Eastern Broadband

Telecom and Taiwan Fixed Network Telecom, which have cable television companies as investors, could enter the broadband network business using cable modems in the future.

Regarding the development of contents and services, it is hoped that corporate investors will offer support. Microsoft of the United States has a 10% stake in Hosin GigaMedia, a cable television company in the Hosin Group that invests in Taiwan Fixed Network Telecom. America Online has a 10% stake in Rebar Eastern Multimedia, a cable television company in the Rebar Group.

According to the results of a survey by the Institute for Information Industry, a local think tank, there were 5.57 million Internet users as of June 2000, an increase of 16% in half a year. This number is expected to exceed 7.5 million in two years time, so the potential for the diffusion of broadband network services is great. It is also expected that contents and services will diversify, giving an impetus to Business-to-Business (B2B) and Business-to-Consumer (B2C) e-Commerce. Although the conditions are different from Hong Kong and Singapore – in

Taiwan, the household diffusion rate for cable television is high at 80% – users can be expected to use CATV and ADSL functions separately depending on the purpose.

Next-generation Mobile Phones

Companies are also eyeing entry into the business of third-generation mobile phones, which will enable the reception and transmission of large volumes of data by connecting a mobile phone terminal with the Internet.

At present, in some areas such services as information on the economy and daily life, Internet banking, and e-mail are available using GSM (Global System for Mobile communication) and CDMA (Code Division Multiple Access) technology. But from now on it is expected that third-generation mobile phone services will become available with 30-150 times faster transmission speeds.

With regard to these third-generation mobile phone services, Hong Kong is scheduled to issue licenses in the first quarter of 2001, with actual services being commenced by 2002. The Hong Kong government announced its policy in October 2000 of deciding the four companies to receive licenses through competitive bidding, while listening to the views of business and experts. Since the bidding system will make further huge investment inevitable in the initial stage, the existing three companies, besides the leading Hutchison Telephone, Smartone, and C&W-HKT, will be forced to look for tie-ups and mergers.

Indeed, a tie-up between SingTel Mobile in the SingTel Group, which failed in a bid to purchase C&W-HKT, and New World Telecom is moving forward positively. SingTel Mobile sees business opportunities for third-generation services not only in Hong Kong and Singapore but also in such countries and regions as Taiwan, Malaysia, and China. Meanwhile, PCCW, which purchased C&W-HKT, is struggling to procure funds and has liabilities estimated at 93.5 billion Hong Kong dollars (approximately

¥1.3 trillion, US\$12billion).

In Singapore, too, licenses will be issued to four companies through a bidding system. The licenses will be granted in February 2001, and actual services are expected to commence in 2002. Among existing mobile phone companies, SingTel Mobile and Mobile One (M1), ranked first and second in the industry, respectively, have announced their intentions to participate in the bidding. In 1999, SingTel Mobile announced the joint development of a wideband CDMA (W-CDMA) in cooperation with Japan's NTT DoCoMo and the National University of Singapore. Also, M1 estimates that the cost of upgrading its own network for third-generation services will be 1 billion-1.5 billion Singapore dollars (approximately ¥61.7 billion-¥92.5 billion, US\$570 million-US\$860 million). Although StarHub, the third-ranking company, will decide what to do after seeing the details of bidding that were to be announced in December 2000, it seems to be moving in the direction of participating in the bidding, having established a tie-up with Nokia, a large telecom equipment maker in Finland, and signed a contract for the joint development of a third-generation telecom network.

In Taiwan, a council under the Directorate General of Telecommunications of the Ministry of Transportation and Telecommunications in August 2000 announced a policy of formulating a plan by the end of 2000 and accepting applications for the acquisition of licenses in the first quarter of 2001. Licenses will be issued to five companies, but it is still uncertain whether a bidding or screening system will be adopted.

Domestic and foreign telecom companies have started moves in Taiwan also toward the acquisition of licenses for third-generation mobile phone services. A joint venture between the French firm ALCATEL and the Japanese firm Fujitsu has announced its entry. Among the domestic companies, the entry of existing mobile phone and pocket pager companies, such as Taiwan Cellular Corp. (TCC), and of

the three new fixed phone companies mentioned above is expected. Also, with regard to foreign capital, such big names as Siemens, Ericsson, and Nokia appear to be making moves to acquire licenses by teaming up with Taiwanese companies.

Amid these circumstances, such existing mobile phone companies as TCC, FarEasTone, and KG Telecom have already established business tie-ups with leading foreign enterprises and look to have the advantage in acquiring licenses.

Furthermore, Paris-based Evolium, the joint venture established in May 2000 by ALCATEL (66%) and Fujitsu (34%) with the aim of carrying out the research and development of second-generation and third-generation technologies, has set itself a target of achieving a 15% market share in Taiwan. In response, the Rebar Group, which is involved in the cable television business, has reportedly asked ALCATEL for technological support. In addition, PCCW, the largest telecom company in Hong Kong, and other domestic corporate groups have also put their names forward for the acquisition of licenses.

The Japanese NTT Group is also becoming actively involved in third-generation mobile phone services in Asia. In 1999, NTT acquired a 19% stake in Hutchison Telephone, the mobile telecommunications business of the Hong Kong company Hutchison Telecom, and, as well as supplying third-generation technology to Hutchison, is conducting research and development for the commercialization of the i-mode service in Hong Kong. In addition, operational tests of the third-generation mobile phones by NTT and SingTel Mobile are reportedly already in the final stage. However, this research is limited in scope to the gathering of data. It does not look as though NTT will establish any direct tie-up with SingTel Mobile in the future. JTI

(Note: First-generation mobile phones are analog; second-generation are digital; third-generation are broadband.)