THE QUALITY AND RANGE OF TELECOMMUNICATIONS AND NETWORK SERVICES: USA VERSUS HONG KONG

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INTRODUCTION

Hong Kong has been a telecommunications hub for the Far East since the early 60s when the Americans and Europeans started presence in this part of the world. Cable & Wireless and the Hong Kong Telephone Company were the only franchised service providers—HKTC subsequently became part of C&W—and many professional practices came from the parent UK company. Today Hong Kong is one of the first to achieve a fully digitized transmission as well as exchange network; and boosts one of highest density in use of cellular phones and paging equipment.

It seems all good news to OFTA but as a corporate user of telecommunications service in Hong Kong, we are still very much limited by the range and availability of innovative services particularly in the high speed data and voice arena. This paper is an attempt to compare the range and quality of telecommunication services in Hong Kong and that of USA as perceived by a large user, followed by a discussion of whether Hong Kong can continue to maintain its regional telecommunication hub status in the next few years.

DATA SERVICES

In the United States, there are a wide range of data services including:

- dedicated circuits: subrate, nx64K DDS up to 1.5Mbps
  Megabit Services up to 45Mbps
  ATM up to 155Mbps
  Sonet up to 2.488Gbps
- ISDN basic (two 64Kbps plus one 16Kbps) and primary rate (24 64Kbps)
- Frame Relay up to 45Mbps
- Switched Multimegabit Data Service up to 45Mbps

Regretably to say, one can easily see that Hongkong Telecom is offering only half of what is listed both domestically and internationally. It took us a couple of years to get the ISDN basic rate service in our data center in TaiKoo Shing and when it was provided, it is not the true ISDN basic rate with only one destination only for both the two 64Kbps channels. Primary rate ISDN is only available for voice so it will take 3 ISDN adaptors and 6 ISDN calls to establish a 384Kbps circuit.

As a multinational company we run business application systems across country boundaries and rely heavily the data networks to provide the connectivity. While International Private Leased Circuits (IPLC) provide a standard method, often we have

to supplement with alternate contingent methods such as high bandwidth switched services (larger than 64Kbps) in case the IPLC was out of service. In Hong Kong, we are simply denied of this critical need.

While Hongkong Telecom has been creative to build a 100Mbps FDDI service or 200Mbps IBM channel attached service, they have been reluctant to provide what was known as "dark" fibre for higher bandwidth requirement. The good news is with the emergence of three new domestic Fixed Telecom Network Service providers in Hong Kong, they have been keen to offer such high speed data service like Sonet. Maybe our "market driven" Hongkong Telecom needs to rethink their marketing strategy.

To be fair, the quality of data services in Hong Kong is excellent if it is "allowed" (by their Marketing folks) to provide. Most of our IPLC circuit outages are due to the distant end carrier or to equipment. In a global financial network we manage, the quality of the local loop in Hong Kong is ahead of other cities like Singapore, Tokyo, New York and London. The account manager will assign a dedicated engineer to follow through a major project to ensure coordination between their departments.

VOICE SERVICES

From the attached table, it can be seen the range of voice services are not as comprehensive either. While there are many new services in the domestic market, such as Citinet (Centrex service), number portability, interactive voice information services, fewer can be found *on* the international front.

The prominent example is IDD services. There is no discount plan on IDD, and a call to Beijing is more expensive than the same call to the USA, Australia or even Japan. Moreover, there are no automatic voice conferencing services, no remote access for Virtual Private Network service, and we cannot forward the call internationally— the latter is important to conduct international customer service to allow global coverage. International hubbing for transit voice calls has a fixed high entry cost which makes it difficult to be considered.

The reason why Hongkong Telecom is slow in this case is to protect their franchised IDD revenue, which contributes more than half of the company's profit.

Regarding quality, it is generally agreed Hongkong Telecom can keep up with a fairly good standard. It is ironic however that I found some of the ex Hongkong Telecom staff saying the quality of Hongkong Telecom has dropped—but maybe they were just trying to show their importance. In any case, I do find that I have to queue much longer for the telephone enquiry service, no wonder why Hongkong Telecom has not included it as part of their Service Performance Pledge.

OTHERS

Finally a few other area of concerns:

- EDI

One of the weakest areas in the Hong Kong telecom scene is the lack of a mass scale deployment of EDI for electronic commerce. The Singapore government helped through automating the custom applications initially and together with ISDN in these two areas Singapore IT infrastructure is ahead of Hong Kong. Some companies in Hong Kong especially the transport and manufacturing industry have been deploying EDI through other valued added service providers. This will be critical if Hong Kong is to continue its leading position as a service and telecommunications hub.

- Corporate Discount Plan

The lack of a corporate discount plan keeps the cost of IDD high particularly with China. It is interesting to note Australia allows service resell, and the Australian Telecommunication User Group has been able to get discounts for their members up to 28% therefore indirectly discouraging Telstra's customers from changing to Optus.

- Self Provisioning

For large corporations that want to drive down the international telecommunication expense, recently OFTA has been successful after many months of delay to grant licence for Self Provisioning. However, experience from the HongkongBank was not good as the process took too long and finally they had to push it through another VSAT service provider.

CONCLUSION

The Hong Kong Government's telecommunications policy issued in January 1994 stated that the Government has guided the development of the industry in Hong Kong in accordance with three main policy objectives being

a) that the widest range of quality telecommunications services should be available to the community at reasonable cost;
b) that telecommunications services should be provided in the most economically efficient manner possible; and
c) that Hong Kong should serve as the pre-eminent communications hub for the region now and into the next century.

The range and quality of the data and voice services though good at present are not enough to maintain the territory’s status as a regional hub. Countries like Singapore, Australia, Malaysia or even Taiwan are racing ahead as regional centers to provide incentives to attract multinationals. One can easily redirect all the IDD traffic and hub it though a third country if Hongkong Telecom does not strive to drive down the unit cost.

Similarly insufficient high speed switched services domestically and internationally will be seen as obstacle. High Internet access charges due to the PNETS licence fee (HK$5.4 per hour) could have been reduced to promote usage. Electronic commerce through EDI will be an critical element of trade into the next century. The bottom line is the cost of conducting business in Hong Kong is likely to increase due to inflation and cost of labour, therefore the cost of telecommunications has to remain flat or reduce; and add value to the business if it ever increased.

In order to achieve that the Hong Kong Government vision, OFTA has to create a level playing field for new entrants to compete with the dominant carrier Hongkong Telecom, and create more opportunities to compete especially in the international services. All the FTNS providers has to be innovative and continue to create new services to address the changing requirement of business, many of them has business link with China, Taiwan and rest of Asia Pacific. As user I will be glad to provide feedback such as this opportunity to speak at the TIF.

Table 1: Services Availability and Quality comparison: USA and HongKong

International	USA	Hong Kong	Quality	Price/performance
Dedicated				
- n x 64K	Yes	Yes	High	Similar
- diversity	Yes	Yes		USA: surcharge for cable routes
- service guarantees	Yes	Yes		
- FMC/managed service	Yes	Yes	High	
Switched				
- ISDN basic	Yes	Proprietary	High	HK: rate too high
- ISDN primary	Yes	No		
- switched n x 64K	Yes	No		
- Frame relay	Yes	Yes	High	
- ATM	Yes	No		
- Sonet/SDH	Yes	No		
Internet access				
- Leased/dial	Yes	Yes	High	HK: PNETS charges
- ISDN	Yes	No, by Jul 96		
Voice				
- IDD discount plan	Yes	No		
- VPN	Yes	Yes	High	
- remote access to VPN	Yes	No		
- hubbing	Yes	Yes		HK: high entry cost
- auto voice conf	Yes	No		
- auto int'l call forward	Yes	No		
X400/EDI	Yes	Yes	Low in HK	
Mobile communications				
- cellular	Yes	Yes	Higher in HK	
- pager	Yes	Yes		
Corporate discount plan	Yes	No		
Others				
- corp self-provisioning	Yes	Yes		