

APEC addresses universal access challenge

The Asia Pacific Economic Co-operation Forum's Telecommunications Working Group (the 'TEL') held a seminar in Darwin in February on "Universal Access to the Asia Pacific Information Infrastructure"

The most striking feature about the challenge of universal access to basic telecommunications services in APEC countries is how different the challenge is for different countries.

The table shows that levels of penetration of fixed and mobile telephone services in the 18 APEC countries varies hugely. Half the countries have fixed line penetration of greater than 40 lines per 100 people. All but one of the rest have less than 20 lines per 100 people, with less than one line per 100 in Papua New Guinea.

The universal service challenge for more advanced economies is about access to advanced services. The objective of less developed countries is to increase "teledensity".

A paper released at the Darwin seminar prepared by a Study Group of the TEL provides important data and analysis of the current arrangements for universal service provision in the APEC countries.¹

It reaches a very significant conclusion about who should be responsible for the universal service obligation. In countries where the network coverage of the incumbent carrier is well developed, the report concludes that the incumbent "should be more capable than the new entrants in providing universal service, at least at the initial stage of competition", though competitive pressure "could help minimise the funding required".

By contrast, in countries with a less developed telecoms sector, "greater flexibility should be allowed [in choosing the universal service provider] since the network coverage of the incumbent carrier may not be much better than those of the new entrants". The APEC report sees competition as a good spur to the expansion of services into wholly unserved areas but also thinks that because the revenue from a less-developed industry is limited, "involvement of public sector resources at the beginning could enhance the pace in which the whole community is connected to the network".

Australia, with a developed telecoms sector, is grappling with this issue now as it decides whether and how to make more sophisticated services than voice telephony universally available. The Telecoms Act 1997 imposes a licence condition on Telstra requiring it to make ISDN services accessible to 96 per cent of Australians by the end of this year. This, like the APEC report, acknowledges that the incumbent might be best placed to provide advanced services because its network is already in place.

A review to be conducted by the Minister before the end of September will explore what interventions might be necessary or

desirable to ensure this higher level of service is available to the other four per cent of customers.

Income and teledensity

At the seminar, Paul Cole from International Technology Consultants argued that income alone is a poor indicator of commercial demand for telecoms services in developing economies. What matters more is the distribution of income. A country may be relatively rich in GDP/capita terms, but if its wealth is heavily concentrated in the hands of the wealthy groups in society which already have services, there may not be much of a paying market among other groups.

The APEC report sees competition as a good spur to the expansion of services into wholly unserved areas but also thinks that because the revenue from a less-developed industry is limited, "involvement of public sector resources at the beginning could enhance the pace in which the whole community is connected to the network".

But Cole stressed the significance of social and cultural mechanisms for "aggregating" spending capacity. If communities are physically and socially organised so that services can be shared (a public payphone, or a single service in one person's house), countries which have very low per capita purchasing power may still provide significant opportunities for commercial services.

¹ 'Study Project on Universal Telecommunications Service', A Report for the 17th APEC Telecommunications Working Group, March 1998

The Asian Crash

Mumtaz Ahmed, managing director of Deloitte & Touche Consulting Group in Hong Kong, told the seminar that the pursuit of universal basic telecoms service in Asian countries had received a "significant setback" as a result of the Asian financial crisis.

Revenues would be hit by lower incomes and thus capacity to pay for services, while the cost of new networks proposed to be built largely with imported technology would increase. Banks would be much more cautious about lending and the cost of capital would increase. The business plans of many new entrants into Asian telecoms markets would have to be completely reassessed. Governments' capacity to intervene to finance network expansion would also be limited by their own budgetary difficulties.

Ahmed gave a useful definition of the level of service which should be made universally available - "a call which if not made would have significant adverse consequences" - though it might be argued that "essential services" should be a positive concept rather than a negative one, stressing what it is that the service enables, not what its absence prevents.

New Brunswick: Wired Province?

New Brunswick in Canada is regarded as one of the success stories of online service development. Richard LeBlanc, director of Government On-Line at NBTEL, who was attempting to sell NBTEL's expertise to federal and state governments while in Australia, told the seminar the province now had 40 per cent of homes connected to the Internet. It had become the call centre capital of North America.

Telephone Penetration Rates and Population Density in APEC Economies in 1996*

Countries	Density (no.per km2)	Fixed Lines (no.per 100)	Mobile (no.per 100)
Australia	2	53	25
Brunei	49	24	12.6
Canada	3	53.4	8.1
Chile	19	14.2	2.3
China	128	6.3	0.6
SAR Hongkong	5,864	53	19
Indonesia	101	1.7	0.1
Japan	333	48.6	16.7
Korea	462	43.7	10.1
Malaysia	60	18.4	7.2
Mexico	47	9.3	0.9
New Zealand	13	47.9	14
Papua New Guinea	8	0.9	0.1
Philippines	240	4.7	1.4
Singapore	4,848	51.9	16.8
Taiwan	596	46.8	4.5
Thailand	116	5.9	1.8
U.S.	28	65	16

Note: * When 1996 figures are not available, figures for 1995 are used and put in italics.

Some significant features of the company's experience:

- NBTEL's work in electronic service delivery is a partnership with the provincial government. In effect, the government has signed up as a significant content provider for the company's online service.
- Information kiosks "didn't work for us". The company found they couldn't attract a sufficient mass of users. "If people have to drive to an information kiosk, they say why not drive to the government office or wherever".

One of the biggest success stories has been the electronic provision of licences for hunting, a popular sport in the province. People who used to pay \$10 for their annual licence at a licensing shopfront were offered them for \$6 if they applied and paid for them over the phone, using an automated touchtone menu and a credit card. Some 84 per cent took the electronic option in the first year.

It is, of course, an odd example to trumpet as a measure of a wired society. Old technology (the telephone) and a discount.

Jock Given