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Local Loop Unbundling

1. ECONOMIC AND SOCIAL ADVANTAGES

Telecommunication Regulators, such as the Commissioner in New Zealand, have a limited number of tools available to address the current regulatory issues that exist in our complex telco market.

How can they create competition in this market? And how can they stop the incumbent misusing its dominant market power?

We now have close to 20 years of regulatory experience and so far nobody in the world has got it right. It is therefore safe to say that, from a regulatory point of view, this is an extremely difficult area.

However, there are two factors that can be identified as key objectives:

- establish facilities-based competition;
- establish on-network competition.

As the first objective is far more difficult to achieve, most regulatory effort is now concentrated upon on-network competition. Basically this means the establishment of a set of rules that regulate the terms, conditions and (most importantly) prices for access to the incumbent network, as well as the interconnection between networks.

Over the last decade, and longer, regulators have tried to regulate the various services that are offered over the networks (long-distance voice, leased lines, ISDN, mobile, local calls, etc), but in no case has this led to a significant improvement in the competitiveness of the national telco markets.

2. LONG-TERM EFFECT OF IMPROVING COMPETITION

An easier method of promoting competition is to move from simple product regulation to the unbundling of the network, which allows wholesale customers to build their own services over the national network. While this situation might not be the ultimate, or the most ideal, solution it is perceived, worldwide, to be the best option at this point in time.

Although there have been no overwhelming successes, LLU certainly has improved competition. However, the slow results have more to do with the fact that the earlier models featured associated access charges that made it economically unviable to deliver residential broadband services over LLU. It is only now that countries are seeing the effects of these earlier regulations. Furthermore, it has taken the regulators much longer than expected to bring LLU access charges down to a level that makes it possible for service providers to start using LLU beyond the business market.

3. NO BROADBAND COMPETITION WITHOUT LLU

The unbundling of the local loop is particularly relevant in relation to broadband services. Broadband allows a combination of voice, video and data services to be delivered through ‘one pipe’. Product differentiation is possible through service variation between these three products; and the data and video elements also allow for endless applications developments that will greatly improve customer choice and product innovation.

Furthermore, price and quality can be varied within each of these three products, voice, video and data, adding another dimension to that level of customer choice.

Unlike the traditional telecoms service, broadband will have a far-reaching impact on the overall economy of the country, since it adds another economic input element to businesses, allowing them to build new products and/or develop new markets within their own industries (as distinct from telco products).

Without any significant facilities-based broadband competition in New Zealand it is almost impossible to promote the uptake of broadband. Only countries that have vigorous broadband competition have high take-up levels. In New Zealand there won't be any significant broadband competition without LLU. LLU will allow the broadband SPs to develop their own unique broadband products and services, and this, in turn, will raise consumer awareness and increase the uptake of broadband.

Table 1 – Broadband access amongst Internet households – 2001-2003

Country	Internet HH penetration		
	2001	2002	2003 (mid)
Korea	65%	80%	85%
Hong Kong	8%	45%	65%
Singapore	7%	35%	50%
Taiwan	13%	28%	40%
Belgium	7%	22%	40%
Austria	13%	25%	40%
Canada	14%	32%	40%
France	4%	16%	39%
Spain	8%	15%	37%
Netherlands	15%	25%	36%
Denmark	8%	15%	35%
USA	17%	23%	35%
Japan	15%	25%	30%
UK	2%	10%	21%
Sweden	10%	15%	20%
Switzerland	6%	14%	20%
Germany	8%	11%	15% (incl ISDN 50%)
Australia	1.5%	5%	7%
New Zealand	0.5%	2.5%	4%

(Source: Paul Budde Communication). Note: In every country in this table, 50% to 60% of all households have Internet access.

The fact that New Zealand is last on this list is not due just to the lack of LLU. However, LLU is an important tool that the Commissioner should use to start improving this embarrassing situation.

4. ECONOMIC AND SOCIAL BENEFITS

On a societal level broadband will improve the lifestyle of citizens through tele-health and tele-education services.

All these services require a high level of innovation, which will only be delivered through competition. LLU allows for innovation and variation, which will stimulate competition. New broadband products no longer need to be linked to the straightjacket category of products and services that must be used in the way they have been developed by the incumbents, with the only variation being price – based on a more or less discounted retail price from the incumbents. Such models offer no room for innovation and don't stimulate new economic developments. LLU, on the other hand, does allow for a high level of differentiation.

Furthermore, with increased pressure on healthcare and education budgets, new and innovative ways to deliver these services need to be explored. Broadband can provide cost savings to this sector in the order of 15% to 30%. This is definitely of great importance to our society. But, again, innovation is needed to develop these services – not discounted retail prices for products developed by a telco – that simply doesn't make sense.

5. NEEDED: REGULATORS WITH VISION

Also LLU has a more long-term effect. Initially service providers have to establish themselves in the new broadband market and at that stage it is easier for them to use straightforward wholesale services – or even discounted retail prices. In this way they avoid the burden of high upfront costs.

LLU, on the other hand, does require investments in exchange equipment. However, as soon as sufficient customers per local exchange are connected, the LLU option instantly delivers a better business model for the service providers. This is also one of the reasons why LLU, once introduced, is not delivering an instant result. Only when a certain penetration level per exchange has been reached will service providers be able to build the appropriate business model to allow them to move from pure wholesale products to LLU – and only at that stage will they make the necessary investments to build out their customer base.

New Zealand can learn from these international examples and make sure that its LLU conditions are correct from the start, so that its LLU service can begin to deliver competition earlier than has happened in some the countries where a less aggressive regime has been introduced.

6. CASE STUDY: AUSTRALIA

With the right conditions on the way, this trend (switching from ADSL wholesale to LLU) is now becoming evident in Australia and it is interesting to see that, as a result, Telstra's reaction has been to become far more supportive of its wholesale activities.

Like other incumbents around the world, they are not the fastest movers – nor are they the most innovative providers. It is the new players that are taking on this role. In Australia more than 50% of the retail broadband market is in the hands of SPs. Within the next 12 months I predict a dramatic move away from ADSL wholesale to LLU. This would never have happened without the foresight of the ACCC in declaring this service back in 1999. It had to force Telstra into action in 2000 and since then the ACCC has been extremely active in improving the economic model around LLU, finally delivering a set of new access charges in June 2003. These will make a real difference to broadband competition in Australia.

With nationwide facilities-based competition a long way off in both New Zealand and Australia, and wireless broadband remaining an over-promised and under-delivered product, the only real hope of improving competition in the short- to medium-term lies with LLU.

That is not to say that facilities-based competition is not needed – on the contrary. However, the prospects are meagre and, while it will be essential to look for ways to stimulate infrastructure competition, we can't wait that long. Both Australia and New Zealand are already a long way behind the rest of the western world in broadband uptake, and every delay sets them back even further.

LLU, therefore, is the most likely short- to medium-term solution to address the local loop bottleneck.

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