

Investment in Broadband

Dr Ross Patterson

Over the last two months there have been two ITU events – the GSR and Telecom World – at which broadband investment has been a central focus of debate. Operators, investors, policy makers and regulators have discussed these issues from their respective points of view.

From these discussions it is possible to identify, from an investors perspective, three critical preconditions to investment. If our objective is to encourage broadband investment it is essential that we understand these preconditions, and design regulatory settings that satisfy them.

The first precondition is a stable and predictable regulatory regime.

While investors talk typically of 'regulatory certainty", they will generally concede that they cannot expect greater certainty that they would find in competitive markets, which are far from certain. What they normally mean is "regulatory predictability" – that the rules are clear, the process is transparent, and decisions are principle based. As a consequence, the risk of a major adverse change to the regime over the lifetime of the investment is low. On the other hand, where rules are unclear, processes not transparent, decision making arbitrary, or the decision maker subject to political influence, the risk is too high to justify investment. Independence of the regulatory is typically identified as the single most important criterion – the highest risk is assigned to jurisdictions where the regulator is subject to political direction or influence.

The second precondition is that **the investor is able to achieve an appropriate return on investment.**

Put simply, if there is no reasonable expectation of achieving an appropriate return, the investment will not be made, no matter how stable and predictable the regulatory regime. Obviously an investor will have its own assessment of what an "appropriate" return is, but a regime that does not allow for such a return will not attract investment.

To a large degree, this is intertwined with the third precondition: the investor is satisfied that there is likely to be sufficient consumer demand to enable an appropriate return on investment to be achieved.

A stable and predictable regulatory regime that allows an appropriate return on investment is necessary but not sufficient to attract investment – if the investor is not confident there is a business case to support the investment, the investment will not be made.



This is, too a large degree, the story of fibre to the home roll out in developed economies. In many jurisdictions, governments have funded fibre roll out, either through building networks themselves (Australia's NBNCo, Qatar's QNBN), public private partnerships (Singapore, New Zealand, Kuwait) or tax concessions (South Korea, Japan). In all cases these governments recognized that the business case for fibre roll out was questionable, but wished to incentivise roll out ahead of market demand.

The fact that market demand is lagging is clear from the uptake figures that have actually been achieved. The example that best illustrates this point is Japan, which has been rolling out fibre for 12 years. Well in excess of 90% of houses have been passed, but uptake has not yet reached 40%. To put it another way, nearly twice as many customers who have fibre available prefer to take a copper-based DSL broadband service than a fibre-based service.

This is the rule, not the exception. The Fibre to the Home Council Europe reports that at 30 June 2012 Europe [EU 27 + 9] had 5.95 million subscribers for 32 million premises passed (18.6%), while the United Kingdom had 13,000 subscribers for 175,000 premises passed $(7.4\%)^1$. Similarly in Singapore, the take up of fibre-based services is less than $15\%^2$.

The reason for the low take up of fast broadband is primarily a result of low consumer demand, which in turn is a consequence of a lack of applications which require faster bandwidth than that already available over copper, or existing mobile services.

The demand side of the broadband equation is often overlooked by policy makers, many of whom have adopted a "build it and they will come" approach. It is becoming more and more obvious, however, that this approach is short-sighted. As an example, a recent roll out of fibre in Bristol, Virginia resulted in uptake of 45% within 6 months in an area where the benefits of high-speed broadband had been promoted, compared to 18% in an area where there had been little awareness driving and marketing support³. And in Singapore, the CEO of NucleusConnect attributes the poor uptake there to the fact that "we haven't sold it very well"⁴.

Governments have a critical role in stimulating demand through services over which they have influence – typically government services, health and education. To streamline broadband investment, therefore, it is essential that there be an e-Government strategy implemented in tandem with infrastructure investment, together with a public awareness (and if necessary e-literacy) program.

In conclusion, what is required is a stable and predictable open access regulatory regime that allows an appropriate return on investment, together with programs to encourage uptake of broadband through proactive education, health and government services initiatives.

¹ Fibre to the Home Council Europe, Panorama update, 17 October 2012, Brussels

² Singapore still struggling to sign up high speed broadband subscribers, Total Telecom, 21 June 2012

³ No Field of Dreams: Eliminating the Waiting Game and Driving Network Uptake, Strategic Networks Group Inc, 2012

⁴ Above, n.2