FTTH COUNCIL EUROPE – CEO INTERVIEW

Interview with Federico Guillén, President Fixed Networks Division of Alcatel-Lucent, 25 September 2013

Alcatel-Lucent is enabling a vast increase in the capacity and reach of China Telecom's fibre optic data network. What can Europe learn from the Chinese approach to fibre?

The European and Chinese markets are quite different. While China is mainly building new infrastructure, Europe already has a good broadband infrastructure. Europe also brings challenges, though, because consumers in Europe have many options and there is no urgent driver to switch to fibre. This may have an impact on short-term adoption. However, in the long-term there is no problem; widespread broadband availability in Europe (regardless of the technology) means that end users are getting used to broadband.

This creates more demand for higher bandwidth and better quality of experience – and accelerates transition to fibre.

The Chinese government really is a very strong supporter of fibre. Very recently, China announced plans to spend $326B in broadband infrastructure, as part of its twelfth 5-year plan. So far, there has not been any similar investment across Europe.

Can you identify key drivers for fibre uptake across Europe? How do these differ from drivers elsewhere?

Applications are a major deployment driver. As people come across new applications that make use of the highest available speeds, they'll see the limitations of their current connections, and demand will increase. This is very similar to how people buy computers. A new computer may run very smoothly at first, but each programme update will be based on a more powerful chipset. The computer will inevitably become slower and a few years later, it will be obsolete. With broadband it is a similar idea. You might think you already have fast broadband, but as more advanced applications appear, the limitations show up. Fibre offers the only future-proof solution.

Wireless is another FTTH driver. When you look at smartphone traffic, 90% is offloaded over fixed networks. After all, if you download a newspaper on the way to work over a mobile connection, you won't have it on your phone until you're already in your office, but if you download it at home you can read it on the way to work. Downloading videos or news programmes 'on the move' is often frustrating in many areas.

These drivers are very similar everywhere, but markets address them differently depending on legislation, the number of operators, competition, infrastructure and so on. In all areas, though, operators need to deploy fibre to capture new customers and retain existing ones.

What do you think the role of European legislators should be in stimulating rollout? How can they support this with actions?

Regulators need to look at ways of increasing competition and encouraging investment. So far, the focus of regulators has been mostly on competition, in some cases to the extent that it has hampered investments. Governments and regulators need to realise the importance of providing broadband to the people across Europe and need to make investments more attractive. This is vital to the telecom industry, which is a booster for other economic sectors. Governments need to invest and not be too conservative. Also, we as an industry should define goals based on the EU 2020 vision and then work out how these can be achieved through phased investments. After all, in a crisis you need to invest instead of stop spending. Broadband helps economies flourish and can accelerate the end of the crisis. Good infrastructure can stimulate new local businesses, saving them money on housing or travel and allowing them to do business worldwide. Telecommunications should be a long-term agenda item, like healthcare.

How do you see the future of fibre in Europe?

Fibre deployments have not really taken off as anticipated, for several reasons. Regulatory discussions are still ongoing, and the number of operators is huge compared with other regions, making the market more complicated. However, although fibre deployments in Europe as a whole are slow, we see several interesting developments. Fibre is moving closer to the end users. Although not everyone will have FTTH in the very

short term, people are progressively experiencing increased bandwidth, seeing the benefits and starting to demand FTTH. The next step in Europe's fibre rollout may be much quicker as a result.

Although we need eventually to bring fibre to every home, operators now have the tools to improve speed and reliability whilst spreading their investment across multiple phases. They can bring fibre to buildings and use another technology for the last hundred metres or less, which can be replaced at a later stage. This makes it more attractive to start investing in places where laying fibre all the way into the home has been difficult.

What role does FTTH play in your future market strategies?
Alcatel-Lucent constantly aims to provide better services to operators at a lower cost. To me, FTTH is the end goal. I'm sure that if investment was not a problem, everybody would have fibre to the home by now. Knowing that the future is fibre, but taking into account the fact that operators' resources are limited, investments must be put to the best possible use. Operators can provide precisely defined levels of service to the greatest possible number of people. They could start by providing 100 Mbps to 80% of their user base through a combination of fibre technologies and later migrating everything to FTTH. We can support them in that.

Alcatel-Lucent technology is helping build Telefonica Spain's first 4G LTE network. How will the relationship between fibre and mobile progress in the coming years?

Alcatel-Lucent is focusing on combining fixed and wireless ultra-broadband to provide the best possible services. From an operator viewpoint there are many ways of combining 4G with FTTH in a commercially successful way. Operators are no longer thinking exclusively in terms of fixed and wireless, but see that bundling both and offering this to customers has tremendous advantages. In Spain, for example, Telefonica has recently launched a converged mobile-fixed service offer, and fibre to the home is part of this. The subscriber take-up in recent months has been spectacular. Spain's three major operators, Telefonica, Orange and Vodafone, are all starting to deploy LTE and all of them are also investing in fibre.

As fibre is increasingly deployed it will also be increasingly used in the backhaul network for small cell deployment. You need fixed networks for efficient wireless networks. In the US, we see the growing number of LTE users requires more capacity in wireless network. This is achieved by introducing a significant number of smaller cells at malls, sports stadiums, city centres, business parks, industrial estates, events and so on. We believe small cell deployment will be a vital booster for FTTH. These two technologies are not competing – they are complementary.