

## **FTTH COUNCIL EUROPE - CEO INTERVIEW**

### **Interview with Werner de Wolf, Vice president and General Manager of EMEA TE Connectivity Telecom Networks 25 March 2013**

#### ***TE operates in the US, Asia, China and EMEA. Is there a marked difference in fibre optic connectivity preferences and requirements between these regions?***

Actually, we see quite a few commonalities with regard to drivers and demand. There is, generally speaking, a global need for faster, better quality bandwidth. Overall, markets want active and passive components that are easier and faster to deploy than previous generations. Of course, there are some marked differences between regions, too. We're seeing strongly varying levels of competition around the world. Wherever we look, we may conclude that more competition definitely leads to a faster-evolving fibre market.

Many growing economies are moving significantly faster than more developed economies. That is, of course, not only caused by competition, but also by an entirely different starting position. There are often no copper networks that support broadband across large parts of these countries. Also, civil works - by far the largest cost factor in any fibre rollout - are often much less costly.

#### ***What trends towards higher bandwidth do you see on the end-user market, both globally and in Europe? Which market drivers for fibre uptake do you see in Europe? How do these differ from other regions?***

Of course, we've seen the bandwidth offering double every two years for the past twenty years or so, and there's no reason this should slow down. There's no single 'killer app' driving uptake - instead, content keeps getting richer and interactivity continues to increase, regardless of whether we're talking about TV, gaming, or new services made possible by smart devices. Personally, I believe the potential of residential cloud services, and the extent to which they will boost uptake, are underestimated. In just five years, there may be no more PCs as we know them, and people will just pay fees for the use of software and services. However, this requires ultra-fast, symmetrical connections with extremely low latency. Some carriers are prepared for this growth, but others aren't ready at all.

Fibre has a relatively long Return On Investment, and Western European carriers often do not perceive the short-term benefit in investing. As a result, they try to squeeze more out of their copper networks for as long as they can and introduce vectoring instead of rebuilding their networks. In the meantime, though, more forward-looking economies will be reaping benefits of their advanced infrastructure, and Europe's economic development will slow down further. Just consider this - in a few years, European business people might not even be able to take part in a videoconference with an India-based company - whilst professionals from Japan or Russia will! In Western Europe, people might spend a lot of time in ever-growing traffic jams as they can't work from home or access ubiquitous cloud services and communications channels.

#### ***What do you think the role of European legislators should be in stimulating roll-out?***

Regulation in Europe differs significantly from the rest of the world. I definitely think Europe's governments should start stimulating economic development through investments, as fibre networks are essentially engines for economical growth. It is hard for people to decide whether they want to make large investments if it is not clear whether the overall environment is healthy and stable and whether there will be a long-term, stable legal framework in place.

The European Commission would like to see competition on the physical layer as well as the service layer. Today, however, there's mainly regulated competition on the physical layer, so sometimes the incumbent feels it will be penalised if it moves to fibre, which actually slows down investment, instead of accelerating it. There is no single answer to stimulating competition. The best technology and financing solutions vary strongly by geography, requirements and funding. In a rural area, it may be hard to compete on the physical layer, but there could be tremendous potential when we look at services.

#### ***Many of TE's FTTH clients are from the telecom industry - how is fibre supporting developments in mobile telecom?***

In our experience, those two worlds are increasingly coming together. The wireless business needs to process increasingly vast amounts of data and this is difficult - if not impossible - to cover with traditional base stations. There is simply a fixed physical limit to data transfer by air. As a result, we see a shift away from networks with a relatively small number of large base stations, towards much larger numbers of smaller

base stations. These all require power and bandwidth, so what could be more logical than integrating them with fibre networks?

***What could European countries learn from the fibre market in other regions in which you are active?***

Building a deep fibre network represents a very significant investment. In that sense, the network becomes a real asset. Making sure this asset is managed in a consistent way will be fundamental to its success. It is vital, for example, to maintain accurate and recent maps of the network (e.g. ducts, sewers, and other potential cable routes). We have seen all too many examples of network data record accuracy dropping to below 70% in just a few years after deployment. Records were lost or weren't updated as a result of customer churn, company takeovers or changes in systems and software. This means an important part of the asset is lost, which might drive additional expenditure. When operators decide to build a new deep fibre network, they are presented with a unique opportunity to take a fresh look at asset management, by automating record keeping. Today, new technologies that can support this end to end are becoming available.

Furthermore, it's vital to realise that rolling out a network takes time! I think many carriers and governments don't really take into account that once you've made the investment decision, it can take quite a while to get a network up and running. If you're considering bringing fibre to, say, 20 million homes, you'll easily need 6-8 years and possibly longer to prepare everything and take care of the actual roll-out. It is also important to find out all you can about the country you're rolling out in. For example: are there sufficiently skilled people and installers available in the area you're targeting? What infrastructure is already there, and how can you make the best use of it? Which regulations govern right of way? Does the region offer opportunities to reduce Total Cost of Ownership that might not be available elsewhere? As the cost is largely in the civil works portion of the roll-out, it pays off to think that through and minimise time spent in the field!