FTTH COUNCIL EUROPE - CEO INTERVIEW

Interview with Richard Toper, CEO of Setics, 30 October 2014

Setics offers a wide range of services for the planning of FTTH networks. Based on your experience, what are the main success factors for a fibre network?
Firstly, you'll need to ensure your network is reliable (minimise failures), compatible (you can provide any service) and sufficiently flexible (the FTTH network is built for 50 years). It should also have enough capacity to accommodate current and future customer needs. Of course, to build a successful business case, you'll need enough subscribers to start with and enough potential subscribers for the future! The answer to these issues is network planning: you need to pre-plan carefully your network: business plan, technical architecture and deployment schedule.

In my opinion, the key success factor is getting enough subscribers to sign up as early as possible. You really have to win over potential fibre users. Once you have a clear picture of their wishes, you can start building a business case and organise your funding. Keeping acquisition costs low is wise. Word to mouth is not only very efficient, it is also the most effective means of promoting what you have on offer! If a family is connected and has access to a few great services, they will definitely tell their family and friends and their collective interest should boost demand.

Network planning should also take all relevant engineering rules into account, for example, when it comes to dimensioning, and should make sure you can offer exactly what ISPs need.

What is your opinion of the national plan for fibre networks in France? Do you agree with the approach? Where do you see potential for improvement?
Infrastructure is becoming more and more important to attracting businesses and holidaymakers, and that means having widespread coverage - a challenge for large countries with many rural regions like France. The national plan for broadband access fits in with our country's long-standing tradition in infrastructure planning. Each house - whether it is in the middle of a large town or in the countryside - should have water, electricity, gas and phone lines of the same quality and at the same price. Getting FTTH everywhere is the long-term end goal, but for now, the plan states that 80% of homes should be passed by 2022. The remainder should receive high-speed access through other technologies, such as satellite links.

The French Ministry of Economics taskforce responsible for all this is doing a good job. Even though the overall economic mood in France is less than positive right now, people see this is a positive, important development and it is received with considerable enthusiasm.

The country is basically divided into two areas. In some parts (10% of the territory, 60% of the population), private initiative will result in full coverage. Networks are owned and operated by private companies. In other areas (90% of the territory, 40% of the population), public support is being provided. The local authorities (about 100 "*départements*" and 27 "*régions*") are building and subsidising passive infrastructure, operated by a telecom operator. These private firms resell the capacity and service packages to ISPs. There are very clear rules regarding open access and network sharing, stipulating reasonable and non-discriminating conditions. All in all, an excellent way of getting fibre across the country.

Here's a difficult question: which is the better FTTH business case, cherry picking or full coverage? Perhaps you can give a short-term and long-term approach.
Instead of exclusively targeting affluent areas and leaving it at that, you can also use the more profitable connections to subsidise those that are less profitable. However, the time that lapses between realising the first and last connection can really add up.

If you want to take a 'full coverage' approach, you need to set very clear targets and precisely define your area and scope. Then, you can work out how you can realise your ambitions in the shortest possible phases. You must always bear in mind the cost of connecting the last (and the costliest) homes: in an average project, the cost of connecting the last 3% homes is 20% of the total cost!

So really, although rolling out the fastest, most future-proof network on the largest scale possible is theoretically ideal, practical considerations determine which is the best option in a given situation. It should be noted that removing competition from the equation can lead to one party simply connecting homes in series, as and when the opportunity

arises. That means there's a risk it might monopolise the market and provide no more connectivity than it considers absolutely necessary.

What do you think about the "Open Access" approach that is being implemented in many rural areas in Europe? Can this be a successful strategy?

Open access, which allows non-discriminatory selling of capacity and services on rented passive network backbone is a truly great idea. However, once again the practice is much more complicated that the theory! There are many technical and legal issues that need to be worked out in advance. Local approaches and laws can be totally different across Europe. Different national and local governments have different philosophies: some see it as their duty to subsidize the fibre 'utility', others consider it a totally free enterprise. In France, the main idea is sharing the last fibre mile: the builder of the network is compelled by regulation to sell this access to any operator at RAND (Reasonable And Non Discriminatory) conditions.

Fibre is a disruptive innovation – telecom stakeholders have to change their way of working. Many incumbents have plenty of resources and don't need to change. We aim to make adoption of FTTH easier for all involved. Recently, the French regulator Arcep asked us to benchmark FTTH networks and rural rollouts in different nations, to discover how the French approach compares to projects in other countries and to uncover best practices.

Open access is definitely a potentially winning concept, but only if you do your homework first! It requires careful balancing of the needs of wholesaler and ISP, public and private money, engineering, strategy and marketing. However, to create a really successful future for fibre, incumbents and governments have to let go of the whole copper network paradigm. The laws of physics dictate that there's no way that copper networks - which were designed for phones, after all - will be able to keep up with demand as it is currently developing! Twenty years ago we had 14k modems, ten years ago we got ADSL. Nielsen's law[1] (or conjecture) of Internet bandwidth states the need for speed goes up by 50% each year. Take note: that's a Logarithmic curve - which means a far greater increase than demand, with speeds doubling each year! Copper simply has physical limitations that improved technologies or compression won't be able to alleviate; fibre is definitely the telecom basis for the 21st century.

[1] More on http://www.nngroup.com/articles/law-of-bandwidth/