
DSM Desotech
Broadband World Forum 2010 “Designed for the Future” Executive Roundtable Summary
26 October 2010, Paris

Fiber-All-The-Way: Can Europe Close the Gap?

Paris’ Annual Broadband World Forum, now in its tenth year, has established a reputation for being an excellent place to take the temperature of the whole broadband ecosystem and this year, with attendance up 40% year on year from 2009, was no exception. With Fiber to the Home sharing the agenda along with other next generation access technologies, the event provided a perfect platform for DSM Desotech to host another of its regular “Designed for the Future” Executive Roundtables, bringing together some of the brightest and most dedicated minds in the industry to explore and offer solutions to the fundamental issues affecting deployment of FTTH in this part of the world.

Hosted at Paris’ famous Fouquets restaurant, the roundtable event sustained a Gallic theme throughout. And while the assembled leaders represented recognized global and regional industry leaders including, among others, Microsoft, Alcatel-Lucent, BSKyB, Ericsson, France Telecom, Numericable, Acome, Yankee Group and IDATE, a good degree of the discussion centred on France’s own experiences with FTTH deployment to date, the innovative business models and novel regulatory concepts the country has seen and that have, in some ways, led to it being described as one of Europe’s most dynamic broadband markets.

The evening’s discussion centred on six major topics:

- **What has prevented European operators from buying-in to FTTx in the same way as US or some Asian operators?**
- **What should be the role of government in driving next generation fiber infrastructure?**
- **Is there a business case for FTTx in rural areas?**
- **What do operators need in order to make large-scale fiber investments?**
- **Is content king? Do the content and apps exist to take full advantage of 1Gbps networks?**
- **Is technology a determining factor when weighing FTTx investment decisions?**

What has prevented European operators from buying into FTTx in the same way as US or some Asian operators?

With Roland Montagne, Director of the Telecoms Unit at analysts IDATE, citing new research that puts the number of FTTH connections in Europe at 3.2 million, a 50%+ year-on-year growth but with a conversion rate of 17% (a total of 18 million homes having now been passed) still lagging far behind the US and Japan, the tenor of the debate centered on the reasons why Europe has not embraced FTTH more effusively.

Here, numerous reasons were offered, taking into consideration Europe’s unique history and competitive landscape. Historically, it was generally agreed that Europe’s legacy copper network has been both a blessing and a curse for the continent: hugely beneficial in that, after 80 years of deployment, copper still provides a platform for telecom operators to offer advanced services such as IPTV, but a negative in that it has to date prevented many tier 1 operators from investing heavily in next generation networks.

The perils of regarding Europe as a homogenous market were also discussed, with delegates pointing out wide disparities between deployment records in different member states. Interestingly, one of the major

reasons for this lay in the strength of each country's cable sectors, as those states where cable companies offer healthy competition to incumbent telcos are the very states where incumbents were beginning to invest in FTTH. States lacking a strong cable community, such as Spain and Italy, likewise have poor records in next generation fiber to the home.

Lastly, it was concurred that, unlike Asia-Pacific where FTTH was being led by the major incumbents such as NTT and Korea Telecom, in Europe the heavy lifting to date was being done by altnets which, according to IDATE research, account for nearly two thirds of all 18 million homes passed. This has presented an opportunity for innovative business models, for example Free in France, which has succeeded in becoming a profitable, significant player by selling broadband at prices many of its competitors thought were not economic, or Reggefiber in the Netherlands. But it also highlights the fact that, while almost all major incumbents have a vision for fiber, few of them feel ready yet to usher in large scale investment.

The common thread running through all these points is one of investor "short-termism". Guests pointed out that while almost all telcos had a vision for bringing fiber to the home, they were being thwarted by the investment community which does not place a high enough value on long term investments. Indeed, some guests drew comparison with recent experiences in the US, where some operators have received unfavorable judgments from analysts for deploying fiber to the home rather than the halfway measure of going as far as the curb.

What should be the role of government in driving next generation fiber infrastructure?

With austerity being the order of the day in European politics, the mood of this roundtable was realistic in terms of how much support government should provide in helping spur fiber to the home. Neither was there wholesale support of fiscal stimulus projects in the US, where some guests believed that the funding provided was too little to make any significant impact.

Nevertheless, with such obvious political, social and economic benefits to be gained from large scale fiber deployment, there was unanimous agreement that government has a role to play in driving FTTH, especially in rural areas where it was felt that the large inequalities in bandwidth speed as compared to cities would soon become politically intolerable. Solutions suggested ranged from direct assistance, such as the €2 billion that the French government is making available, to non-cash policy support that any government could, but currently does not, provide—such as making fiber obligatory in all new homes or insisting that any street dug up for utility maintenance cannot be refilled without the installation of ducts first.

Finland was mentioned by guests as another positive example of how the state can lead on driving fiber to the home. There, the government has recently called on fiber to be deployed to within a maximum of 2km of each and every house of business premises, a feat that will be mainly funded by the private sector, albeit with 5% coming from public funds.

Is there a business case for FTTx in rural areas?

Finding a business case for fiber in rural areas has been one of the biggest issues for FTTH proponents globally, and the case is not helped in Europe where many incumbent operators are reluctant to roll out new fiber networks for fear of being re-cast as a monopoly, an image they have worked hard to dispel. While all guests believed that for the time being any large scale subsidization of rural fiber deployment was unlikely, the new services and increased demand that is expected should offer both an incentive to more private operators to bring services to rural areas and also leverage pressure on government to ensure that rural communities do not fall too far behind in the digital divide.

What do operators need in order to make large-scale fiber investments?

The question of what was needed in order to encourage operators to invest heavily in fiber elicited a number of responses. Benoit Felten, an industry expert and blogger at www.fiberevolution.com, who led the discussion, called passionately for operators to fundamentally re-think their business and recognise their network as their greatest asset, and one that would make them succeed if they got its deployment right. Felten pointed out that, while it was possible to be completely vertically integrated and still be successful, there was too often a tendency for operators to try and replicate services that are already available from internet companies while they could instead be investing in their network.

While most agreed that Montagne from IDATE's assertion that a competitive cable sector was the best driver for fiber investment, one executive from a leading European pay TV firm suggested that the time may be near when operators are forced to upgrade their networks to meet growing demand. The executive said that two devices playing HDTV in one home is already enough to put serious pressure on a network while the fact that the number of people using broadband to watch video—currently only 10%—is expected to rise sharply, perhaps the time when operators start turning their FTTH visions into reality may not be so far away after all.

Is content king? Do the content and apps exist to take full advantage of 1Gbps?

An alternative, but related, opinion that was put forward is that all it would take for operators to start making bigger investments in FTTH would be for them to start marketing their services effectively and selling fiber as a lifestyle, rather than a utility. Benoit Felten of Fiberevolution.com pointed out that all FTTH advertisements are based on bandwidth speed alone, a dispiriting observation when compared with the energy with which the mobile sector has managed to create exciting global brands.

A scarcity of good marketing was also recognized by guests, who observed that many operators were still not doing enough to sell the technology to the public. It was felt that consumers—in particular younger generations—will have no problem filling up networks with new or bandwidth-hungry applications once the new capacity becomes available and awareness grows.

The role of content was also discussed at length. One guest - a high-ranking executive from a leading European triple play – suggested that although there was little doubt new killer apps would emerge that would drive demand for high bandwidth services, 'traditional' TV content was already having an effect in putting pressure on networks, as HDTV streams to more than one device per household was already reaching many networks' bandwidth limits. Even so, future applications are still being experimented with and, while nobody had any real expectation that 3DTV would make a big impact on demand for at least another 5 years when glasses-free screens became available, others said their companies were experimenting with a number of services, including video conferencing, to try and gauge demand.

Is technology a determining factor when weighing FTTx investment decisions?

This last topic produced perhaps the most unanimous agreement. While comments from the operator community cited concerns with sharing networks—from both a business as well as technical context—most agreed that technology was no longer a determining factor in making fiber investment decisions. Of more concern to guests were unrealistic expectations from some in the investment community that wanted to see unrealistic pay-back times on networks that were being designed to last decades, not years. Here, it was pointed out that Japan's NTT would achieve break-even on its FTTH network after nine years—an impressive achievement given that the network could easily last three times that length and that, operating

in a country when the conversion rate of homes passed is still only 35%, there is still plenty of growth on the table.

It was pointed out that a roll of dental floss currently contains more value per kilometer than optical fiber and that the aggressive price erosion in the sector brought with it a risk that networks were not future-proofed and therefore potentially unable to deliver the services of the future. Operators, as one guest put it, "Have to learn to love their networks again," because if copper could last 80 years in the ground, there was no reason why fiber could not also.

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About DSM Desotech

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