
DSM Desotech
FTTH Europe 2010 “Networked for the Future” Roundtable Summary
Lisbon, 26 February 2010

Is Europe seeing the light?

With business, regulatory and technological developments beginning to align, the prospects for large scale deployments of Fiber-to-the-Home in Europe are encouraging, say delegates at DSM Desotech’s Networked for the Future Roundtable discussion at FTTH Europe conference in Lisbon.

Conferences always offer a good opportunity to take the temperature of a particular industry, and the FTTH Council’s European conference in Lisbon in 24-25 February, 2010 was certainly no exception.

With a focused audience of 2,500 delegates representing the whole prism of stakeholders, the event provided a unique opportunity for Europe’s fiber-to-the-home community to meet and discuss the latest developments in technology, applications, business and regulatory developments facing their industry.

Both timing and location were opportune: timing, because with more business and regulatory certainty on the horizon, Europe’s incumbent operators are beginning to display serious interest in large scale FTTH networks. And location because Portugal, whose government last year backed a rapid rollout of FTTH to one million homes in the past year, offers a fascinating case study for future deployments.

Against these backdrops, the ‘*Networked for the Future*’ roundtable event, hosted by DSM Desotech, proved to be a fascinating microcosm for the industry as a whole. Held at one of the city’s most stylish restaurants and with over 30 senior industry executives in attendance representing leading operators, vendors, equipment manufacturers and research houses, considerable collective expertise over a wide range of issues was clearly evident.

Foremost in the conversation was the optimism all delegates held for widespread Fibre-to-the-Home progress in Europe. To date, the continent’s FTTH success stories have mostly been the preserve of disruptive alternative networks or locally-organised municipal co-ops, and this small scale approach, characterized by limited marketing spend and little brand awareness has not helped fiber work its way into the public consciousness.

The roundtable in Lisbon built on other successful events DSM has hosted in the US and China. Europe currently lags both Asia-Pacific and the US in terms of FTTH deployment and the consensus was that, while this status quo was unlikely to change in the short term, the situation in Europe was at least looking up.

On the demand side, it was regretted that FTTH capability is still not seen as a deal-breaker for European businesses or families looking to relocate. However, delegates also reported

that, in France and elsewhere, real estate firms are now beginning to advertise FTTH connections on properties they market. It was also noted that most of Europe's largest telcos are increasing investment in FTTH infrastructure in anticipation of future demand.

One area of debate where opinion was divided was the future delivery of FTTH services. The prevailing viewpoint was that Europe's large incumbent operators were holding back large scale deployments of Fiber-to-the-Home and that the markets where FTTH has really taken off, including Portugal itself, were those where disruptive challenger operators have provoked the local incumbent into action.

The contrarian view, which had considerable support in the room, was that only large scale incumbents have the scale to be able to deploy FTTH universally, and that leaving private enterprise to cherry pick the lucrative urban markets would not help deliver governments' social goals.

Guests also drew parallels with current events in America, where Google recently announced plans to invest in Fiber-to-the-Home as a direct challenge to Verizon and AT&T. Rob Crowell, DSM Desotech Vice President of Fiber Optic Materials, reflected the consensus that, while nobody apart from Google yet knew exactly what the search firm's plans were for fiber, it was unlikely that the company would set out to become a major player in the sector. Benoit Felten, principal analyst at Yankee Group, agreed, suggesting that the chances were that Google would use its investment in fiber to encourage other would-be disrupters to take on the incumbents.

While delegates agreed that, on the supply side, an acceleration of deployment in Europe was in little doubt, they also agreed that FTTH to date still lacks a single, killer application. Crowell pointed out that the killer app could well be different in different geographical markets. "In Sweden, where there is a high ageing and rural population, many of whom are often cut off in winter time, we are seeing that telemedicine is driving FTTH: when the doctor's surgery gets a fiber connection for eHealth services, it often leads to the whole community following suit. In another market, it could easily be e-Government or entertainment that is the main driver. Today, we still don't exactly know how bandwidth in the future will be used up; we just know it will be."

While clearer definition of future FTTH killer applications was recognized as a necessary ingredient for future FTTH deployments, operators' also acknowledged there was a need to address a trend to 'down-gauge' FTTH network designs in response to current high deployment costs and difficulties in accessing certain urban areas. This down-gauging in turn places more stringent demands on the performance of the deployed optical fiber, especially as the fiber finds itself more deeply embedded in a building's infrastructure, having to work in more and more confined spaces-

The consensus among the delegates was that the best solution to accommodate this extra demand placed on fiber was to ensure networks were made of the highest quality materials. This would not only ensure that networks last their natural 30-year lifetime and enable performance at higher wavelengths such as 1577nm or even higher wavelengths that will likely be used in the future, but also mean they are easy to manufacture and deploy in the field.

Representatives also acknowledged that operators needed to take quality into account when making investment decisions - especially when some of those decisions involved taxpayers'

money - and called on the vendor community to work together to make sure their materials were of the highest quality. In this respect suggestions varied, from fiber manufacturers' standardizing worldwide production, to enhanced laboratory 'road testing' to complement theoretical durability calculation. The possibility of a global standard for macro- and micro-bending to move both glass and coatings to the highest possible benchmark was also mentioned.

In summing up, Crowell said: "With everyone agreed that business and government in Europe is now in a position to push forward with fiber-to-the-home deployment, we believe our industry must also now align to ensure that the ideal technical specifications exist to enable investors to be sure a network can meet the expectations of consumers and businesses for the duration of its lifetime. DSM looks forward to playing an active role in this debate, and looks forward to working with our partners towards achieving this end."

About DSM Desotech

DSM Desotech is the world's leading developer of UV-curable optical Fibre coatings, a critical component of high-speed optical Fibre networks. With more than 40 years experience in Fibre coatings development, the company holds more than 120 U.S. patents in UV-curable technology, with other patents in Europe, Asia-Pacific, Australia and Canada. DSM Desotech operates globally, with research and manufacturing facilities located in the U.S., Europe, China and Japan. It is headquartered in Elgin, Ill., USA. DSM Desotech is a business unit of DSM Resins, based in the Netherlands, and is part of the global DSM family - a world leader in life sciences and material sciences. More information can be found at: www.supercoatings.com.

About DeSolite Supercoatings™

DSM's newest generation of Fibre coatings, DeSolite Supercoatings™, has been engineered to significantly improve microbending sensitivity at the fastest processing speeds, ensuring the best economy of high speed production and superior attenuation performance. In standard basket-weave testing, DeSolite Supercoatings™ display 90% less sensitivity to microbend attenuation—a performance advantage critical for today's new FTTx designs, especially at the longer wavelengths beyond 1550nm. In addition to improved microbending sensitivity, DeSolite Supercoatings™ demonstrate high reliability in temperature extremes, ensuring a robust solution especially in low temperature environments. Other enhanced performance properties include reduced volatility, faster cure speed and advanced mechanical properties.

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