



NEXT-GENERATION NETWORKS

Weight advantage

Despite all the noises to help out altnets, it seems the heavyweight operators will be favourites to build Europe's fibre

EUROPE'S LAWMAKERS and regulators have spent a busy summer laying initial foundations for next-generation access (NGA) networks. But while it looks like a good opportunity to level the playing field, alternative operators are likely to struggle to make the economic case for such networks stack up.

In theory, next-generation local access fibre networks offer an unprecedented chance to change the structure of the industry and dismantle the last-mile copper monopoly that incumbents have long enjoyed.

"Fibre is the first time we all start again in [fixed line] technology deployment," said Richard Feasey, director of public policy at Vodafone, speaking at a regulatory conference organised by altnet interest group ECTA earlier this year.

The opportunity to gain full operating control of a mass-market network has arisen "only once in the last [few decades] and that is GSM," he said. "We [at Vodafone] are looking at how we might move forward on that."

But in practice experts expect traditional fixed-line incumbents to take the leading role in building Europe's fibre networks. They have more to lose if they don't build, and are also better able to draw on revenues and strong customer bases to justify the investment and access credit.

BT became the latest incumbent to join the fray when it announced in July that it will build a high-speed fibre access network reaching 10 million homes by 2012.

"It will be mass-market [when] incumbents get in the game," says Joeri Van Bogaert, president of the FTTH Council Europe.

"The cost per home connected for NGA is much more dependent on market share than is the case with LLU. The economics of NGA are also highly variable with geography," says Matt Yardley, partner and head of the Broadband & Media

Consulting Division at Analysys Mason. "Operators with high market shares are best placed to make the stronger case for investment in NGA. Typically, this means incumbents."

Not only do incumbents have a large existing broadband market to protect, but they can also make opex savings by replacing old copper networks and phasing out local exchanges.

Nevertheless, return on investment in fibre access depends on unknowns such as whether telcos can make money from video, television and gaming services (see Focus p.24-29).

A typical VDSL/fibre-to-the-cabinet (FTTC) operator in Germany would have to invest €5 billion to cover 40% of the total customer base for high-speed broadband access. And it would cost more than €3 billion to reach just 7% of households in France with a more extensive fibre-to-the-home network, according to WIK, a telecoms research company which recently conducted a report on the feasibility of NGA build for ECTA. In France, the three main operators are already offering triple-play services over FTTH at just €29.99 per month.

"The economics [of FTTH] look very challenging and it is difficult to find a way to improve the economics," says Vodafone's Feasey.

As a result, incumbents are pushing regulators both to provide concessions that recognise their financial risk and give a clear picture of future regulation. In the meantime, they are only going as far and as fast in fibre access build as broadband competition pushes them. BT is a prime example. Its fibre access network announced in July will have top speeds of up to 100 megabits per second. But in reality BT will build fibre to the premises (FTTP) in greenfield sites, which means most of the network will be FTTC, initially delivering broadband speeds of up to 40 Mbps. BT's modest move means spending only £100



million above existing capital expenditure plans in each of the 2008/09 and 2009/10 financial years. What's more, it follows Virgin Media's announcement to deploy a 50-Mbps network, destined to reach approximately 50% of UK homes by 2009.

"BT only plans FTTH where it feels under threat from altnets, such as in Ebbsfleet or the Greenwich Peninsula," says Andrew Wheen, principal consultant at business and management consultancy Mott MacDonald Schema.

France Telecom's swift launch of FTTH services in Paris was in response to Iliad's 2006 announcement it would build FTTH. In the Netherlands, where there are extensive cable networks, KPN was one of Europe's first operators to announce an ambitious fibre build and plans to have connected 300,000 Dutch homes to its FTTC network by the end of this year, and over a million by the end of 2009. KPN also plans a mass rollout of FTTH, although it is waiting for Dutch regulator OPTA to state how it will regulate fibre access before releasing deployment targets, says a KPN spokesman.

"If [KPN] didn't do it, it would be dead," because of competition from cable, says Mike Cansfield, a principal analyst at Forrester Research.

In Italy, where Fastweb has built FTTH networks and unbundled the local loop, Telecom Italia will spend €6.5 billion over the next 10 years on next-generation infrastructure, and plans to reach 7.3 million households with NGA networks by 2016. Telecom Italia will also share network access with Fastweb, and they will plan to avoid duplicating NGA network build.

European governments' desire for very high-speed broadband access gives incumbents lobbying strength. In Spain, Telefonica plans to build out fibre to 3 million households by 2010, says Spanish regulator CMT, although in June Telefonica said it would hold fire until it had assurances on next-generation network regulation. CMT said in May it would make Telefonica provide wholesale access to its new fibre optic network, but on 1 August the regulator issued a statement reversing this decision, and instead Telefonica will only have to provide access to its cable ducts.

Meanwhile BT says it is committed to making an "equivalent" wholesale offer on its new fibre network that takes into account its investment risk—meaning that competing operators will access the network under the same terms and conditions as BT.

But BT, which has no mobile arm, also wants other operators to open their networks, including mobile operators. "We're referring to Virgin and mobile players as they move into a converged environment," says Emma Gilthorpe, group

director, industry policy and regulation at BT. "The days of BT being an incumbent are long gone."

Feasey at Vodafone says large-scale mobile operators may be well placed to build a business out of local access fibre, given that they have larger customer bases than alternative broadband access providers, as well as a need for backhaul networks.

"We need to find economies of scope. If it's [coming from a] standalone DSL [business] without adjacent services it looks bleak," said Feasey. "You have to think big market share. We have to believe we can achieve 30% [market share]... That is where the mobile distribution engine comes in. The only one [sector] where we have seen these numbers [for market share in comparison to the incumbent] are in mobile."

Vodafone already has a 44% stake in French mobile operator SFR, which in turn owns 96.41% of Neuf Cegetel, the country's second-largest fixed operator, which is building FTTH networks in major French cities; Vodafone also controls fixed operator Arcor in Germany. Yet analysts think it unlikely Vodafone will invest in fibre access in the UK, for example. "I don't believe for a moment Vodafone would go down that path," says Wheen.

Vodafone is calling for regulated wholesale access to Europe's NGA networks, particularly as there is unlikely to be more than one infrastructure provider per household. "Oligopolistic competition is simply unviable," says Feasey. "The current model of more than two unbundlers is likely to be phased out by FTTH. If you share that conclusion [there is a] need [for] wholesale."

Which leaves the question of how to regulate wholesale access without enshrining incumbents' local access monopoly, while allowing a reasonable return on network investment. Initial approaches vary across Europe. In late July the French Parliament voted on laws designed to ease FTTH deployment. Although the new laws require France Telecom to provide altnets with access to civil infrastructure such as ducts, they do not mandate wholesale bitstream access. Instead they ask operators to meet reasonable requests for access to the fibre optic line at an undefined point outside the building.

"Any operator can theoretically deploy a network independently of others, right up to the subscriber," said Paul Champsaur, head of regulator Arcep, speaking before the vote. "In practice this hypothesis is neither realistic nor desirable. The part of the local loop closest to the subscriber will be a natural monopoly and should be shared between operators."

Meanwhile, in July the European Parliament voted in favour of making network constructors and companies that use new fibre facilities share the financial risk, as part of the EC's telecoms reform package, which will come into play in 2010.

This could see companies wanting to use fibre facilities signing for a minimum number of lines for a set number of years from the company building the network, much as operators do in the submarine cable market. But altnets would prefer incumbents to cover their risk through a wholesale pricing structure that includes the concept of a fair return on investment.

"What incumbents mean by it is a system where everyone pays money and pays up front," says Ilsa Godlovitch, director of regulation for ECTA. Godlovitch argues the structure of the submarine fibre market does not transfer to local access, where service providers may be considerably smaller than the company building the network. "In the undersea cable market you have a large number of players of equal size. In that environment it makes sense. It makes less sense... if one operator has 10 times the revenue of the next biggest." ■

Joanne Taaffe

'It is difficult to find a way to improve FTTH economics'