

Executive summary: Regulatory policy and FTTH roll-out

DotEcon was commissioned by the FTTH Council Europe to investigate how regulatory measures can encourage investment in fibre access networks. They were asked to look at how the existing regulatory framework might be better applied, and to explore potential new solutions.

Regulatory objectives pull in different directions

The regulatory framework is enshrined in the European Commission's *Recommendation on regulated access to NGA networks* (the NGA Recommendation). Operators judged to have significant market power (SMP) must provide wholesale access to their infrastructure at a regulated price. This requirement affects the rate of return that an operator can expect to earn from its fibre network, which impacts directly on the business case.

The two regulatory objectives set down in the NGA Recommendation – promoting retail competition and allowing network operators to earn a fair return on investment – are not always well aligned, unfortunately. DotEcon warns that focusing too hard on promoting retail competition over fibre networks assuming they are *already in place* runs the risk of discouraging the investment needed to turn this assumption into reality.

Allowing returns that are no more than equal to the cost of capital is insufficient to trigger investment. Where significant investment is required up front and future demand for services is uncertain, it becomes more attractive for the operator to “wait and see” or take the cheaper route of upgrading its copper network. On the other hand, allowing a higher premium may suppress demand for high-speed connections. Consumers are very cost conscious and evidence suggests that few are willing to pay a premium for faster fibre services.

The NGA Recommendation allows a risk premium to be applied to wholesale fibre access, but there is no agreement on how it should be calculated and little evidence of how it would work in practice. To date only the Dutch regulator OPTA has decided to set a risk premium, and it has not decided at what level it will be set. DotEcon says regulators should provide greater clarity on the magnitude of the reward that successful investors are allowed, and make a commitment to protect such returns from being eroded through a process of frequent reviews.

The NGA Recommendation also allows fibre networks to be deregulated where competing infrastructures exist. DotEcon further suggests that, in order to maximize incentives, national regulators could make use of this exception in a forward-looking manner. There is anecdotal evidence that suspending regulation of fibre networks does encourage competition, e.g. in Portugal (although this case is also influenced by the fact that duct access is already mandated in Portugal).

Encouraging migration from copper to fibre

For incumbent operators, the issue is not simply about whether to invest in fibre, but whether to meet the demand for high-bandwidth services by upgrading the copper network, rolling out FTTH or some combination of the two. Even if operators decide to move customers from copper to fibre, there will be a transitional period where both networks are in operation. Therefore, the relative attractiveness of the two wholesale access products is important, and they cannot be considered in isolation. Here again, the effects of policy changes are complex because they often work in opposing directions, and may affect incumbents and new entrants differently.

Higher prices for the legacy network will potentially lower incremental gains from investing in fibre, which may discourage fibre investment by the incumbent. But at the same time, higher copper prices can stimulate roll-outs by new entrants, and this competition may provide the incentive for the incumbent to upgrade in order to stem customer losses. The precise effect will depend on the specifics of the local market.

On the other hand, lower wholesale prices for the legacy network make fibre investment less attractive for alternative operators, while also constraining retail prices in the market overall and thus the profitability of new fibre infrastructure.

DotEcon identified two potential solutions to widen the gap between copper and fibre wholesale prices without adversely affecting retail prices: a tax on copper-based access and blended prices:

- A “copper tax” could drive a wedge between copper and fibre retail prices and the tax revenue could be reinvested in fibre roll-out.
- Blended prices – averaging the wholesale access charges for copper and fibre networks – would put incumbents in a position where they can increase the wholesale price as they roll-out more fibre. (Though this approach could potentially disadvantage new entrants in the market).

Allowing incumbents to withdraw copper-based access products as soon as they offer FTTH can avoid the situation in which self-competition from copper undermines the business case. It also avoids the situation in which parallel infrastructures are operated inefficiently. But although a “fibre switchover” policy is appealing, DotEcon believes that regulators will find it difficult to enforce against operators’ wishes – there is no fibre equivalent of the “digital dividend”, so it will be more difficult to gain public acceptance for the policy, and there could be legal challenges from operators that don't wish to turn off their copper-based equipment.

Regulation needs backing up with other measures

DotEcon makes a number of additional recommendations. There is a strong case for the Commission being more explicit about the targets it has set for required upload and download speeds. Individual member States could set a requirement (rather than voluntary codes) for clearer advertising of broadband speeds, which would help customers to understand the benefits of fibre and foster greater willingness to pay a premium for faster fibre services. Measures to promote co-operation between network operators and those providing services on fibre networks would help to ensure more determined effort in the development of both networks and services. Finally, where public funds are being used to drive fibre roll-out, they must be disbursed effectively and be aimed at projects delivering the greatest benefits.

DotEcon concludes that regulation of next-generation access networks remains a complex issue, and it is unlikely that a “one size fits all” approach will be found.

Further information:

DotEcon’s report on **Regulatory policy and the roll-out of fibre-to-the-home networks**:

http://www.ftthcouncil.eu/documents/Reports/Dot-econ_Regulatory_Report.pdf

FTTH Business Guide Chapter 6: Regulation http://wiki.ftthcouncil.eu/index.php/FTTH_Business_Guide/Regulation