



# Creating a brighter future

Response to the BEREC Consultation on 'Guidelines for Quality of Service in the scope of Net Neutrality'

31 July 2012

## Introduction

The FTTH Council Europe (hereinafter the FTTH Council) welcomes the opportunity to participate in BEREC's consultation on its 'Guidelines for Quality of Service in the scope of Net Neutrality'.

The FTTH Council Europe is an industry organisation with a mission to accelerate the availability of fibre-based, ultra-high-speed access networks to consumers and businesses. The Council promotes this technology because it will deliver a flow of new services that enhances the quality of life, contributes to a better environment and increased competitiveness. The FTTH Council Europe consists of more than 150 member companies. Its members include leading telecommunications companies and many world leaders in the telecommunications industry (additional information is available at [www.ftthcouncil.eu](http://www.ftthcouncil.eu)). Telecoms operators are not members of the FTTH Council and we have our own perspectives regarding the appropriate regulatory policies to accelerate NGA deployments.

The FTTH Council generally agrees with the proposals on transparency regarding traffic management on a network but will concentrate its response on the issues raised as regards transparency relating to network performance. The FTTH Council would note that many of the issues regarding network management and competition concerns have arisen in the context of scarcity of network capacity but feel that at least in fixed networks, such capacity constraints can be easily overcome by the deployment of FTTH networks.

## The importance of Transparency in Network Capacity

Users are not fully informed about the services they receive, or are likely to receive when signing up for a broadband connection. In Europe, certain regulators such as Ofcom in the UK found that *"DSL based connections continued to deliver average download speeds that were much lower than the headline 'up to' speeds which are frequently used to advertise broadband services. 'Up to' 8Mbit/s and 'up to' 20/24Mbit/s ADSL connections delivered just 41% and 31% of headline speeds during the period, in line with results from previous research while cable and FTTC-based services on average delivered between 90% and 103% of headline speeds."* CMT made similar findings in the Spanish market where xDSL continues to underperform its advertised speeds especially as compared to FTTH products.

Such results appear to be almost universal. The US Federal Communications Commission ("FCC") found that in the United States actual speeds for both downloads and uploads were much lower than the advertised speeds. The average actual download in 2009 speed was found to be only 40–50% of the advertised "up to" speed for which households signed up<sup>1</sup> with the exception of FTTH based products which tended to perform at or beyond the advertised speed. While the gap has narrowed in the latest report<sup>2</sup> it is still overwhelmingly the case that FTTH

---

<sup>1</sup> Federal Communications Commission, "Connecting America – The National Broadband Plan", 2010 (<http://www.broadband.gov/download-plan/>) - Exhibit 3.G and accompanying text

<sup>2</sup> <http://www.fcc.gov/measuring-broadband-america/2012/july>

understates its performance whilst other network operators continuously overstate their performance.

That gap between promise and reality is greater for higher-speed DSL services, whilst both FTTH and cable and services with fibre to the cabinet tend to deliver what they promise.

As noted by DotEcon in a recent report for the FTTH Council *‘Such large differences between what is being promised and what is being delivered could actively suppress the demand for fibre as copper-based access may be wrongly perceived to provide similar services. Combined with the fact that many customers may not be able to establish the speeds they are actually obtaining, and even if they might not be in a position to identify their connection as the main source of poor service quality (which may for example also be the result of congestion at the server end when downloading popular content), such advertising could artificially depress the fibre premium.’*

Improving the information provided to customers is an obvious way of removing distortions in valuation. This would entail, for example, provisions that stipulate what information has to be provided to customers, and in what form. Information about maximum available speed, for example, might be misleading, and operators could be required, for example, to inform customers about the speed they should be expecting to get most of the time, taking account of the quality of the line, distance from the exchange, contention ratio used by the operator etc. Alternatively (or in addition), there might be information about minimum guaranteed speed, and a clearer identification of available upload speeds.

The FTTH Council has commissioned other studies which show that FTTH networks enjoy a close to 50% uplift in ARPU over time<sup>1</sup>. These results are fairly consistent across markets and indicate that where there is a competitive and regulatory dynamic which supports investment, operators can invest based on market returns. One interesting observation in that study by Diffraction Analysis is that: *the most influential factor, as shown in Exhibit 2, is time. In other words, the longer an FTTH infrastructure has been in the market, the better its take-up rate.*

This is entirely consistent with research undertaken by Rosston et al.<sup>3</sup> which suggests that the valuation of internet connectivity is dependent on experience. Quoting results from the Pew Internet and American Life Project (2010) and their own survey data, they report that roughly a third of inexperienced households would take up an internet service once they have experience the benefits of the service. In relation to higher speed services, the study found that subscribers’ valuation of speed increases with experience, defined in terms of their existing connection speed, the period for which they have been connected, and experience with ‘internet-related devices and applications’.

The special Eurobarometer published in June indicated that 58% of Europeans did not know the speed of their connections (an additional 6% of those who thought they

---

<sup>3</sup> Gregory L. Rosston, Scott J. Savage, and Donald M. Waldman (2010) “Household Demand for Broadband Internet in 2010,” The B.E. Journal of Economic Analysis & Policy: Vol. 10: Issue 1 (Advances), Article 79; available at: <http://www.bepress.com/bejeap/vol10/iss1/art79>

knew their contract speed did not in fact)<sup>4</sup>. A similar survey by the FCC on the consumer broadband experience found that 80% of broadband users in 2010 did not know the speed of their broadband connection<sup>5</sup>.

An implication of this analysis is that a misrepresentation of what is being delivered, calling a 10Mbps connection a 30Mbps connection and so on, will further distort the perception and experience of users and undermine the take up of FTTH.

Special measures are needed to ensure that minimum conditions with regard to advertising of speeds should be imposed in the interests of QoS and transparency. Those conditions need to be simple and clearly communicated to end-users so that a fair comparison between network products can be made.

## **Provisions**

The FTTH Council agrees with the proposal that QoS Monitoring should include a range of quality parameters: actual vs. advertised speeds, measurements of timing parameters (e.g. latency or jitter), level of congestion in the network, performance of IAS compared to specialised services, quality as perceived by end users, and IAS offers on the retail market (e.g. availability and penetration).

The FTTH Council further agrees that ‘Following a common European approach will contribute to ensuring a consistent implementation of the regulatory framework’ and would welcome such an approach.

The FTTH Council would believe the functional requirement to include an ‘Access performance required to be comparable to advertised speed’ and that a detailed technical requirement specifying ‘A typical or minimum actual access speed to be required’ should also be included.

## **Conclusion**

The FTTH Council believes that monitoring and requiring accurate network metrics to be collated by NRAs is important. This can allow NRAs to judge the correspondence of actual versus advertised broadband speeds in the name of transparency and the assessment of network management.

The FTTH Council would emphasise that the issue of network transparency is not simply one of user rights (though these are important) but it is also an issue regarding the development and take-up of advanced networks and services which will have an impact on the general economy.

The FTTH Council Europe fully supports BEREC’s general position that transparency policy should be accessible, understandable, meaningful, comparable and accurate if

---

<sup>4</sup> [http://ec.europa.eu/information\\_society/digital-agenda/scoreboard/docs/pillar/studies/eb\\_ecomm/final\\_reports/eb381-report\\_en.pdf](http://ec.europa.eu/information_society/digital-agenda/scoreboard/docs/pillar/studies/eb_ecomm/final_reports/eb381-report_en.pdf)

<sup>5</sup> J Horrigan and E Satterwhite, “Americans’ Perspectives on Online Connection Speeds for Home and Mobile Devices” 2010 ([http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-298516A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-298516A1.doc))

it is to be effective. The FTTH Council also believes that there must be a viable choice for consumers that they can act upon if they are not getting the service they want.

The FTTH Council would also note in that transparency measures are at least as important in terms of the network performance. While some NRAs such as Ofcom in the UK and CMT in Spain have tested network delivery speeds against advertised speeds and have highlighted the persistent underperformance of DSL networks, a more systematic and Europe-wide assessment is a necessary complement to the current proposals on transparency regarding what is delivered over those networks.

Well informed consumers with choice of suppliers will be enable a more dynamic and responsive market to the benefit of consumers and industry.

FTTH Council Europe



President of the Board



Chair Policy & Regulation Group



Director General

FTTH COUNCIL EUROPE ASBL  
Av. Louise 214, Bte. 12, 1030 Brussels  
[info@ftthcouncil.eu](mailto:info@ftthcouncil.eu)