



# Creating a brighter future

Response to the Public Consultation on 'THE REVISION OF THE RECOMMENDATION ON RELEVANT MARKETS'

8 January 2013

## Executive Summary

The FTTH Council believes that the revision of the Recommendation on Relevant Markets gives an opportunity for the Commission to recognise the changing market structure in a way that is consistent with the principles of the Regulatory framework but which also creates a regulatory structure that allows competition to happen in a way that facilitates the competitive process.

In summary the FTTH Council sees the existing wholesale broadband markets being merged together for a combination of reasons, both technical and market driven. From a technology perspective, the network evolutions on the fixed telecoms networks imply that unbundling as a physical option will be very limited in future. That constraint has been recognised as a feature of a large number of Article 7 cases in different ways. In some markets physical bundling as a remedy has effectively been removed<sup>1</sup> whilst in others, although maintained, the weakness of the measure means that the market 5 (bitstream access) remedy is being recognised as the effective remedy in market 4<sup>2</sup>. The Council believes this trend will continue and indeed will accelerate. It therefore makes little sense to monitor a separate physical unbundling market in this context. Other physical access remedies such as access to passive infrastructures can be dealt with more effectively through symmetrical access remedies.

**The FTTH Council believes that Markets 4 and 5 should be merged into one broader wholesale broadband access market.**

From a market driven perspective, consumers are moving strongly towards bundled products with the latest Eurobarometer surveys showing that level of bundling for broadband access has reached 60% of all broadband access connections being sold as part of a bundle. Operators supplying the retail market are overwhelmingly supplying a bundled retail market. In order to supply that retail market, operators need access to a wholesale input product which will support that retail product. That does not mean that all retail products are fully bundled triple play products. A significant proportion of today's market is made up of single products or double play products.

What constitutes a triple play product is also changing. In addition to multiple SD TV Channels, broadcast TV products are expected to contain at a minimum a number of HD TV channels. A standard triple play product which offers NGA ready speeds<sup>3</sup> in addition to broadcast and managed VoIP services can only be supplied with today's technologies over fibre and fibre hybrid solutions. Standard copper products cannot supply these services.

It is clear therefore, that the retail market is splitting into traditional products (termed loosely as non-NGA products), in addition to a retail set of full service triple play products (which might be termed loosely as NGA enabled products).

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<sup>1</sup> BE/2011/1227 and NL/2011/1278

<sup>2</sup> UK/2010/1064 and AT/2010/1084

<sup>3</sup> i.e. a minimum of 30mbps

**The FTTH Council believe that the broadband access market which includes both markets 4 and 5 should then be split into a basic broadband market and an NGA-enabled broadband market.**

This new wholesale market structure better reflects the kinds of wholesale inputs that parties in the retail market will need in order to contest single product or broader retail product markets.

Meanwhile, for standard voice and internet browsing at lower speeds, mobile technologies have evolved to be a real and credible alternative to fixed-line solutions. Already in Sweden, broadband of speeds up to 50Mbps are being sold not as ‘mobile’ solutions but rather as a box that can be plugged-in in the city but can also be brought on holidays to the coast or lake during the holidays and plugged in the summer home<sup>4</sup>. Clearly, as the functionality of these products has changed, so too has the marketing of these products.

With an expansion of platforms in the basic broadband market the FTTH Council Europe believes that the three criteria will not be met.

Though there are still barriers to entry, these are not so high and since these markets will normally be characterised by 3-5 different operators over the entire territory each with excess capacity, a competitive dynamic can be anticipated.

In addition, with so many platforms competing against each other, the possibility for Competition law to intervene will be real and for that reason, the FTTH Council believe that the third criterion would also not be met in the basic broadband market.

**Therefore the FTTH Council Europe believes that the basic broadband market does not meet the three criteria test and should not be subject to ex ante regulation. It follows from this analysis that market 1 should also be removed from the list of relevant markets.**

On the other hand, the NGA enabled broadband market has a more limited number of broadband platforms available to it. In practice, only fibre to the home, fibre to the cabinet with enhancements and fibre to the node (coaxial) networks are capable of providing the wholesale inputs capable of delivering the desired retail products.

Again entry barriers are high but not evenly so throughout a Member State. It seems likely that multiple NGA enabled networks could be deployed in urban areas where the cost of deployment will be low compared to deployment in other areas. Already, at least two NGA networks are available over about 30% of the EU population.

Again with multiple networks and excess capacity and the threat of further market entry it seems likely that the second criterion will not be met.

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<sup>4</sup> <http://www.tele2.se/mobilt-bredband/abonnemang.aspx> , <http://www.telia.se/privat/mobilt-bredband/abonnemang/mobilt-bredband-total-4g/>

However, the entry threat of NGA enabled networks will be limited to low cost urban areas and the FTTH Council recognises that other access products will be necessary outside those areas.

The FTTH Council believe that access remedies should be available outside major urban areas with a population density that will not support a competitive deployment.

**The FTTH Council believe that the NGA broadband market should be geographically delineated into Urban and non-Urban areas. The FTTH Council further believes that only the non-Urban area is likely to satisfy the three criteria test for inclusion in the list of Relevant Markets.**

The Council notes that other access remedies, in terms of access to passive infrastructure can best be delivered using other symmetrical access means and that such remedies will be further enhanced through a regulation before the Recommendation is revised.

The Council emphasises its belief that such a European regulatory approach will give clarity and certainty to investors and operators and the confidence that the approach can be delivered. In effect, this approach reaffirms a graded-remedy mechanism that facilitates and moves forward an appropriate environment for large scale network investment.

## **Introduction**

The FTTH Council Europe (hereinafter the FTTH Council) welcomes the opportunity to participate in the consultation ‘The Revision of the Recommendation on Relevant Markets’.

The FTTH Council is an industry organisation with a mission to accelerate the availability of Fibre To The Home (FTTH) 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 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.

One point which the FTTH Council would like to set out before addressing the specific questions posed in the questionnaire concerns the consultation process itself. The FTTH Council is glad to contribute at this stage in the process but notes that there are no actual proposals put forward by the Commission. Therefore, this and all stakeholder responses are likely to be general and unguided to a large extent.

The FTTH Council observes a trend in DG Connect which sees consultations launched before any policy opinion has formed. Once policy is formed, stakeholders have no further right of comment except through informal channels where operators and organisations with the most resources have the biggest voices.

The FTTH Council believes therefore that there must be a second round consultation once the Commission has formed opinions about what the different options are for specific markets or indeed the three criteria. Therefore, in the interests of transparency and openness, the FTTH Council asks for the right to comment formally again once policy options have taken shape.

**Question 1: What are the technological developments in the electronic communications sector at the EU level as of 2007 that have an influence on how the markets should be defined in the revised Recommendation from an *ex ante* perspective?**

There are several technical evolutions which have had a profound impact on the market since 2007.

In 2007 the level of FTTH penetration was 5%. Even vDSL which had started deployment in certain countries such as Germany and Belgium was largely unknown. For instance the UK incumbent BT, only announced its intentions to deploy FTTC in 2008<sup>5</sup>. By spending a relatively small sum in a relatively quick period, BT has been able to reach over 50% of households today<sup>6</sup>. From a position in 2007 when NGA network evolutions were tentative at best, the latest information from the Digital Agenda for Europe (DAE) scoreboard indicates that today over 50% of households have NGA capabilities available.

In the intervening period, the capacities and nature of vDSL technologies have not so much changed as become better understood by regulators. Major impediments such as crosstalk interference which attenuated throughput can be offset with technologies such as vectoring. However, the current vectoring solutions do not support multiple DSLAM operators implying that Sub-Loop-Unbundling is not compatible with the technology. NRAs have accepted this technological restriction in markets such as Belgium where the obligation has been officially withdrawn and tacitly in a large number of markets (for instance the Netherlands).

The closure of unbundling as an access remedy has profound impacts on the market.

Mobile evolutions have in certain markets been even more dramatic. The arrival of tablets and mobile computing has coincided with LTE's technical evolution and the growing spectrum availability through the harmonisation of spectrum bands and the creation of the first digital dividend. The first iPhone from Apple became available in Europe in November 2007 and the first iPad in mid-2010. While these devices attracted many imitators, the proliferation in devices has been staggering. Mobile and Fixed generated traffic are not yet approximating each other in volume terms, mobile data continues to grow almost 3 times faster than fixed<sup>7</sup>. Convergence since 2007 has moved very much from the abstract to something much more concrete.

Another technical issue is the growing symbiosis between fixed and mobile networks with high capacity mobile networks being dependent of fixed networks for backhauling and even off-loading (whereby mobile networks pass data onto associated WiFi networks where available) in order to create the possibility to free up the radio channel.

The expansion of over the top services (OTT) since 2007 has created, with the network and device elements a perfect storm of events creating a radically market landscape in just 5-6 years.

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[http://miranda.hemscott.com/servlet/HsPublic?context=ir.access&ir\\_option=RNS\\_NEWS&item=65554085838890&ir\\_client\\_id=1281](http://miranda.hemscott.com/servlet/HsPublic?context=ir.access&ir_option=RNS_NEWS&item=65554085838890&ir_client_id=1281)

<sup>6</sup> <http://www.news-openreach.co.uk/press-releases.aspx?newsid=10>

<sup>7</sup> [http://www.wik.org/fileadmin/Konferenzbeitraege/2012/Mobile\\_broadband/Pepper-WIK\\_Moble\\_Broadband-For\\_Delivery-09-2012.pdf](http://www.wik.org/fileadmin/Konferenzbeitraege/2012/Mobile_broadband/Pepper-WIK_Moble_Broadband-For_Delivery-09-2012.pdf)

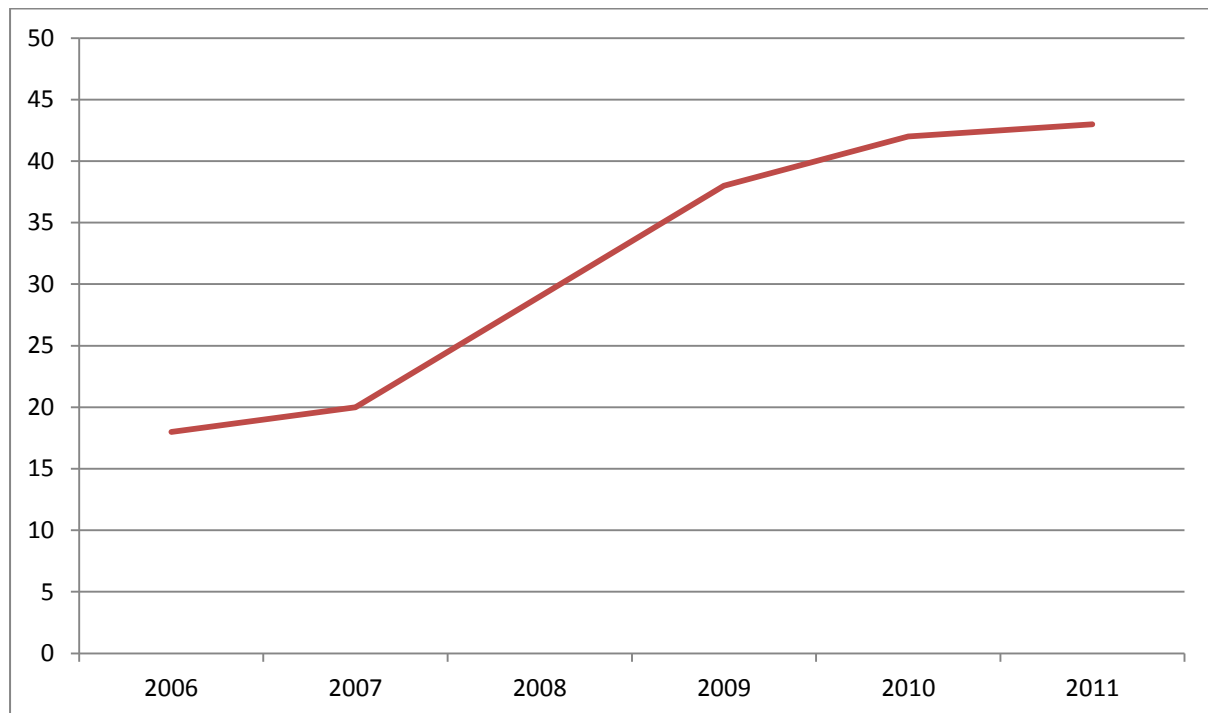
**Question 2: What are the changes in structure and functioning of the relevant markets (e.g. supply and demand side developments, bundles, convergence, geographic scope), which should be reflected in the revised Recommendation from an *ex ante* perspective?**

The principle changes relate to demand and supply conditions in the broadband market.

Starting at the retail level, the preference for bundling of discreet retail services has continued and deepened profoundly.

The level of retail bundling has risen as shown below<sup>8</sup>:

**Figure 1: Retail Bundling in the EU 2006-2011**



Already today more than 60%<sup>9</sup> of all internet connections are sold as part of a bundled product. However, the nature of a retail bundle in terms of product characteristics and the corresponding wholesale inputs that would allow entry into a putative bundled retail market will differ depending on the retail bundle in question.

Already, the European Commission has accepted that wholesale remedies must be made available in order to make effective remedies in a related market even though a bundled retail market analysis was not conducted<sup>10</sup>. In the Belgian broadband market analysis it was deemed that though cable operators had market power on broadcasting transmission, any remedies would need to be augmented by broadband access in order to be effective (in a broader and bundled retail market). By analogy the DSL operator that was deemed to be dominant in the broadband access market was obliged to augment its broadband access

<sup>8</sup> Eurobarometer 283, Eurobarometer 362, Eurobarometer 381

<sup>9</sup> Eurobarometer 381

<sup>10</sup> Case BE/2011/1227-1228

remedy by facilitating a broadcast product so that, again, the broadband access product would be effective in a broader bundled retail offering.

The implication of this inexorable shift to a bundled retail market is that the breath of wholesale inputs must also change.

Those operators supplying the retail market are overwhelmingly supplying a bundled retail market. In order to supply that retail market operators need access to a wholesale input product which will support that retail product. That does not mean that all retail products are fully bundled triple play products. A significant proportion of today's market is made up of single products or double play products.

What constitutes a triple play product is also changing. In addition to multiple SD TV Channels, broadcast TV products are expected to contain at a minimum a number of HD TV channels. A standard triple play product which offers NGA ready speeds<sup>11</sup> in addition to broadcast and managed VoIP services can only be supplied with today's technologies over fibre and fibre hybrid solutions. Standard copper products cannot supply these services.

Meanwhile for standard voice and internet browsing at lower speeds, mobile technologies have evolved to be a real and credible alternative to fixed-line solutions. Already in Sweden, broadband of speeds up to 50Mbps are being sold not as 'mobile' solutions but rather as a box that can be plugged-in in the city but can also be brought on holidays to the coast or lake during the holidays and plugged in the summer home<sup>12</sup>. Clearly, as the functionality of these products has changed, so too has the marketing of these products.

It is clear therefore, that the retail market is splitting into traditional products (termed loosely as non-NGA products), in addition to a retail set of full service triple play products (which might be termed loosely as NGA enabled products).

A key characteristic in this respect concerns the technological differences between NGA and Non-NGA enabled networks and their ability to provide a set of wholesale products which can facilitate entry to the retail market where market power is identified.

From a technical perspective, it is clear that only NGA enabled networks are capable of supplying the appropriate wholesale inputs in whatever form for access to the retail market. The corresponding demand profile for wholesale inputs will follow or can be inferred from a retail market analysis. Access to wholesale NGA enabled networks will be distinct from wholesale non-NGA enabled networks.

Before considering further what the likely impact of retail demand changes are on wholesale markets, it is worth considering again some of the technological aspects of the recent network evolutions on traditional telecoms networks. Already today, over 25% of telecom access lines are enabled with vDSL (or FTTC). There are additionally more that 15% of networks which are either FTTH or FTTB. Overwhelmingly these networks have a PON topology. Both of these deployment topologies imply that the availability of physical access remedies in the future will be very limited, though the FTTH Council would highlight the possibilities for

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<sup>11</sup> i.e. a minimum of 30mbps

<sup>12</sup> <http://www.tele2.se/mobilt-bredband/abonnemang.aspx>, <http://www.telia.se/privat/mobilt-bredband/abonnemang/mobilt-bredband-total-4g/>



FTTH networks of whatever topology to either give physical access (in the case of a P2P topology) or evolve to a physical unbundling equivalent (Wave Division Multiplexing over a PON topology).

The reality of these limitations is evident already today. Some countries which have seen significant FTTC deployments have withdrawn the obligation to provide physical unbundling at the subloop either overtly as in Belgium, more surreptitiously as in the Netherlands or very reluctantly as in the UK.

A question mark therefore arise about the technical availability of physical access remedies.

It is not obvious that these remedies will be available therefore regardless of the demand characteristics since the supply profile will not exist.

**Question 3: Can you identify any market bottlenecks which in your view cannot be addressed by *ex ante* regulation via a revision of the Recommendation alone? How in your view can such market bottlenecks be addressed?**

The FTTH Council find this question somewhat perplexing. The FTTH Council believes that the current Framework has at its core a stable and predictable mechanism for identifying areas of market failure and intervening as appropriate. The suggestion that ‘bottlenecks’ might be identified suggests a departure from that general paradigm which does not sit well with the current legal framework it does not seem especially relevant in the context of the revision to the Recommendation on Relevant Markets.

Markets are defined in a manner consistent with competition law and which satisfy certain criteria and ancillary remedies may be applied in order to make the primary remedy effective. Where items sit outside the market analysis framework, such as access to passive infrastructures, specific provisions exists (e.g. article 12 of the Framework Directive). In extremis, measures have been taken (such as in the area of International Roaming) which resulted in a new legislative framework.

If the Commission is proposing to put forward a ‘bottleneck’ test for interventions then the FTTH Council would express concern at such a shift. . The proposal itself already raises concerns and emphasises the need for a further public consultation once the Commission has some clarity on what direction its thoughts might take. The current consultation is a very abstract exercise since the entire framework within which the Recommendation on Relevant markets is set could change fundamentally (for instance if the three criteria were eliminated and three new criteria were selected, ‘bottlenecks’, ‘one firm with more than 40% market share’ and ‘investors request’ – then all subsequent comments in this Consultation might be misdirected).

The FTTH Council does not agree with the introduction of some undefined and arbitrary classification such as ‘bottleneck’ to identify areas of concern and believes strongly that the existing competition law principles on which the current regulatory framework is built should be maintained.

**Question 4: In your opinion, is the three criteria test, as defined in the Recommendation, an appropriate instrument in defining the relevant markets susceptible to *ex ante* regulation or would alternative means to identify relevant markets be more suitable?**

The FTTH Council believes that the three Criteria remains an appropriate way in which to identify markets under the current regulatory framework.

It may be that the third and final criterion, the sufficiency of Competition Law could be merged into the second criterion – that is, if a market has a tendency towards non-competitive outcomes so that dominant firms are likely to persist, then it may be assumed that interventions will have to be repeated even if Competition Law can, and even if Competition Law has, made interventions in the past.

The FTTH Council note that while DG Competition has made a series of interventions on regulated telecommunication markets, notably in Spain, Germany and Poland, this does not mean that Competition law could be viewed in any way as sufficient in itself. In these instances, DG Competition saw abuses of dominant positions despite regulation being also available. While competition law can always choose to make an intervention where it sees dominance which is not controlled (which could occur for a variety of reasons including regulatory capture, misleading data or lack of intervention etc.), the withdrawal of *ex ante* regulation becomes more difficult to reverse once regulation is withdrawn as could be the case where a market is dropped from the list of relevant markets.

For that reason the FTTH Council believes that the third criterion should properly be incorporated within the second criterion.

**Question 5: Should, in your view, criteria be added or removed from the list or should the criteria be formulated in a different manner? Should additional guidance be given to the existing criteria?**

The FTTH Council believe that it the third and final criterion concerning the sufficiency of Competition Law should be merged into the second criterion – that is, if a market has a tendency towards non-competitive outcomes so that dominant firms are likely to persist, then it may be assumed that interventions will have to be repeated even if Competition Law can, and even if Competition Law has, made interventions in the past.

The FTTH Council note that while DG Competition has made a series of interventions on regulated telecommunication markets, notably in Spain, Germany and Poland, this does not mean that Competition law could be viewed in any way as sufficient in itself. In these instances, DG Competition saw abuses of dominant positions despite regulation being also available. While competition law can always choose to make an intervention where it sees dominance which is not controlled (which could occur for a variety of reasons including regulatory capture, misleading data or lack of intervention etc.), the withdrawal of *ex ante* regulation becomes more difficult to reverse once regulation is withdrawn as could be the case where a market is dropped from the list of relevant markets.

For that reason the FTTH Council believes that the third criterion should properly be incorporated within the second criterion.

**Question 6: How, in your view, can legal certainty be best ensured in identifying the markets susceptible to *ex ante* regulation?**

The FTTH Council believes that legal certainty can be ensured by adhering to the legal framework and selecting markets based on a mechanism and a methodology which was used and understood in the previous reviews.

There is clear evidence of significant technological changes and also significant shifts in demand at the retail level in many relevant markets. There are corresponding changes in demand and supply characteristics at the wholesale level. These factors are visible in markets today and can be observed. It can be anticipated that changes will be made and to a greater or lesser extent, these can be anticipated.

Changes driven by these evidences and made in the context of the existing methodology can only reinforce legal certainty. Arbitrary or non-evidence-based decision making, such as the selection of ‘bottlenecks’ for instance would act in the other direction and would undermine faith that decision makers can anticipate changes to the regulatory framework, with a consequent and negative impact on the legal certainty that exists.

The FTTH Council reiterates its view that the current consultation, while welcome, is necessarily abstract that that DG Connect should reverse the recent course in the consultation process and give stakeholders a right to comment once DG Connect has formed opinions on what the most likely options are.

**Question 7: In your opinion, should the scope of any relevant market(s) identified in the Recommendation be changed? If yes, please explain why, referring to the relevant market(s) concerned.**

The FTTH Council believes that several markets warrant changes in the Recommendation on relevant markets.

Those market changes are driven by a combination of retail demand shifts and by technological change.

At the retail level, NGA enabled services, including a ‘full service<sup>13</sup>’ triple play product set, sits apart from other bundle products or individually bought fixed retail services. These retail segments are quite separate from each other with ‘full service’ Triple Play products being in a distinct retail market from single or narrow double-play products. This analysis of the retail market has been accepted by the Commission in its article 7 practices in Belgium for instance.

Narrow, non-NGA enabled retail products correspond to the retail market previously identified in the existing Recommendation on Relevant markets. However, this market is now

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<sup>13</sup> Which would have broadband at NGA speeds

capable of being supplied not only by fixed technologies but also by mobile technologies. Retail consumers that take non-NGA services are largely indifferent to the manner in which their access is delivered.

Some mobile broadband services over LTE are increasingly available and importantly, are being marketed not as mobile broadband but simply as broadband<sup>14</sup>. Often basic fixed broadband products are being marketed as having some degree of mobility<sup>15</sup>. The Commission in a market 5 case in Austria<sup>16</sup> accepted that mobile and fixed broadband competed in the same market even in 2009. With the technological advances and the availability of the necessary spectrums it is clear that the two technologies will compete in the same market at this end of the broadband spectrum.

If this analysis is accepted, then it is not obvious that the three criteria would be met for this broader defined markets. In a reflection of the previously defined Market 15 (Mobile Access and Call Origination) it could be expected that with multiple operators behind the barrier to entry, that a tendency towards a competitive outcome might be observed.

For NGA enabled services, it is clear that neither traditional networks nor LTE networks are capable of competing to supply the necessary wholesale inputs to address this market. By definition, only NGA networks are capable of competing to supply the necessary wholesale inputs.

***What are the necessary wholesale inputs to supply an NGA retail market?*** The change to technologies in access networks suggests that physical access remedies to grant access may not be a viable means to bring competitors into the market. As noted already, with over 25% of telecom access lines enabled with vDSL or FTTC. There are additionally more than 15% of networks which are either FTTH or FTTB. Overwhelmingly these networks have a PON topology. Since both of these deployment topologies imply that the availability of physical access remedies in the future will be very limited, though the FTTH Council would highlight the possibilities for FTTH networks of whatever topology to either give physical access (in the case of a P2P topology) or evolve to a physical unbundling equivalent (Wave Division Multiplexing over a PON topology). Nevertheless, the reality today is that physical access remedies for a putative NGA retail market are not available for the most part. Therefore, and absent certain deployments such as the Netherlands, physical access remedies are not capable of being supplied even if the economics can be overcome.

Over time, this reality is being accepted to a greater extent and while NRAs have struggled, there is a growing realisation that bitstream (often rebranded VULA in an NGA context) is the only viable access remedy. Bitstream has been made the access remedy for physical access in Market 4 in the UK<sup>17</sup> and for Market 4 in Austria<sup>18</sup> while a large number of NRAs are preparing NGA Bitstream access products in market 5 though the remaining market 4

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<sup>14</sup> See footnote 8 above for example

<sup>15</sup> <http://corp.fon.com/en/partners>

<sup>16</sup> AT/2009/0970

<sup>17</sup> UK/2010/1064

<sup>18</sup> AT/2010/1084

access products do not enable NGA retail services to be offered. SLU has not been used in most countries by entrants either for economic reasons or because the evolutionary path is a dead-end with vectoring requiring cessation of supply.

The necessary wholesale input would therefore appear to be a bitstream product which, unless on a FTTH network, does not lend itself to a ‘ladder of investment’ type analysis. That is, there is no possibility that access seekers can move further up the value chain over time once a customer base is established (unless said access seeker were to deploy its own network in part or in whole). One interesting aspect is that cable networks may be able to supply an equivalent bitstream service and at a minimum, these networks will compete with each other at the retail level. Certainly, the technological evolutions of NGA networks imply that the gap between telecom network NGA access products and cable based NGA access products have narrowed very considerably.

The FTTH Council would suggest that all NGA access networks would likely find themselves in the same wholesale market.

The FTTH Council believe two further questions or issues then arise in relation to an NGA-enabled wholesale broadband market; 1. What is the likely scope of the geographic market and 2. Are the 3-criteria likely to be met?

***Geographic scope of the market:*** The FTTH Council believes that there should be a stronger correlation between the treatment of geographic segmentation and the treatment of geographic markets in the State Aid Guidelines. The SMP process which includes both product and geographic market definition in stage 1 must be conducted on a forward looking basis. This is also true of a State Aid assessment which takes a (proposed) five year forward looking perspective to determine which areas are to be classified as white (no prospective infrastructure) grey (only one prospective infrastructure) or black (more than one prospective infrastructure). If such an assessment can be conducted for a State Aid assessment then it is equally capable of being conduct in the context of an Article 7 market review.

A determination of where, geographically more than one prospective infrastructure could be deployed would warrant a different treatment of that area. Where parallel networks are not viable, NRAs should concentrate their efforts to making sure that other forms of access, where appropriate, are put in place as effectively as possible.

The FTTH Council believes DG Connect should be much more explicit therefore about the need to geographically segment the market though this is already apparent in the proposed cost accounting and non-discrimination Recommendation. The FTTH Council believe that this is preferable to an alternative approach which would be to allow NRAs to apply different remedies in different parts of a national market. The conditions of competition have been markedly different within certain Member States that have found a national market but put different remedies in different geographic parts of that market<sup>19</sup>.

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<sup>19</sup> AT/2008/0757

In whatever way it is achieved, either by geographically segmenting the market or varying remedies within a national market, NRAs must focus their interventions where they can have maximum impact with a set of remedies in those areas where effective competition in market 4 is potentially possible and complimented with another set of remedies where effective competition in market 4 might not be possible.

### ***3 Criteria Assessment in the preceding analysis.***

In effect, the logic of the FTTH Council approach sees the current markets 4 and 5 collapsing into a broad broadband access market. This broad wholesale access market is then subdivided then into non-NGA wholesale access and NGA wholesale access.

In the non-NGA wholesale access market, it has already been observed that by analogy to the mobile access market (ex-market 15) that the 3 criteria are unlikely to be met in general.

In respect of the NGA Wholesale access market it is not obvious that, on a forward looking basis that entry is forestalled or that a sufficient number of operators could not establish themselves behind the barrier to entry. In particular the Commission's own proposals on cost reduction suggest that someone other than incumbent operators is likely to build new network (since it is hardly aimed at granting infrastructure owners access to their own infrastructure). The FTTH Council's own cost modelling finds that density has a material impact on the cost of roll out and the FTTH Council believes that in densely populated areas competitive roll-out is possible provided the right incentives and enablers are in place.

In the event that a competitive roll-out does not happen it appears that the question of whether or not there is sufficient competition will likely revolve around issues which have been dealt with elsewhere such as whether two network operators is sufficient<sup>20</sup>. In a nascent market with strong growth it may be that a Bertrand oligopoly dynamic asserts itself as the equilibrium and that the second criterion would be fulfilled. However, a case by case analysis would be needed to determine whether the outcome tended more to a Cournot type equilibrium or a Bertrand equilibrium. However another issue which would arise concerns a joint –dominance concept and the lack of certainty that would be involved for access seekers under such an analysis. It seems certain that in most countries that single dominance will not be found.

Therefore, it is suggested that for urban areas regulation on NGA networks should be withdrawn and that outside these urban areas an enhanced NGA bitstream access product would be appropriate.

**Question 8: If the answer to the previous question is yes, please specify the qualitative and quantitative impact of such changed scope on consumers (users), competition, and development of the internal market. Please provide separate reasoning for each market subject to a new scope.**

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<sup>20</sup> See for example: OPTA Economic Policy Note, no. 6, September 2006 'Is two enough'

For the putative Wholesale NGA enabled Access market it is contended that the impact on consumers would be none in the short term. Today, alternative operators avoid NGA access remedies to an extraordinary extent. Wik in a study for ECTA<sup>21</sup> found that incumbent operators had close to 100% of the NGA retail broadband market. Nevertheless, NGA retail access products were largely aimed at cable competitors. Over time it can be expected that the withdrawal of this market (for urban areas) from the Recommendation would crystallise alternative operator's plans to invest in the medium term while removing lingering uncertainty from the existing operator's investment plans.

Provided the necessary enablers are in place in terms of facilitating alternative builds, it can be expected that competition will be deepened through additional network investments in the medium term in those areas that can support such investments while access in non-urban areas would be maintained via bitstream or enhanced bitstream obligations.

**Question 9: On the basis of the three criteria test carried out at EU level, should any of the markets listed in the Recommendation be removed from the list in the revised Recommendation? If yes, please provide comprehensive reasoning thereof.**

The FTTH Council approach sees the current markets 4 and 5 merging into a broad broadband access market. This broad wholesale access market is then sub-divided into non-NGA wholesale access and NGA wholesale access.

In the non-NGA wholesale access market, it has already been observed that by analogy to the mobile access market (ex-market 15) that the 3 criteria are unlikely to be met in general.

In respect of the NGA Wholesale access market it is not obvious that, on a forward looking basis that entry is forestalled or that a sufficient number of operators could not establish themselves behind the barrier to entry. In particular the Commission's own proposals on cost reduction suggest that someone other than incumbent operators is likely to build new network. The FTTH Council's own cost modelling finds that density has a material impact on the cost of roll out and the FTTH Council believes that in densely populated areas competitive roll-out is possible provided the right incentives and enablers are in place.

**Question 10: If the answer to the previous question is yes, please specify the qualitative and quantitative impact of such removal of markets on consumers (users), competition, and development of the internal market. Please provide separate reasoning for each market you propose to delete from the list.**

In terms of non-NGA wholesale access the FTTH Council would see a limited impact on consumers or competition. It is contended that over the next one to two years mobile and broadband will compete head to head in the lower speed (non-NGA) market. This has already been observed (and agreed by the European Commission) explicitly in the Austrian market

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<sup>21</sup> [http://ectaportal.com/en/upload/File/Press\\_Releases/2012/NGA\\_Progress\\_Report\\_final.pdf](http://ectaportal.com/en/upload/File/Press_Releases/2012/NGA_Progress_Report_final.pdf)

and implicitly in Mrs Kroes' July 12 2012 policy statement. It is contended that were LLU obligations removed in the Austrian market not much would change in fact. Already, Telecom Austria group offers copper loops much more cheaply than mandated by regulation in order to compete with mobile and indeed cable competitors in the market.

As LTE disperses across Europe and as mobile continues to play in the fixed market and to position itself as an alternative to fixed, more and more markets are behaving and will behave in a similar way to the Austrian market.

**Question 11: On the basis of the three criteria test carried out at EU level, should any of the markets regulated by NRAs on the basis of national circumstances (such as SMS termination or broadcasting transmission services) be added to the list in the revised Recommendation from an *ex ante* perspective? If yes, please provide comprehensive reasoning thereof.**

No. Please note that the FTTH Council approach sees the current markets 4 and 5 collapsing into a broad broadband access market. This broad wholesale access market is then subdivided into new non-NGA wholesale access and NGA wholesale access. This approach is suggested on the basis of demand and supply characteristic and technology changes.

**Question 12: If the answer to the previous question is yes, please specify the qualitative and quantitative impact of adding those market(s) on consumers (users), competition, and development of the internal market. Please provide separate reasoning on the impacts for each market you propose to add to the list.**

NA

**Question 13: On the basis of the three criteria test carried out at EU level, can any other markets be identified that should be added to the list in the revised Recommendation, from an *ex ante* perspective? If yes, please provide comprehensive reasoning thereof.**

No. Please note that the FTTH Council approach sees the current markets 4 and 5 collapsing into a broad broadband access market. This broad wholesale access market is then subdivided then into new non-NGA wholesale access and NGA wholesale access. This approach is suggested on the basis of demand and supply characteristic and technology changes.

**Question 14: If the answer to the previous question is yes, please specify the qualitative and quantitative impact of the relevant markets(s) you propose to add on consumers (users), competition, and development of the internal market. Please provide separate reasoning on the impacts for each market you propose to add to the list.**

NA



**Question 15: On the basis of the three criteria test carried out at EU level, can any transnational market(s) be identified in the revised Recommendation, from an *ex ante* perspective? If yes, please provide comprehensive reasoning thereof.**

No.

**Question 16: If the answer to the previous question is yes, please specify the qualitative and quantitative impact of the relevant market(s) you propose to introduce on consumers (users), competition, and development of the internal market. Please, provide separate reasoning on the impacts for each market you propose to introduce.**

NA