

ECTA's response to BEREC consultation on the draft BEREC Report on impact of fixed-mobile substitution in market definition

Executive summary

ECTA welcomes the opportunity to comment on the detailed questionnaire-based draft report of BEREC regarding the impact of fixed-mobile substitution (FMS) and the main concepts relevant for this assessment.

Our comments focus on suggestions for further improvement.

FMS and retail market definition by NRAs

The draft Report identifies an extensive list of factors that NRAs have broadly taken into account when considering the definition of the relevant market. In order to have a consistent approach to market definition in the single market it would be useful for BEREC to **identify a list key factors that all NRAs would examine** and take into due account.

Technological development will have a major impact on the characteristics, functionality and quality of broadband services. We believe that this **would merit more focus in the final Report and a more detailed analysis of the capabilities and limitations of fixed and mobile technologies both from consumers' and businesses' perspectives**. With the advent of NGA it is clear that the relative capabilities of fixed and mobile networks will further diverge going forward, as mobile networks are intrinsically shared networks in the access segment.

Given that fixed access markets are characterized by enduring and non-replicable bottlenecks, NRAs should consider that the lack of effective competition might have withheld the dynamic and competitive development of the market, suppressing consumer demand and distorting the consumer's experience and perceptions.

This aspect is **particularly important where copper networks have been partially upgraded and there is a widespread coverage by FttX but higher speeds are not being offered or they are offered at high, non-competitive retail prices** resulting in very little take-up, and/or wholesale access to the bottleneck inputs is not made available, is not fit for purpose, or is subject to discriminatory or dissuasive wholesale charges. **In such cases, NRAs should take into account the intrinsic capability of the fixed network and the type of speeds and services that would be offered if the market was competitive or more effectively regulated.**

The presence and behaviour of integrated fixed and mobile operators can be an important indicator of the complementarity rather than substitutability of fixed and mobile services. If the integrated operator offers fixed and mobile services in one bundle, this also demonstrates complementarity of fixed and mobile services. Clearly, if fixed and mobile services were viewed as substitutes they would not be offered in one package and consumers would not take up such offers.

The prevalence of triple play and quadruple play offers in a market should be duly taken into account by NRAs when considering both demand and supply side substitutability, and the analysis of the retail market should not be confined to broadband Internet access, but should also take account of the influence of bundled offers.

Wholesale market definition and potential impact of FMS on fixed market failures

If an NRA considers that fixed and mobile services might be perceived as substitutable at the retail level, a comprehensive analysis of the wholesale access market should be conducted to cross-check the conclusions reached in respect of the three criteria test in the retail market and particularly to ensure that there are no undue barriers to entry and expansion for innovative firms serving or planning to serve the retail market.

If an NRA proposes a market definition that leads to withdrawal of regulatory obligations relating to a market that is included in the Recommendation on Relevant Markets, ECTA believes that conducting the three criteria test and a full market analysis at wholesale level should in any case be required.

NRAs should take a cautious approach when analysing any potential indirect competitive constraints and including self supply in the relevant market, because these indirect constraints are in most cases only theoretical and in the absence of concrete evidence of sufficiently strong constraining effects, the inclusion of self supply will predetermine the SMP assessment – and hence risk understating the real market power of the dominant operator in the wholesale market.

The ability of mobile broadband services to indirectly constrain the pricing behaviour of dominant fixed operators is even weaker and far more remote than in the case of cable broadband services. Mobile broadband services have very different characteristics in terms of speeds, quality, product functionality, volume restrictions and prices as compared to fixed broadband services and the geographic coverage of advanced mobile networks is also far from being ubiquitous, therefore cannot be considered substitutes.

Where the predominant or increasingly relevant retail products are bundles including TV, mobile broadband will not have a constraining effect on them.

In nearly all Member States, the fixed incumbent operator also has a mobile arm, which is often largest mobile operator in the market. In such cases, mobile broadband services cannot have any remote disciplining effect on the pricing behaviour in the fixed wholesale market, since any potential switch to mobile broadband would only increase its own retail mobile revenues, which are likely to be higher than the lost fixed wholesale revenues.

It is also worth noting that **there is empirical evidence across Europe that fixed incumbents' wholesale pricing behaviour is not restrained by retail competition and particularly not by any potential mobile competition, since in several Member States there have been repeated requests by the incumbent to the NRA to increase fixed access prices**

FMS and retail market definition by NRAs

The draft Report identifies an extensive list of factors that NRAs have broadly taken into account when considering the definition of the relevant market and analyzing demand and supply side substitution. In order to have a consistent approach to FMS across Europe, it is necessary for NRAs to analyse and take into due account at least some of these key factors – highlighted below – otherwise divergent regulatory approaches risk fragmenting the single market by treating similar circumstances differently and distorting the conditions of competition, especially in fixed markets, by a flawed analysis leading to erroneous conclusions.

○ *Product characteristics, functionality and quality*

There are major differences between fixed and mobile services, notably in terms of effective download and upload speeds, restrictions on data volumes and technological capabilities.

Studies and measurements published in Austria and in the UK indicate that the downstream speed genuinely experienced by users of 3G mobile Internet connections does not exceed 1 Mbit/s¹. This clearly has consequences for the ability to view streaming video of adequate quality, and for the ability to download films within an acceptable timeframe. Mobile networks also suffer from poor latency, jitter and packetloss, which affects streaming media, videoconferencing, online gaming, etc.

Clearly, a mobile network cannot be used today and for the foreseeable future to deliver residential television to a standard screen size television set. A mobile network also cannot deliver Internet access with specifications that are equivalent to those of a modern fixed broadband network.

With the advent of NGA it is also clear that the relative capabilities of fixed and mobile networks will further diverge going forward, as mobile networks are intrinsically shared networks in the access segment. Even if a LTE base station will in the future be able to deliver 100 Mbps downstream, this bandwidth will be shared between all users connected to the base station, and therefore fluctuate depending on the number of users connected and their usage patterns.

The test results of Telia Sonera's LTE broadband in Finland showed that even with using 2x20 MHz spectrum in the 800 MHz band (operators typically obtain 2x5 or 2x10 MHz in that band) it provides only 36.1 Mbps in a testing environment². Once such a network is available for commercial use and consumers start using it, the test speeds cannot be reproduced but only much more modest speeds can be expected, which cannot compete with the reliable high speeds provided over fixed networks. This is confirmed by the average LTE speeds of around 10 Mbit/s provided in those countries where LTE has been commercially available and used for a while now, such as Germany and the US. Even in these countries, the LTE networks are currently at an early lightly loaded stage, because few users have LTE-capable terminal equipment.

¹ Study by Austrian Federal Chamber for Employees - Sep 2008;

Study by Epiteiro, <http://www.epitiro.com/news/epitiro-publishes-uk-mobile-broadband-research.html>

² <http://www.unwiredinsight.com/2011/teliasonera-lte>

Such speeds are not comparable from a consumer experience perspective to the 30 Mbit/s to 100 Mbit/s usually offered and actually provided already today over FttX networks and the 1 Gbit/s broadband that can be expected in the future and is already being provided in some more advanced markets such as Sweden since 2007.

In most cases, not only the actually provided mobile data speeds are limited on average to 1 Mbit/s to 10 Mbit/s (over LTE) but the data consumption offered is also capped. Mobile data caps typically vary between 50 MB through 1-2 GB up to 15 GB per month, which is reflected in the price of the subscription. By contrast, fixed broadband subscriptions mostly include virtually unlimited data and their prices are not influenced by the amount of data included.

Given that fixed access markets are characterized by enduring and non-replicable bottlenecks, NRAs should consider that the lack of effective competition might have withheld the dynamic and competitive development of the market, suppressing consumer demand and distorting the consumer's experience and perceptions. This is very likely to be the case where the fixed market is characterized by the prevalence of low speeds being offered at comparatively high prices despite the fact that the fixed network is capable of much higher speeds. This aspect is also particularly important where copper networks have been partially upgraded and there is a widespread coverage by FttX but higher speeds are not being offered or they are offered at high, non-competitive retail prices resulting in very little take-up, and/or wholesale access to the bottleneck inputs is not made available, is not fit for purpose, or is subject to discriminatory or dissuasive wholesale charges. In such cases, NRAs should take into account the intrinsic capability of the fixed network and the type of speeds and services that would be offered if the market was competitive or more effectively regulated.

Whilst advanced 4G/LTE mobile services are capable of much higher speeds than 3G/HSPA networks, the actual speeds provided to end users over existing LTE networks cannot meet those offered via FttX networks.

These significant and increasing differences show that, in terms of offer characteristics, service functionality and quality, fixed and mobile data offers cannot be considered substitutes (perhaps with the exception of very low end 1-2 Mbit/s basic, single broadband offers).

- ***Market structure, strategy and trends***

In addition to product characteristics, NRAs should also take into due account the existing and foreseeable structure of the market, the strategic behaviour of the operators present, and market trends.

The presence and behaviour of integrated fixed and mobile operators can be an important indicator of the complementarity rather than substitutability of fixed and mobile services.

For example, the fact that an integrated operator invests in the deployment and upgrading of both its mobile and fixed networks suggests that it views its fixed and mobile services as complementary and for both of which there is consumer demand. If

the integrated operator considered that mobile services were a substitute for its fixed services, the rational behaviour would be to invest in upgrading only its mobile network and not to make any, more expensive fixed investments.

If the integrated operator offers fixed and mobile services in one bundle, this also demonstrates complementarity of fixed and mobile services. Clearly, if fixed and mobile services were viewed as substitutes they would not be offered in one package and consumers would not take up such offers.

When assessing FMS on a forward looking basis, NRAs should also take into due account investment plans to deploy FTTx networks. Such investment plans are essential in the assessment of FMS not only in case of an integrated fixed and mobile operator, which shows that these services are considered to be complementary, but also indicates that further divergence in the capabilities of fixed and mobile services can be expected.

- **Bundles**

As mentioned above, if mobile services are offered in one bundle with fixed services, this is indicative of them being complements and not substitutes for fixed services.

NRAs should also examine the presence and take-up of fixed triple play offers, which are increasingly the leading fixed products in several markets. Where the market trend shows that consumers tend to subscribe to triple pay services including TV, mobile services cannot be considered substitutes for such bundles, because they cannot effectively be provided over a mobile network.

The prevalence of triple play and quadruple play offers in a market should be duly taken into account by NRAs when considering both demand and supply side substitutability, and the analysis of the retail market should not be confined to broadband Internet access, but should also take account of the influence of bundled offers. On the supply side, NRAs should assess whether such bundles can be readily provided by competitors including the regulatory, technical and pricing barriers to the replication of bundles. Fact of the matter is that very few NRAs have mandated multicast wholesale broadband access, and the absence thereof prevents competitors from making nation-wide offers for bundles which include television.

Wholesale market definition and potential impact of FMS on fixed market failures

In most cases, NRAs have correctly reached the conclusion that fixed and mobile services are not substitutable at the wholesale level due to several reasons including those highlighted above. In Austria, however, the NRA concluded that mobile broadband connections were substitutes for DSL (including VDSL) and cable connections in the *residential retail* market. Based on this finding at the retail level, the NRA chose to refrain from properly defining and analysing the wholesale broadband access market (e.g. it did not conduct the three criteria test at wholesale level and did not properly examine demand and supply side substitutability in the wholesale market).

- ***Wholesale market should be properly analysed even if FMS is found on the retail market***

If a thorough demand and supply side substitutability analysis is carried out taking due account of all the relevant factors described above and in the draft BEREC Report, the conclusion of NRAs should be the acknowledgment of the fact that fixed and mobile services are not substitutes but complements.

Even if an NRA considers that fixed and mobile services might be perceived as substitutable at the retail level, a comprehensive analysis of the wholesale access market should be conducted to cross-check the conclusions reached in respect of the three criteria test in the retail market and particularly to ensure that there are no undue barriers to entry and expansion for innovative firms serving or planning to serve the retail market.

The Commission also stated the requirement for a proper analysis at the wholesale level in its Second Phase letter to the Austrian NRA: “...*the definition of the wholesale broadband access market should also include a substitutability test carried out at the wholesale level*”.

In addition, if an NRA proposes a market definition that leads to withdrawal of regulatory obligations relating to a market that is included in the Recommendation on Relevant Markets, ECTA believes that conducting the three criteria test and a full market analysis at wholesale level should in any case be required.

At the wholesale level, the demand to be examined is the demand of seekers/takers of the wholesale input, i.e. that of the existing and of potential alternative operators, and not that of end-users.

There is explicit demand for fit-for-purpose wholesale broadband access from alternative operators and business service providers. The demand of competitors, reflecting demands of customers at retail level, is for wholesale broadband access offers which address the different residential and business needs of customers, i.e. triple play capable bitstream access for residential consumers (including multicast capability to ensure that IPTV streams can be carried economically) and business grade bitstream access to serve domestic and multinational corporations (including the ability to provision multiple VLANs, appropriate service level agreements on repair for business-critical services, etc.).

An asymmetry also exists between fixed and mobile. The mobile operators can enter the fixed market easily where there is ex ante regulation whereas fixed operators cannot so easily enter the mobile market because of the entry barriers of (1) spectrum scarcity and (2) discrimination in call termination pricing between own-use and third party operators, giving MNOs a structural advantage³.

³ This statement cannot be attributed to earlier entrants to the mobile market, but represents the views of all other ECTA members.

- **Indirect competitive constraints**

In principle, a competitive retail market could conceivably have an indirect disciplining effect on the pricing behaviour of the dominant provider in the upstream market if it is sufficiently strong and might constrain the degree of dominance upstream.

NRAs should be very careful, however, when analysing any such potential indirect constraints and including self supply in the relevant market, because these indirect constraints are in most cases only theoretical and in the absence of concrete evidence of sufficiently strong constraining effects, the inclusion of self supply will predetermine the SMP assessment – and hence risk understating the real market power of the dominant operator in the wholesale market.

Some NRAs have taken into account the potential indirect constraints from cable in their market analysis, which was seriously criticised by the European Commission and ECTA because the indirect constraints were only assumed, in reality they were weak and were incorrectly considered at the early stage of market definition rather than during the SMP analysis.

When commenting on indirect constraints in case UK/2007/0733, the Commission noted that *"Ofcom appears to consider sources of indirect constraint at the wholesale market definition stage of the analysis because of a perceived risk of market power being overstated if indirect constraints are not included in the relevant market. Conversely, however, if weak constraints are automatically taken into account at the market definition stage, then there is also a risk of prejudging the SMP assessment and understating the real extent of market power at the wholesale level by including self-supplied market shares for all vertically integrated competitors irrespective of whether they are actually constraining the market behaviour of the incumbent."* (emphasis added)

In Case CZ/2008/0797, the Czech NRA took into account indirect constraints at the SMP assessment stage when analysing the wholesale broadband access market. The Commission noted that *"because any price increase at the wholesale level is diluted when it is passed through to the retail level, substitution may occur on a smaller scale in response to the smaller retail price increase. This however depends on the degree of customer responsiveness at the retail level. Thus, caution should be afforded when interpreting indirect constraints stemming from the retail level."*

The Commission also observed in its comments letter of 22 December 2005 regarding WBA in Austria: *"Considering the limitations as regards direct substitutability, TTK bases its finding of a single wholesale market for DSL and cable-based bitstream products mainly on an assumed indirect pricing constraint derived from substitutability between cable and DSL at the retail level. The Commission considers that such an indirect competitive constraint should not have been taken into account at the stage of the definition of the relevant market."* The Commission concluded that in case of a DSL only market definition TA's market share would have been much higher, around 87%.

The ability of mobile broadband services to indirectly constrain the pricing behaviour of dominant fixed operators is even weaker and far more remote than in the case of cable broadband services.

First of all mobile broadband services have very different characteristics in terms of speeds, quality, product functionality, volume restrictions and prices as compared to fixed broadband services, and therefore cannot be considered substitutes.

Where the predominant or increasingly relevant retail products are bundles including TV, mobile broadband will not have a constraining effect on them.

Even in case a market is dominated by single broadband offers and advanced 4G/LTE services are being deployed, the higher speed mobile services are not only not substitutes for fixed broadband due to their characteristics but the geographic coverage of advanced mobile networks is also far from being ubiquitous.

In nearly all Member States, the fixed incumbent operator also has a mobile arm, which is often largest mobile operator in the market. In such cases, mobile broadband services cannot have any remote disciplining effect on the pricing behaviour in the fixed wholesale market, since any potential switch to mobile broadband would only increase its own retail mobile revenues, which are likely to be higher than the lost fixed wholesale revenues.

It is also worth noting that there is empirical evidence across Europe that fixed incumbents' wholesale pricing behaviour is not restrained by retail competition and particularly not by any potential mobile competition, since in several Member States there have been repeated requests by the incumbent to the NRA to increase fixed access prices and there have been no voluntary price reductions whatsoever. In the context of the current debate on fixed access costing methodologies, it is clear from the positions taken by incumbent operators that their approach to setting wholesale access prices is not constrained in any way by retail competition and can be expected to be even less constrained going forward.

Therefore, NRAs should exercise significant caution if they analyse and assess potential indirect pricing constraints from mobile services and should rigorously follow the self supply test set by the European Commission, i.e.:

- (i) ISPs would be forced to pass a hypothetical wholesale price increase on to their consumers at the retail level based on the wholesale/retail price ratio;
- (ii) There would be sufficient demand substitution at the retail level to retail services based on indirect constraints such as to render the wholesale price increase unprofitable;
- (iii) The customers of the ISPs would not switch to a significant extent to the retail arm of the integrated hypothetical monopolist, in particular if the latter does not raise its own retail prices.⁴

⁴ http://www.erg.eu.int/doc/berec/bor_10_09.pdf page 9