

BEREC response to the EC public consultation on the review of the Recommendation on Relevant Markets

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1. EXECUTIVE SUMMARY

This document is the BEREC response to the public consultation on the review of the Recommendation on relevant markets launched by the European Commission on 15 February 2019.

BEREC considers as **relevant trends** to take into account for the review of the Recommendation on relevant markets the following: the increasing deployment of NGA access infrastructures, the corresponding progressive migration from copper to high speed capacity broadband, the importance of bundling strategies applied by operators, the question of fixed-mobile convergence, and the increasing use of OTT services.

On **termination markets (markets 1 and 2)**, the future introduction of a European termination *eurorate* reduces the need for NRAs to conduct market analyses at a national level. However, BEREC points out that, besides the *eurorate*, other remedies (especially access, transparency and non-discrimination) can be essential to ensure effective competition in markets downstream of the termination markets. To the extent that the Commission provides sufficient guidance on how NRAs could address these issues, notably by applying other provisions in the European Electronic Communications Code different from SMP regulation, BEREC would not oppose the deletion of Markets 1 and 2 from the list of relevant markets.

Regarding **broadband connectivity markets**, BEREC considers that, looking forward, high and non-transitory entry barriers will still be observed for these markets in the majority of Member States. For this reason, BEREC considers that markets 3a (WLA), 3b (WCA) and 4 should all remain in the list of markets susceptible to ex ante regulation in the revised Recommendation.

Regarding the potential merging of markets 3a and 3b, substitutability among wholesale products in these markets is largely determined by how the technical characteristics of the product and the localisation of the point of handover affect the access seeker and the access network operator, thus a case-by-case approach appears to be required when performing such substitutability analysis. Although ACM recently defined a single market for wholesale fixed access (WFA), a general tendency for such a wider market definition across the EU is not observable at this stage. Considering this, BEREC concludes that, as a starting point for NRAs' analyses, WLA and WCA should be assessed as separate markets. BEREC would in any event welcome guidance on which factors might be useful to consider for the purposes of determining whether there is a case for defining a broader wholesale fixed access (WFA) market, encompassing both WLA and WCA.

Regarding **other markets to be added to the revised Recommendation**, BEREC does not, at this time, consider that it is appropriate for the Commission to include the wholesale market for access to physical infrastructure, as this would oblige all NRAs to undertake an analysis that would, in many cases, offer little if any material benefit. However, BEREC considers that it would be very desirable if the Explanatory Note to the Recommendation contains some reflections on this issue and explicitly notes that, given recent trends in some Member States, it may be appropriate or even necessary for some NRAs to consider defining and notifying an additional separate market for wholesale access to physical

infrastructure.

Finally, as NRAs have not yet defined **transnational markets** and no concrete cases have been put forward, BEREC cannot make a judgement on any potential transnational market that should be added to the Recommendation.

2. INTRODUCTION AND OBJECTIVES

The Recommendation on relevant markets was last reviewed in 2014¹. As stated under Article 64(1) of the European Electronic Communications Code (EECC), the European Commission (EC) shall adopt by December 2020 a new revised Recommendation on relevant product and service markets.²

The EC has started the review process, opening a consultation on the review of the Recommendation on relevant markets, launched on 15 February 2019.³ As stated in the EECC, the EC shall take the utmost account of the opinion of BEREC when preparing the new Recommendation.

This document is the BEREC response to this consultation, as approved in the 39th BEREC Plenary that took place on 12-14 June 2019 in Ghent (Brussels). The document is organised around the key issues addressed in the public consultation. Section 3 addresses relevant technological and regulatory trends. Termination markets (markets 1 and 2) are addressed in section 4. Section 5 develops BEREC's views on broadband connectivity markets (markets 3a, 3b and 4), while section 6 focuses on the market for access to physical infrastructure. Finally, section 7 and section 8 deal with other markets to be potentially added to the revised Recommendation, as well as with transnational markets.

BEREC would like to express its availability and willingness to collaborate with the EC throughout the process of the review until the Recommendation finally comes into force. In this context, the present response should be considered as an initial step in this process of collaboration with the EC.

¹ Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services

² *“After public consultation including with national regulatory authorities and taking the utmost account of the opinion of BEREC, the Commission shall adopt a Recommendation on Relevant Product and Service Markets (‘the Recommendation’). The Recommendation shall identify those product and service markets within the electronic communications sector the characteristics of which may be such as to justify the imposition of regulatory obligations set out in this Directive, without prejudice to markets that may be defined in specific cases under competition law. The Commission shall define markets in accordance with the principles of competition law. The Commission shall include product and service markets in the Recommendation where, after observing overall trends in the Union, it finds that each of the three criteria listed in Article 67(1) is met. The Commission shall review the Recommendation by 21 December 2020 and regularly thereafter”.*

³ <https://ec.europa.eu/digital-single-market/en/news/consultation-revision-recommendation-relevant-markets>

3. RELEVANT TECHNOLOGICAL AND REGULATORY TRENDS

5.1.1 What are the technological developments in the electronic communications sector at the EU level that may influence how the markets should be defined in the upcoming Recommendation?

5.1.2 What are the changes in the structure and functioning of the relevant markets (such as 5G deployment, bundling, convergence, possible competitive constraints of OTTs, etc.), that may have an influence on how the markets should be defined in the upcoming Recommendation?

- **The NGA Environment**

The progressive rollout of Next Generation Access network infrastructures is relevant for the evolution of electronic communications markets, particularly from an investment and competition standpoint.

The 2016 BEREC report “*Challenges and Drivers of NGA-rollout and Infrastructure Competition*”⁴ (the ‘**2016 BEREC Report**’) identifies the role played by incumbent operators alongside alternative network operators in NGA rollout. Specifically regarding cable networks and alternative FTTP networks, the 2016 BEREC Report considers their presence as a driver for NGA rollout, both through their infrastructure deployment and by way of their market presence, triggering NGA investment by the incumbent as well.

Different countries implemented varying measures to promote NGA investment. In various instances, state aid has been a relevant factor, particularly when it comes to NGA rollout in rural areas or areas with a low population density. While national experiences vary, the results obtained generally suggest positive developments in terms of NGA deployment. Some countries have also encouraged co-investment practices to facilitate and accelerate the rollout of NGA, such as in the case of Spain, Portugal, Italy and France.

BEREC considers that co-investment can play an important role in the pursuit of high-speed connectivity and that this is a relevant factor for NRAs when carrying out their market analysis. From a market definition point of view, co-investment is not likely to change the product market definition for fixed broadband markets. However, co-investment can affect competition dynamics, which means that the potential competitive outcomes resulting from co-investment have to be assessed by the NRAs, including the potential impact on issues such as the geographical scope (or segmentation) of markets⁵ and the conditions of

⁴ “Challenges and drivers of NGA rollout and infrastructure competition”. BoR (16) 171. June, 2016. Available at https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/6488-berec-report-challenges-and-drivers-of-nga-rollout-and-infrastructure-competition

⁵ On geographical segmentation, see the recently published “BEREC Report on the application of the Common Position on geographic aspects of market analysis”. BoR (18) 213. December 2018. Available at https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8308-berec-report-on-the-application-of-the-common-position-on-geographic-aspects-of-market-analysis

competition observed nationally and sub-nationally.

The 2016 BEREC Report referred to above also underlines that the type of NGA rollout, fibre to the premise (FTTP) or fibre to the cabinet (FTTC), is often “path dependent”, in the sense that it depends on the characteristics of the legacy copper access network and available civil infrastructure. In particular, the 2016 BEREC Report adds that when ducts and / or poles are available, investment in FTTP would be more likely to materialise, given the significantly reduced deployment costs. In fact, the cost of deploying physical infrastructure, such as ducts and poles, represents a very significant proportion of the investment in NGA networks.

When, on the other hand, duct and poles access is not available, investment in FTTC may be materialised with the deployment of VDSL and vectoring technologies, if and where the last segment of the copper access network and its structure would allow for this. BEREC acknowledges that the rollout of FTTP can be challenging, particularly when deployment has to take place closer to the end-user (e.g. in the form of FTTH). Such a process could entail substantial changes in competition dynamics and, hence, requires closer supervision by NRAs regarding market power and to ensure wholesale access when needed. BEREC considers that, generally speaking, migration to NGA networks has not fundamentally changed the bottleneck characteristics of broadband access networks, since high barriers to entry persist in most countries. Hence, SMP regulation remains an important tool in many EU countries.

Notwithstanding investment by incumbents and alternative operators, BEREC notes that NGA deployment has not been uniform across the EU, with different competitive outcomes observed across different countries and sometimes even at the regional level. Also, most NRAs in the European Economic Area (EEA) currently regulate access to physical infrastructure in the context of the market for wholesale local access provided at a fixed location (Market 3a). Some NRAs also regulate access to physical infrastructure in Market 3b or Market 4⁶. Further considerations on the possibility of defining a market for access to physical infrastructure are presented in section 6 and are analysed in the BEREC Report on Access to physical infrastructure in the context of market analyses⁷.

Another important consideration related to NGA infrastructure-based competition, and the presence of incumbent operators alongside alternative network operators, is the possible finding of varying degrees of competition in different areas, which might lead to the delineation of subnational geographical markets.

- **Migration to high capacity broadband**

BEREC notes the on-going migration of end-users from legacy networks (e.g. copper and non-upgraded cable networks) to NGA networks that are capable of supporting higher capacity broadband. In itself, this migration suggests asymmetric substitution away from services provided on the legacy networks to very high capacity broadband services provided by NGA networks, but not in the other direction. On the one hand, a clear break of

⁶ See “BEREC Report on Access to physical infrastructure in the context of market analyses”. BoR (19) 44. June 2019. Available at www.berec.europa.eu

⁷ Ibid footnote 3

substitution between low and high bandwidth services was commonly not observed by NRAs so far. On the other hand, in some countries the development of demand patterns suggests that such a break of substitution may happen. Therefore, the explanatory note of the recommendation should allow for NRAs to define product markets reflecting the state of development in their national markets.

- **Bundling trends**

The bundle penetration rate has continued to rise in recent years, with substantial growth observed in the number of end-users combining their purchase of fixed broadband along with other services in a bundled package⁸, for instance including fixed telephony and TV services. Also of note, in the context of convergence, is the growing rate of mobile services being included in bundles with fixed services in many countries.

Therefore, BEREC considers that when defining wholesale ECS markets, NRAs should be able, when relevant, to take into account the technical and economic replicability of all the key retail elements within the bundle components that are not provided on an effectively competitive basis. Ultimately, the Recommendation should be flexible enough to allow NRAs to define a bundle market if it is relevant for their national market.

- **Fixed and mobile substitution**

Increasing convergence of fixed and mobile services remains a relevant consideration in the definition and analysis of electronic communications markets. However, BEREC remains of the opinion that, looking forward, mobile broadband is, in general, unlikely to compete directly against high-speed fixed broadband. In particular, despite advances in technology that have enabled faster access speeds, driven by the rollout of LTE, capacity often remains limited and, consequently, mobile broadband is often offered with usage caps, especially in bundled offers.

Given the above, market monitoring remains key, in particular for retaining awareness of the differences between fixed and mobile data consumption, the extent of heterogeneity of fixed broadband and mobile broadband plans (in the case of the latter related to download / upload speeds and data capping), or relevant price developments. Future technology developments are another consideration when assessing competition dynamics, such as the deployment of 5G. To guarantee that the 5G service provided will be of a high quality, mobile operators will need to ensure that backhaul to connect base stations is up to the task of undergirding 5G performances, notably in terms of speed and latency, and may need in most cases fibre backhaul. This could in turn give rise to an increased demand for local

⁸ According to the Special Eurobarometer 462 on E-Communications and Digital Single Market published on July 2018, *“almost six in ten EU households (59%) purchase bundled communication services (packages that combine two or more services for one overall price). This is an increase of nine percentage points since the previous survey in 2015, and a 21-point increase since 2009.”* See <https://publications.europa.eu/en/publication-detail/-/publication/57889a55-8fb6-11e8-8bc1-01aa75ed71a1/language-en>

access to fibre. Within this framework the appropriate regulatory tools should also be provided by the European Commission: securing backhaul access to alternative operators may specifically be crucial for the roll-out of 5G.

- **OTTs**

BEREC acknowledges that internet-related communications paths / means, such as 'over-the-top' (OTTs) communication services⁹, have emerged as a potential competing force to "traditional" (i.e. non-OTT) electronic communications services. It therefore understands that such services may provide, on a forward-looking basis, partial or full substitutes to some of the "traditional" ECS at the retail level.

However, BEREC notes that, currently, the indirect constraints these OTT services exert on the wholesale markets are to be analysed only when relevant, i.e. particularly for markets 1 and 2. Indeed, BEREC recalls that OTTs require access supported by infrastructure provided by ECS providers, but do not provide Internet access services themselves and therefore do not generally exercise direct nor indirect competitive pressure on wholesale access markets (current markets 3a, 3b and 4).

Furthermore, the key bottlenecks identified in the current Recommendation¹⁰ will remain the same, despite the increasing competitive pressure stemming from the applications at the retail market level. Thus, even if OTT communications services increasingly alter the competitive situation on some of the retail markets, they still rely on (local) access, and are unlikely to significantly modify the competitive situation on the main regulated wholesale markets.

5.1.3 Legal/regulatory developments that may have an influence on how the markets should be defined

To a certain extent, the European Electronic Communications Code (EECC) will have an impact on the list of relevant markets that would feature in the future Recommendation. In this regard, various factors will play a part, such as the introduction of a new general objective of connectivity and access to VHCN (Article 3). Other relevant provisions are the introduction of EU-wide termination rates, as set out in further detail below, the extended possibility of symmetric regulation introduced in Article 61 (3) of the EECC and Article 72 of the EECC on access to civil engineering.

Article 61 (3) allows NRAs to meet certain regulatory needs that otherwise would have to be addressed by the upcoming Recommendation on relevant markets, such as the need for regulatory intervention on a more symmetric level to address the emergence of local fibre bottlenecks.

⁹ The focus here is on OTT services that qualify as an ECS under the new definition provided in the Code.

¹⁰ Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

4. TERMINATION MARKETS

5.3.1.1 Market 1 – On the basis of the three criteria test, should the market for wholesale call termination on individual public telephone networks provided at a fixed location listed in the 2014 Recommendation be removed from the list in the revised Recommendation?

5.3.1.2 Please explain.

5.3.1.3 Market 2 – On the basis of the three criteria test, should the market for wholesale voice call termination on individual mobile networks listed in the 2014 Recommendation be removed from the list in the revised Recommendation?

5.3.1.4 Please explain.

BEREC points out that the EECC requires the Commission to adopt a delegated act setting maximum fixed and mobile voice call termination rates (Eurorate) in the EU by 31 December 2020 (cf. Article 75), which reflects the fact that ex ante price regulation of these termination markets is deemed necessary – and that such regulation should be harmonised at the EU level. This possibility arises in order to “*reduce the regulatory burden in addressing the competition problems relating to wholesale voice call termination consistently across the Union*” (cf. recital 196 of the EECC). The objective of Article 75 to reduce the regulatory burden for NRAs may suggest that NRAs need not conduct a market analysis on Markets 1 and 2.

In this scenario, BEREC remains concerned by possible side effects that the removal of Markets 1 and 2 from the list in the revised Recommendation could have for some Member States regarding other types of remedies which are imposed today (for instance to ensure the effectiveness of interconnection between operators). Indeed, as the Commission mentioned in its public consultation, current NRAs’ practices in the analyses of Markets 1 and 2 lead to a full set of remedies not limited to price control, whereas the delegated act only includes a single maximum Union-wide mobile and fixed voice termination rate. Therefore, considering that the delegated act of the EC is to be limited to this specific type of remedy, BEREC considers that the removal of Market 1 or 2 from the list in the revised Recommendation should not necessarily lead to a withdrawal of important non-tariff remedies currently implemented by several NRAs in the EU. In fact, besides the Eurorate, other remedies (especially but not limited to access, transparency and non-discrimination) could be necessary to ensure effective competition in markets downstream of the termination markets. This is because in certain cases, even in the presence of a Eurorate, operators could provide access under discriminatory (quality-wise) or under non-transparent conditions (especially when these services are provided to small operators). Similar issues can arise regarding ancillary services, such as co-location or interconnection kits. In addition, there could be situations where these issues require an asymmetric regulation (closure/move of points of interconnection, reference offer, transition to IP interconnection). NRAs should still have the possibility to impose such obligations; in this regards it is necessary to analyse if the EECC offers a conclusive answer in this matter.

Also, in light of the above, BEREC considers that provisions of the EECC, other than the

articles related to SMP regulation, could be useful tools in order to prevent any such shortcomings from materialising. In particular, Article 61(1) and 61(2) empower NRAs to impose symmetric obligations related to interconnection¹¹. Furthermore, dispute settlement provisions contained in Article 26 may be an additional tool at the disposal of NRAs to limit negative effects arising from the deregulation of the termination markets.

Therefore, if the Commission intends to withdraw these markets from the list, it would be indispensable that the Explanatory Note to the Recommendation contains some reflections on the way in which such non-SMP based provisions could be applied in order to ensure that, if deemed necessary, non-price related obligations applicable to termination may remain in place.

In any case, BEREC also recalls that, depending on national circumstances, Article 67(1) allows NRAs to impose regulatory obligations if it finds that each of the three criteria listed therein is met for a market not included in the list of relevant markets. In conclusion, to the extent that sufficient guidance is provided by the Commission on how to avoid the above-mentioned side effects, BEREC would not oppose the deletion of Markets 1 and 2 from the list of relevant markets.

5. BROADBAND CONNECTIVITY MARKETS

5.2.11 *Based on their supply and demand characteristics, should market 3a and market 3b as identified in the 2014 Recommendation be considered in the upcoming Recommendation as constituting one combined market, regardless of the handover point of access?*

5.2.12 *Please explain and specify the qualitative and quantitative impact of such a combination of markets on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development*

5.3.2.1 *Market 3a – On the basis of the three criteria test, should the market for wholesale local access provided at a fixed location listed in the 2014 Recommendation be removed from the list in the revised Recommendation?*

5.3.2.2 *Please explain.*

5.3.2.3 *Market 3b – On the basis of the three criteria test, should the market for wholesale central access provided at a fixed location for mass-market products listed in the 2014 Recommendation be removed from the list in the revised Recommendation?*

5.3.2.4 *Please explain.*

- **Regarding the continued relevance of markets 3a and 3b**

¹¹ In addition, Articles 20 and 21 of the EECC, on the collection of information, could also be useful to enable NRAs to maintain a good knowledge of the cost structure.

As outlined above (section 3), coverage of various NGA infrastructures, including FTTC and FTTB/H-based access networks, has increased substantially across Europe in the past years¹². Moreover, technical developments have made it possible to supply advanced broadband solutions over cable networks where those networks are available.

The presence of multiple network infrastructures, as well as the take-up of access-based competition, specifically in upstream-markets (e.g. LLU-services), have transformed the competitive landscape. In light of such developments, many NRAs have adapted SMP regulation via:

- (i) market segmentation (by either identifying sub-national markets or imposing geographically differentiated remedies or even both)¹³; and /or
- (ii) adaptation/migration of copper-based access remedies to a fibre-based scenario, such as VULA.

Nonetheless, bottlenecks in the provision of advanced broadband access services are generally found, at least in parts of the national territory, and a large majority of Member States are therefore still applying SMP regulation to these markets. In those national instances where deregulation took place, such a regulatory approach was limited to specific, sub-national geographic areas.

Indeed, regarding WLA (Wholesale local access/ Market 3a), Member States usually found entry barriers in this market to be high and non-transitory given (i) the high sunk costs; and (ii) the amount of time needed for any potential entrant to replicate the infrastructure of an access network. In addition, given the small number and often limited geographical reach of competitors operating their own alternative infrastructure, it is unlikely that, without continued regulatory intervention, the competitive dynamics in this market will change significantly on a national scale over the foreseeable future. Conclusively, it is not expected that effective retail competition could be ensured in the absence of wholesale regulation. Given the importance of guaranteeing effective and timely network access, competition law alone is not yet deemed to be capable of addressing such entrenched bottlenecks.

Regarding WCA (Wholesale central access/ Market 3b), high and non-transitory entry barriers are also still observed in the majority of Member States and generally a tendency towards competition is neither observed nor expected. Likewise to the situation on the market for WLA, replication of access-infrastructure itself takes a long time and faces high sunk costs. At the same time, the take up of WLA, which can serve as an input for alternative operators to offer end-user products on the corresponding retail market, as well as an input for alternative WCA-offers, is often limited in terms of geographical scope and in some Member States it remains low. It is not expected that WCA services provided by WLA-

¹² See BEREC annual report 2018.

¹³ See “BEREC Report on the application of the Common Position on geographic aspects of market analysis”, p. 9 et. seq.

(https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8308-berec-report-on-the-application-of-the-common-position-on-geographic-aspects-of-market-analysis)

based entrants will develop on a national scale in the foreseeable future. Partly, this is due to the need observed in several countries to access WLA-products in low-density and rural areas. At the same time, network coverage of alternative operators often remains geographically limited. As a result, competition law alone is not deemed sufficient to address the market failures generally observed for the WCA market.

In summary, despite ongoing investment activities by incumbents and alternative operators, BEREC currently does not see a clear trend that these would lead to effective and sustainable competition in either Market 3a or Market 3b in most countries within the timeframe for which the new Recommendation will apply. BEREC therefore considers that Markets 3a (WLA) and 3b (WCA) should both remain in the list of markets susceptible to ex ante regulation in the revised Recommendation, given that the competition dynamics in these markets are unlikely to change within the timeframe for which the new Recommendation will apply.

- **Regarding the possibility of merging Markets 3a and 3b: substitutability analysis and relevance of virtualised access products**

In its consultation, the Commission notes that the 2014 Recommendation already identified a possible need to reassess the product characteristics and boundaries of wholesale broadband access markets as they were defined at that time, due to the increasing importance of virtual access products.

BEREC agrees that, at least in some countries, the relevance of virtual unbundled local access (VULA) products has increased over the past few years as a consequence of the NGA rollout, including both VDSL-Vectoring and GPON-fibre networks.

In some markets, specific VULA products might constitute an alternative for wholesale access to fibre networks where (i) physical unbundling is (at least up until now) technically and / or economically not feasible (for instance, in certain GPON point-to-multipoint architectures) or (ii) physical copper unbundling would greatly impair the possibilities for service providers to offer advanced end-user products (VDSL-vectoring). This is particularly the case in markets where regulated access to the network for both civil infrastructure and terminating segments is not deemed to be sufficient to ensure effective competition.

BEREC further notes that, although virtual products are designed to exhibit functionalities as close as possible to the key features of physical unbundling, substantial differences might remain between physically unbundled and certain virtually unbundled products. Even sophisticated Layer 2-based access products generally impose some limits on product differentiation and network control for the access seeker, which has limited control over the active network elements that are part of the access provider's network.

Since the product characteristics are largely determined by the choice of active equipment and the configuration made by the access network operator, a case-by-case approach therefore appears to be required when performing such substitutability analysis.

In this regard, BEREC refers to the importance of both the point of handover and functional characteristics of the respective products when assessing whether (i) physical and virtual unbundled access products can be considered as substitutes within the market for WLA, and (ii) the markets for WLA and WCA should be merged into a single market. It has to be pointed out that products with similar characteristics might be established at very different points of handover in the network architecture. In certain specific cases, those services might be regarded as substitutes if the product characteristics are largely similar, even though the point of handover may differ significantly. Conversely, even where handover for two access products might occur at the same location or at a similar location, the functional differences of those products, with regard to the flexibility of product differentiation, transparency of transmission and Quality of Service (QoS), may be deemed not adequately substitutable by access seekers.

In this respect, BEREC observes that some NRAs found VULA services being a substitute to LLU, while WCA products were generally not found to be a functional substitute for WLA products. Of note is that ACM defined a broad market encompassing both local and central access. In its decision ACM found that the WCA products and WLA products provide sufficiently similar functionalities and that access seekers do actually switch between those products, thus it defined a single market for wholesale fixed access (WFA). However, a general tendency for such a wider market definition across the EU is not observable at this juncture.

Therefore, whilst BEREC is of the opinion that, as a starting point, WLA and WCA should be assessed as separate markets and, thus, should remain separate in the Recommendation list, it remains possible for other NRAs to reach a similar conclusion in the future to that reached by ACM. BEREC would therefore welcome guidance (e.g. in the accompanying Explanatory Note) on which factors might be useful to consider for the purposes of determining whether there is a case for defining a broader wholesale fixed access (WFA) market, encompassing both WLA and WCA. In this regard, some of the elements mentioned by the EC in its comments letter for the Dutch case (e.g. high degree of virtualisation of wholesale access products, similar technical specifications of WLA and WCA, observed patterns of wholesale and retail demand substitution, evidence of indirect constraints, etc.) might serve as a useful starting point for making such an assessment.

5.2.9 Market 4 - Should the scope of the market for wholesale high-quality access provided at a fixed location identified in the 2014 Recommendation be changed (including, for example, combining, broadening or narrowing the scope of some of the existing markets)?

5.2.10 Please explain and specify the qualitative and quantitative impact of any proposed change in scope of Market 4 on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development of the internal market for electronic communications networks and services, and promoting the interest of the citizens of the Union in line with Article 3 of the Code.

5.3.2.5 Market 4 – On the basis of the three criteria test, should the market for wholesale high-quality access provided at a fixed location listed in the 2014 Recommendation be removed from the list in the revised Recommendation?

5.3.2.6 Please explain.

BEREC is of the opinion that Market 4 should remain a relevant market. Most NRAs found such a wholesale market to exist, with products which are distinct to those of Markets 3a and 3b in terms of quality and in some cases also in terms of bandwidth and/or points of handover. Typically, the wholesale products considered in this market are leased lines or high quality Layer-2 bitstream products, either with traditional interfaces or with Ethernet interfaces. At this moment, 75% of all NRAs (21 out of 28) found SMP in Market 4 in their last round of market analysis. It should also be noted that eight of the 21 NRAs found SMP only in a part of the market, either only for some geographic areas or only for some bandwidths (or a combination of both).

Some of the relevant questions with regard to the definition of Market 4 are the following:

- (i) Are Ethernet based leased lines in the same market as other Ethernet-based products such as high quality Layer-2 bitstream?
- (ii) Is mobile backhaul in the same market as wholesale services for the use of business connections?
- (iii) Are leased lines using traditional interfaces still relevant and part of the market, given the migration to Ethernet-based services in most countries?
- (iv) Should the market be differentiated geographically and/or according to bandwidth categories due to lack of substitution and/or insufficient homogeneity of competitive conditions?

BEREC considers that the answers to these questions heavily depend on national circumstances and consequently the Recommendation should allow sufficient flexibility in this respect.

6. MARKETS TO BE POTENTIALLY ADDED TO THE REVISED RECOMMENDATION

Wholesale access to physical infrastructure

The Commission survey notes the following:

“Wholesale access to physical infrastructure could have a great impact on the successful roll-out of new networks because it could significantly reduce the high sunk costs associated with network rollout. National Regulatory Authorities have had different approaches regarding the regulation of access to physical infrastructures and the effectiveness of those approaches could be further affected by the developments in these markets.

The current section focuses on the potential need to identify one or more market(s) for wholesale access to physical infrastructure as a relevant market in the revised Recommendation.

For the purpose of this questionnaire physical infrastructure should be understood as defined in Article 2(2) of the BCRD[1], namely, any element of a network which is

intended to host other elements of a network without becoming itself an active element of the network, such as pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations, towers and poles.

A potential inclusion of such a market(s) in the revised Recommendation would be without prejudice to the distinct possibility established by Article 72 of the Code for NRAs to impose civil infrastructure access as a necessary and proportionate remedy to address SMP found on another relevant market.

This issue should be addressed in accordance with the “Modified Greenfield approach” as defined in paragraph 17 of the 2018 SMP Guidelines, namely, that existing market conditions as well as expected or foreseeable market developments over the course of the next market review period in the absence of SMP based regulation, should be taken into account. The analysis should further take into account the effects of other types of (sector-specific) regulation, decisions or legislation applicable to the relevant retail and related wholesale market(s) during the relevant period.

For the purpose of this section, the non-SMP based regulation should be understood as a reference to, inter alia, the Broadband Cost Reduction Directive and the possibility in the Code of applying symmetric regulation of access to the physical infrastructure up to the first concentration or distribution point”

BEREC’s response addresses the following questions in Section 5:

5.4.1.1 Do you, under the modified greenfield approach, consider that one or more separate wholesale market(s) for access to physical infrastructure (or certain elements of physical infrastructure) would meet the three criteria test at the EU level? Would the regulation of such a market help to attain the objectives of Article 3 of the Code?

5.4.1.2 Please explain and specify the qualitative and quantitative impact of defining any such market on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development of the internal market for electronic communications networks and services, and promoting the interest of the citizens of the Union in line with Article 3 of the Code.

5.4.1.3 If you replied to Question 5.4.1.1 in the affirmative, how would you define the product and geographic dimension of the wholesale market for access to physical infrastructure?

5.4.1.4 In light of Article 72 of the Code, do you consider it necessary to include one or more wholesale market(s) for access to physical infrastructure in the list of relevant markets of the revised Recommendation?

5.4.1.5 Please explain and specify the qualitative and quantitative impact of defining any such market on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development of the internal market for electronic communications networks and services, and promoting the interest of the citizens of the Union in line with Article 3 of the Code.

As clearly identified in the Broadband Cost Reduction Directive (BCRD) and more recently in the EECC, and as illustrated in many Member States, access to existing physical infrastructure has the potential to substantially reduce the cost of investment in VHC networks, thereby promoting new market entry through such access availability (coverage). In general, when the incumbent owns civil infrastructure and no proper other infrastructures are available for alternative operators, the incumbent may be in a position to benefit from this asset to roll out NGA networks. To allow third-party operators to roll out NGA networks and thus enforce a level playing field, access to civil infrastructures can, in a relevant number of Member States, be of utmost importance and can be imposed as a remedy.

This benefit is recognised in the regulation of access to physical infrastructure imposed in many Member States in response to market power concerns identified in particular in Market 3a (by 25 countries) and to a lesser degree in Markets 3b and 4 (by 3 and 2 countries respectively). Several NRAs observed that operators have made significant investments in VHC networks using physical infrastructure access regulation and many NRAs consider it essential to assure this regulation in order to sustain competition in the supply of fast broadband services to end-users.

However, as BEREC noted in its report on *“Access to physical infrastructure in the context of market analyses”*¹⁴ (the **‘2018 BEREC Report’**) there are potential challenges to the existing regulatory structure and the sustainable imposition of regulation on physical infrastructure.

As noted in the 2018 BEREC Report, while there are a number of alternative ways of dealing with these challenges, it is clear that an approach based on a consideration of physical infrastructure as a stand-alone wholesale market could offer a viable approach to the establishment of upstream regulation of physical infrastructure. The 2018 BEREC Report illustrates how such a market might be defined and the various considerations NRAs may need to undertake when considering such a separate market (see Section 5.2 and Annex 2 thereof).

As set out in the 2018 BEREC Report, and as illustrated in Ofcom’s recent consultation on physical infrastructure¹⁵, BEREC considers that there will likely be national circumstances where the definition of a Physical Infrastructure Wholesale Market¹⁶ would satisfy the three criteria test. Such a wholesale market, to the degree that physical infrastructure further promotes downstream competition, could allow the potential for NRAs to deregulate more extensively downstream.

However, as also noted in the 2018 BEREC Report (p. 21), most NRAs have not consider

¹⁴ See BoR (18) 228, subject to public consultation in 6th December 2018, available at https://berec.europa.eu/eng/document_register/subject_matter/berec/public_consultations/8323-draft-berec-report-on-access-to-physical-infrastructure-in-the-context-of-market-analysis

¹⁵ “Consultation: Physical infrastructure market review” Ofcom, November, 2018. Available at <https://www.ofcom.org.uk/consultations-and-statements/category-1/physical-infrastructure-market-review>

¹⁶ The forms of physical infrastructure in such a market could be quite wide but are likely at a minimum to include duct and pole infrastructure designed to support telecoms networks.

that there was a need for market analysis specifically at the level of physical infrastructure in order to maintain any regulation on that infrastructure that was necessary to support competition in the related downstream markets. Most NRAs, even those with a strong focus on duct regulation, have been of the opinion that they could maintain the respective obligations within Markets 3a, 3b and 4.

On a different note, it is also worth indicating that there are a few countries where there is no or limited duct availability controlled by the incumbent that could be used for alternative telecommunications networks. It is acknowledged that the fact that the incumbent does not own or manage an extensive duct network does not mean by itself that there are no relevant physical infrastructures in those countries. However, for these countries, it would be very difficult to define and analyse a market for access to physical infrastructure.

Further, there are also some NRAs which currently do not regulate access to physical infrastructure as an SMP obligation at all¹⁷, either because the relevant markets are deregulated, or because other remedies/legal instruments (e.g. BCRD) are deemed to be sufficient or more appropriate.

In light of the above, BEREC does not, at this time, consider that it is appropriate for the Commission to include the wholesale market for access to physical infrastructure in the revised list of recommended markets, as this would oblige all NRAs to undertake an analysis that would, in many cases, offer little if any material benefit.

However, BEREC considers that it would be very desirable if the Explanatory Note to the Recommendation contains some reflections on this issue and explicitly notes that, given recent trends in some Member States, it may be appropriate or even necessary for some NRAs to consider defining and notifying an additional separate market for wholesale access to physical infrastructure. Such reflections could draw on the fact that some Member States have already identified the actual or potential requirement for this kind of market intervention and that the importance of stable regulation for physical infrastructure in promoting investment and sustaining competition means that, where alternative means of sustaining regulation are not fully adequate, then it could be appropriate for NRAs to consider market analysis at the physical infrastructure level.

7. Any assessment of a separate physical infrastructure market would have to meet the three criteria test and NRAs would be best positioned to determine if any physical infrastructure remedies that are deemed appropriate and proportionate would be more appropriately imposed in a market review associated with another one of the markets on the current list or

¹⁷ See 2018 BEREC Report, p. 7.

following the definition of a separate market for physical infrastructure. OTHER MARKETS TO BE ADDED TO THE REVISED RECOMMENDATION

5.4.2.1 *On the basis of the three criteria test, should any other market(s) be added to the list in the revised Recommendation?*

5.4.2.2 *Please explain and specify the qualitative and quantitative impact of defining any such market on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development of the internal market for electronic communications networks and services, and promoting the interest of the citizens of the Union in line with Article 3 of the Code.*

BEREC has not identified any other market to be added to the list of relevant markets.

8. TRANSNATIONAL MARKETS

5.5.1 *On the basis of the three criteria test carried out at EU level, can any transnational market(s) be identified in the revised Recommendation?*

5.5.2 *Please explain and specify the qualitative and quantitative impact of defining any such market on promoting connectivity and access to, and take-up of, very high capacity networks, promoting competition in the Digital Single Market, contributing to the development of the internal market for electronic communications networks and services, and promoting the interest of the citizens of the Union in line with Article 3 of the Code.*

To date, NRAs have not defined transnational markets because the technical capabilities of networks are still considered as national, rather than transnational. However, as traditional electronic communications services compete more and more with services unbundled from the provision of a network, questions about the geographic scope of the markets and, hence, about the need to define transnational markets, may arise in the future. BEREC cannot however make a judgement on any potential impact as of yet because no concrete cases have been put forward.