

**BEREC Report on the outcome of the
public consultation on the Draft BEREC Report
on the regulatory treatment for fixed and
mobile backhaul**

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1. INTRODUCTION

This report summarises the responses provided by the stakeholders during BEREC's public consultation on the "Draft BEREC Report on the regulatory treatment for fixed and mobile backhaul",¹ as well as BEREC's views on the issues raised by the respondents. The Draft report was open to public consultation from 4 October to 5 November 2021.

11 respondents contributed to the public consultation, namely:

1. BREKO, German Broadband Association - Germany
2. Open Fiber - Italy
3. Liberty Global - The Netherlands
4. FTTH Council Europe - Belgium
5. European Competitive Telecommunication Association (ECTA)
6. European Telecommunications Network Operators' Association (ETNO)
7. European Local Fibre Alliance (ELFA)
8. Deutsche Telecom - Germany
9. GasLINE GmbH - Germany
10. Deutsche Glasfaser Holding - Germany
11. Vodafone Group.

Comments, observations and recommendations raised by the respondents are summarised here below and BEREC's views are presented in separate boxes. The report is organised according to the sections of the Draft Report submitted to public consultation.

This Report complements the final BEREC Report on the regulatory treatment for fixed and mobile backhaul². Both reports are published simultaneously.

¹ BoR (21) 129, "Draft BEREC Report on the regulatory treatment of fixed and mobile backhaul" See https://berec.europa.eu/eng/news_consultations/Closed_Public_Consultations/2021/9077-public-consultation-on-the-draft-berec-report-on-the-regulatory-treatment-for-fixed-and-mobile-backhaul

² BoR (22) 33, "BEREC Report on the regulatory treatment of fixed and mobile backhaul" See https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/10205-berec-report-on-the-regulatory-treatment-for-fixed-and-mobile-backhaul

2. GENERAL COMMENTS

In this first section, BEREC presents and provides feedback on general comments expressed by the stakeholders.

Liberty Global supports BEREC's intention to continue monitoring the regulatory treatment for fixed and mobile backhaul in the next coming years, considering that such a position can ensure the coherence of future decision-making on the national level, as well as its adherence to the principles of appropriateness, proportionality and of technology neutrality. According to **Liberty Global** there is still a need for a harmonized application and interpretation of applicable rules, specifically as regards methods of analysis and potential remedies, whilst national circumstances diverge and may merit different approaches.

ETNO considers that at present, the current regulatory framework (the European Electronics Communications Code, EECC and the Broadband Cost Reduction Directive, BCRD) has the necessary instruments and obligations to address any competition issues that may arise in the future. **ETNO** does not consider the potential regulation of mobile backhaul to be justified nor proportionate, as allegedly no competitive issues have been identified in the relevant retail market that would request to consider backhaul as a relevant market susceptible to regulation. **ETNO** is concerned that letting fixed access regulation interfere with competition on the mobile infrastructure markets, while there is no related retail market defined or analysed, might constitute a serious risk of market distortion in the mobile markets.

From **ELFA's** point of view, fibre connections for 5G base stations is a functioning market and **ELFA** considers that the imposition of regulation on this market segment would distort the existing balance regarding negotiation power. Seeking regulatory instead of negotiated solutions, would most likely, according to **ELFA** cause a significant delay on the connection of 5G base stations.

BREKO considers that new regulatory measures pertaining to backhaul infrastructures should allow sufficient time for recently implemented legislative initiatives such as the EECC, the Recommendation on Relevant Markets (RRM) and the BCRD currently under revision, to take their course and be effectively applied before any new market interventions are prematurely introduced.

Deutsche Telekom believes that only if there are proven severe, national competitive problems, NRAs could have extended regulation to mobile backhaul. **Deutsche Telekom** considers that the facts assembled in this report show that there are no such circumstances present.

GasLINE points out that, at least with regard to the dark fibre infrastructures it offers, there has been and will be no need for regulatory intervention.

ECTA's position is that regulation of backhaul is likely to be necessary in certain circumstances, but regulation of an operator with SMP does not have to mean action to push down its wholesale prices; it can also be action to prevent operators with SMP from undermining the businesses of emerging competitors, for whom backhaul is an important part of their business case.

According to **ECTA**, the supply of backhaul may well be sufficient and competitive in some areas in some EU Member States today, but certainly not on a nation-wide basis throughout each Member State in the EU. Also, BEREC and NRAs should not proceed from the assumption that mobile retail markets are competitive on a general basis. A modified greenfield approach always needs to be taken, examining markets properly. This could in future lead to findings that fixed-mobile integrated retail markets, or even stand-alone mobile retail markets, do not, or no longer, tend towards effective competition, for instance due to a dearth of relevant fit-for-purpose backhaul provided on a competitive basis to the existing and new locations where backhaul is required.

BEREC's response:

BEREC agrees with **Liberty Global** on the need to continue monitoring the evolution of backhaul use and needs, and – as expressed in section 7 – BEREC plans to do so with a special focus on backhaul use and needs for 5G deployment and the application of the new recommendation on relevant markets that entered into force in December 2020 with the aim of facilitating coherence of future decision-making on the national level.

On **ETNO, BREKO, GasLINE, ELFA and DT** comments, BEREC would like to remark that the general situation at the European level analysed in the report should not be directly applied to national level. The situation for each country may differ. When applying the three criteria test, NRAs may detect situations calling for regulation in case competition problems at the fixed and/or mobile retail level would arise absent regulation on backhaul. Conversely, an analysis at the national level may show that the supply of backhaul may be sufficient and competitive in the country, and that a regulatory intervention would not be justified. In this regard, BEREC agrees with the specific comment raised by **ECTA** on different situations depending on the national circumstances.

To summarise, BEREC is not promoting any general extension of the intervention to regulate backhaul, but takes account of national circumstances to carry out the analysis and adapt the scope of the intervention accordingly. According to BEREC opinion on the draft recommendation on relevant markets³, in some countries, for instance, there is a need for regulated services for mobile backhaul, especially in the light of the expected massive deployment of 5G networks. Thus, regarding 5G, BEREC considers that the analysis should be forward-looking and takes account of the need to deploy new base stations to implement these technologies.

BEREC agrees with **ECTA** on that the potential of undermining of the business of emerging competitors on backhaul via anti-competitive practices, should be part of the regulatory analysis.

³ “BEREC Opinion on the European Commission's Draft Recommendation on relevant product and service markets susceptible to ex-ante regulation” BoR (20) 174. October 2020. See: https://berec.europa.eu/eng/document_register/subject_matter/berec/others/9411-berec-response-to-the-public-consultation-on-the-digital-services-act-package-and-the-new-competition-tool

3. COMMENTS ON CHAPTER 3– EU LEGAL FRAMEWORK FOR BACKHAUL

BREKO considers that the backhaul market, in particular mobile backhaul and fiber-based connections of 5G base stations, is a functioning market that should under no circumstances be distorted by additional regulation. **BREKO** believes that -given that currently there is a functioning market structure which tends towards effective competition- mobile backhaul markets in particular should not be considered as potentially falling within the scope of ex ante regulation, since the three-criteria test established in the EECC cannot be satisfied. This is, according to **BREKO**'s view, precisely why mobile backhaul was not considered a market susceptible to regulation by the EC under the 2020 RRM. Mobile retail markets are generally competitive on an EU-wide level, and asymmetric regulation should only be possible if a prospective analysis justifies its inclusion within a relevant market susceptible to ex ante regulation.

Liberty Global agrees with BEREC's description of the system foreseen by the current regulatory framework for the purposes of regulating markets such as backhaul, and notes that the legal certainty it provides is instrumental in incentivizing innovation and investment.

ECTA believes that NRAs should analyse markets that are not contained in the 2020 RRM if they have sufficient grounds to consider that the three-criteria test is fulfilled. Additionally, according to **ECTA**, NRAs would be well-advised to explicitly specify in their future market analysis decisions that there are no usage restrictions on the remedies they impose, since remedies relating to wholesale local access and wholesale dedicated capacity should be generic inputs that should be available for any use in order to promote competition, innovation, and ultimately end-user interest. This includes possible ancillary remedies such as wholesale access to civil engineering infrastructure and potential backhaul remedies.

According to **ETNO**, in light of the EECC provisions stressing the need that measures are proportionate, prior to the imposition of additional remedies on the SMP operator, NRAs should assess whether the sole imposition of access to civil infrastructure alone may be a reasonable means to promote competition and the end-user's interest. **ETNO** calls NRAs to effectively identify the conditions that need to be met to progress towards such regulatory outcome, instead of potentially considering the extension of regulation towards mobile backhaul. NRAs should also review any existing SMP obligations imposed on backhaul and assess the sufficiency of the existing access obligations to physical infrastructure, as well as the role of commercial agreements and the competition that alternative operators may exert.

ETNO further notes that the mobile backhaul market is highly competitive and benefits from infrastructure deployments undertaken by both the SMP and alternative operators. **ETNO** stresses that where retail markets are effectively competitive in the absence of wholesale regulation, regulation should not be required on related wholesale markets. An interventionist regulatory approach towards mobile backhaul could not be possible without a prior careful assessment of the retail mobile market and the establishment of a potential market failure, which to date has been discarded at EU-wide level. **ETNO** concludes that the possible regulation of mobile backhaul would be not only excessively intrusive but also undue in the absence of an identified market failure to remedy. In addition to the previous reasoning, **ETNO**

believes that the three criteria test is not fulfilled due to the existence of effective competition in infrastructure, the absence of real barriers to entry and the sufficiency of competition law. As new networks are still being deployed, the discussion of regulatory obligations at this stage is premature and could be counterproductive.

For **Vodafone**, article 72 of the EECC provides a standalone remedy of first resort for access to physical infrastructure. The EECC recognises the importance of this obligation to avoid the issues identified by BEREC, where such remedies were previously only ancillary to other wholesale products or services. Thus, the remedy regarding access to civil engineering, as envisaged by Article 72(2) may be imposed irrespective of the exact scope of the relevant market as determined by the market analysis. **Vodafone** proposes that this issue is highlighted in the final BEREC report, and that it is taken up in future regulatory guidance.

GasLINE believes that all regulatory interventions (based on the EECC, ex ante regulation based on SMP or the BCRD) require a demonstrable justification of existing competition problems at the retail level.

BEREC's response:

The section in the report dealing with the EU legal framework for backhaul, presents the rules on access to backhaul according to the two main instruments under which access may be envisaged, namely SMP regulation and national rules implementing the BCRD. The rules are presented taking into account the overall situation at the European level (as set in particular in the 2020 Recommendation on Relevant Markets), without delving into the specific features that may make regulation of backhaul at Member State level more or less needed.

It is thus beyond the scope of the report to reach any individual conclusion on whether, at national level, there is regulatory merit in introducing *ex ante* measures in view of the provision of fixed and/or mobile backhaul. This is an assessment that, if the case may be, will have to be undertaken by each NRA in the context of the periodic review of the markets that may be susceptible to *ex ante* regulation. It is however worth noting that the fact that the regulation of backhaul is not explicitly included in the 2020 Recommendation on Relevant Markets and associated documents, is without prejudice to the potential introduction of *ex ante* measures at national level, in accordance with the legal principles that are enshrined in EU law.

In particular, EU law foresees that wholesale *ex ante* regulation should only be applied where, under the modified greenfield approach, demonstrable competition problems exist at the retail level. Under the modified greenfield approach, NRAs should in particular take into account existing market conditions, including other types of regulation affecting the market (such as the BCRD), but assuming that SMP regulation is absent (e.g., specific *ex ante* measures that may have already been imposed on backhaul in the context of the market that is now being reviewed).

Regarding the possible application of the three criteria test, the test will have to be fulfilled in the event that an NRA identifies a market that is not currently included in the 2020 Recommendation on Relevant Markets, such as for instance a separate market for backhaul. It is however beyond the purposes of the report to ascertain whether the three criteria test, and in particular the conditions that (i) high and non-transitory barriers to entry are present; (ii)

the market structure does not tend towards effective competition within the relevant time horizon; is fulfilled at national level.

The issue raised by **Vodafone** is already covered in BEREC's report, where it is explicitly stated that access to the physical infrastructure of the SMP operator may be deemed as a self-standing remedy for the improvement of the competition conditions downstream, and not just as an ancillary remedy. In fact, article 72(2) of the EECR explicitly states that NRAs "*may impose obligations on an undertaking to provide access [to civil engineering], irrespective of whether the assets that are affected by the obligation are part of the relevant market in accordance with the market analysis, provided that the obligation is necessary and proportionate to meet the objectives of Article 3*".

BREKO concurs with the BEREC draft report on the significance of the BCRD to lower the costs of broadband deployment and to accelerate roll-out in areas without high-speed connectivity. According to BREKO, the present scope of the BCRD provides sufficient access opportunities and as such, there is no pressing need for further regulatory intervention.

However, in **BREKO's** view, access obligations for physical infrastructure owned by fibre network operators should not be deemed to fall under the BCRD's remit, to protect the first mover's business case and maintain the incentives for electronic communications operators to deploy new networks. **BREKO** thus believes that the BCRD should exclusively focus on access to the physical infrastructure of undertakings that do not provide electronic telecommunications networks.

ECTA considers that SMP regulation continues to play a crucial role, and that the existence of the BCRD does not justify removing the specific (more detailed, and stricter) asymmetric regulatory obligations designed to address market power.

From **ETNO's** perspective, the existing regulatory framework makes available to alternative operators a set of measures that guarantee the possibility of deploying the infrastructure they need according to the competitive approach they have chosen. There is thus no material need to enlarge the set with additional *ex ante* obligations, especially taking into account that these are complemented with the BCRD. **ETNO** stresses that the BCRD already guarantees the right of operators to request access to network operators' infrastructures for the deployment of NGA networks and to negotiate such access under fair and reasonable conditions. Mobile operators can thus already deploy backhaul infrastructure based on ducts, where available, and other passive infrastructure for which the framework for sharing is already in place.

FTTH Council Europe notes that specific instruments such as the BCRD can have a significant impact on the cost of deployment, thereby enabling self-sustaining competition. Lowering barriers to entry in this way can facilitate competition without creating uncertainty about future demand. To achieve this, the future direction of regulation should be focused on enabling entry at the deepest level of the value chain possible, namely via physical infrastructure access products.

ELFA believes that the consideration of a new market for mobile backhaul would inevitably lead to excessive and conflicting market regulation, since the BCRD already establishes adequate regulatory measures.

BEREC's response:

BEREC's report already acknowledges the importance of the BCRD for the purposes of stimulating the roll-out of high-speed electronic communications networks. It is however the task of NRAs when performing their market analyses -and thus beyond the purposes of this report- to determine to what extent the access obligations to physical infrastructure stemming from the BCRD might be sufficient, on their own, to remedy the competition problems that may have been identified in the provision of backhaul services.

Regarding **BREKO's** assertion, for the purposes of the BCRD, undertakings providing or authorised to provide public communications networks are for the time being deemed to be network operators and are thus covered by the access (and related) obligations foreseen in said legislative instrument. This is without prejudice to the outcome of the impending revision of the BCRD.

4. COMMENTS ON CHAPTER 4 – STAKEHOLDERS' INPUT ON BACKHAUL

BREKO states that concerning stakeholder input to the public consultation, the report appears to indicate a certain degree of willingness for alternative providers to accept increased regulation pertaining to mobile backhaul. A similar tendency is also observed with regards to fixed backhaul, be it nationwide or limited to prescribed regional areas. This position is contrary to the policy stance of **BREKO**. Thus, it would be misleading to assume that alternative providers would be more favourable towards greater regulation simply by virtue of not carrying an incumbent status in a given market. It is important that BEREC avoids recommending blanket regulation at the European level, but rather accord a wide degree of appreciation at the national authorities to develop and implement tailored regulatory interventions depending on the precise needs of the national, regional and local markets.

FTTH Council Europe believes that the backhaul currently used for mobile networks is essentially unregulated. According to the report, integrated incumbent operators with their own fixed infrastructure state that regulation will not be needed for mobile backhaul whereas stand-alone mobile operators are more inclined to either see a need for regulation in general or regulation targeted to areas which are harder to reach. Alternative fibre network operators see mobile backhaul as an important segment of future demand. The data from BEREC suggests that today, less than 5% of mobile backhaul relies on regulated products. This is likely to fall as network investments increase and commercial alternatives increase – the most likely future outcome is that there will be no need for regulated mobile backhaul. On the contrary, fixed backhaul will likely remain available for regulation in the future (even if some geographic segmentation may be needed).

ECTA agrees with the BEREC findings in the draft BEREC Report on that there is considerable demand from alternative fixed and mobile operators for regulated fixed and mobile backhaul, and for regulation where it is currently absent and for fit-for-purpose regulation where it is currently insufficient. The demand for regulated backhaul (as well as

expected future demand) is focused in particular on fit-for-purpose access to civil engineering infrastructure and access to dark fibre, among other types of wholesale access. According to **ECTA**, this is the case even though BEREC has found that the share of use of regulated backhaul is relatively low in proportion to total backhaul requirements.

ECTA comments on the stakeholders' input on backhaul and would recommend that it is probably worthwhile for BEREC to be less binary (less focused on a divide between incumbent fixed-mobile integrated operators versus any other type of company) in its depiction of stakeholder views, and to create more categories and report on these with more granularity. In addition, **ECTA** recommends BEREC to seek validation or to re-run some of the interviews, to ensure that non-representative elements are set aside, and categorizations and representations of stakeholders' views are correct.

Deutsche Telekom finds surprising the statements from the alternative operators, elaborated in the BEREC report that they wish for more regulated products in the future, without any analytic or fact-driven evidence given.

GasLINE agrees with the EC and the responses of the majority of mobile network operators in Europe that the mobile retail markets are generally competitive and that there is no need for ex ante regulation at the wholesale level. According to **GasLINE**, mobile network operators in Germany have many alternative sources of mobile backhaul at their disposal. Obligations of mobile network operators to cooperate with other companies due to the use of scarce spectrum resources should, however, remain independent of SMP regulation. In this case, regulatory intervention is justified due to the high barriers to market entry resulting from the use of scarce spectrum resources. Concerning fixed backhaul, **GasLINE** warns against extending existing obligations and points out that the imposition of ex-ante regulation does not incentivise operators to deploy new FTTH networks.

Deutsche Glasfaser states that, at least in Germany, the provision of mobile backhaul is competitive and is based on negotiated solutions. **Deutsche Glasfaser** does not see that such a specific sub-market (not a mass market in any case) would fulfil the three-criteria test, as regulatory intervention is not necessary. **Deutsche Glasfaser** is in line with the EC and its 2020 RRM and does not see backhaul solutions as part of the Market 1/2020. As backhaul solutions require specific capabilities, they can only, if at all, be part of a separate market not yet deemed in need of regulatory oversight across the EU.

According to **Vodafone Group** in those markets where remedies such as access to ducts and poles or dark fibre for mobile are not available, specific remedies for regulated backhaul access should exist. **Vodafone Group** considers that mobile markets across the EU are generally competitive. **Vodafone Group** agrees with the report findings that, irrespective of whether alternative access is available via passive infrastructure or dark fibre for instance, backhaul access may be regulated where the three criteria test is satisfied and there is a competitive failure in the relevant retail market. This is likely to lead to one of the mentioned false positive/negative errors in situations where, on the one hand, mobile markets do not have a competition problem but alternative access for backhaul (ducts, dark fibre) is not available.

In the context of future 5G deployment, **Vodafone Group** proposes that the gap could be addressed by ensuring that, where regulatory remedies relating to passive infrastructure access are limited to fixed networks, these should be complemented by dark fibre access for mobile base stations.

BEREC's response:

With regard to **BREKO's** comment "*As such, it is important that BEREC avoids recommending blanket regulation at the European level, but rather accord a wide degree of appreciation at the national authorities to develop and implement tailored regulatory interventions depending on the precise needs of the national, regional and local markets*", BEREC agrees and does not recommend such an approach in the report. Section 4 of the report only describes the responses of the operators.

On the comment from **FTTH Council Europe**, BEREC would like to point out that the report presents a European view, based on responses of operators from several European countries, but that the competitive landscape, fibre availability etc. is still very different across countries. Therefore, NRAs will have to conduct a case-by-case analysis at the national level for both fixed and mobile backhaul.

On the use of regulated products (**FTTH Council Europe, ECTA**), care should be taken in the interpretation, as the numbers include incumbent integrated operators that mainly or exclusively use their own infrastructure. The number of responses does not allow for a more detailed analysis or conclusions.

On the views expressed by alternative providers (**DT, ECTA**), BEREC just presents their views, without endorsing or refuting them. BEREC categorised operators as incumbents in case they were the former fixed network monopoly providers in a specific country. BEREC recognises that also affiliate companies of incumbents in other countries may have been influenced by their parent companies in their responses, but of course it is not possible for BEREC to know if this is the case. Therefore, BEREC added a text in the final report (footnotes 39 and 52) stating: "*Some of the responses may be influenced by incumbent parent companies or may represent a corporate perspective*". moreover, the number of responses not allow for a more detailed analysis or conclusions (e.g. setting up more categories). On top of that, there was a misunderstanding by **ECTA** as the 14 operators who are against nationwide regulation are all for regulation in some areas, so there are not any alternative operators who do not want any regulation. Consequently, the fact that the sample could not be further split up into integrated and non-integrated operators does not lead to any implausible results.

With regard to the comment of **GasLINE**, BEREC wants to point out that the report does not draw any conclusions whether there is a need for regulation of mobile or fixed backhaul in any particular country. Any conclusion in this regard can only be drawn by the NRAs after a detailed case-by-case analysis. The issues on spectrum resources addressed by **GasLINE** are not addressed in the report.

Concerning **GasLINE's** comments on fixed backhaul, it should be considered that regulation of fixed backhaul is usually applied as an ancillary remedy in order to encourage and facilitate investment in access networks.

On the national situation of Germany (**Deutsche Glasfaser**), BEREC does not take a position as the corresponding NRA is suited best to assess the national situation and to apply the three-criteria-test to the corresponding market. The application of the latter is also proposed by **Vodafone Group**. Concerning their suggestion to regulate dark fibre for mobile base stations in the context of 5G, BEREC reiterates that the report is only descriptive and that it leaves the analysis of the individual market conditions to the corresponding NRAs.

5. COMMENTS ON CHAPTER 5 – REGULATORY TREATMENT OF FIXED AND MOBILE BACKHAUL BY NRAS

From the **FTTH Council** perspective, 5G is seen mainly as a complement rather than a substitute technology to fibre networks. The implication is that 5G is one of the demand drivers for FTTH and in particular, mobile backhaul can be a significant driver of fibre operators' business cases. According to the **FTTH Council**, the principal concern for both fixed and mobile backhaul ought to be around the impact that regulation could have on the incentive to invest. This is especially true for mobile backhaul where a move to a regulated backhaul market risks undermining alternative fibre providers' business cases with unknown consequences. **FTTH Council** believes that this can be especially problematic where a geographically averaged regulated price is imposed, thereby masking the high cost of provision in higher cost, often rural, areas.

However, what is clear for the **FTTH Council** in the current report is that insufficient consideration has been given to the revised Article 3 of the EECC which makes encouraging investment in (and take up of) fibre a primary objective of European NRAs. In respect to achieving efficiencies for the future demand, a cost model developed by the **FTTH Council** shows that the biggest obstacle to the savings being achieved may be fear of regulated access to the 'spare capacity' or 'spare fibres' built in anticipation of 5G which can undermine the incentive to invest. **FTTH Council** believes that the approach currently suggested in the assessment of mobile backhaul is very positive towards future regulation.

The **FTTH Council Europe** is not suggesting that regulation or that the possibility of regulation should be removed but it is suggesting that there should be far greater consideration of the impact on investment that stems from regulated access. Looking at the data in the BEREC report, there is a marked difference between the current use of regulated access products for mobile and fixed backhaul. That balance may lead to different treatment of backhaul depending on its use so that competition is preserved but also that the incentive to invest is maintained.

ECTA recommends that the final BEREC Report could usefully describe precisely on which basis both fixed and mobile backhaul have been regulated by each NRA that has done so, containing information distinguishing the market definition stage, the SMP assessment stage, and the remedies stage (with particular focus on explaining whether backhaul is a core remedy or an ancillary remedy). It is important to make clear exactly at which process stage the essential structuring decisions were taken by NRAs with regard to backhaul.

ECTA also finds necessary that the Report explains why (i) the NRAs have decided not to regulate fixed or mobile backhaul, (ii) the NRAs that do not find access to civil engineering to be important for backhaul said so, (iii) the dark fibre is included in (excluded from) market 4/2014 and (iv) backhaul is included in (excluded from) market 4/2014.

ELFA stresses that introducing a new market for mobile backhaul across the EU would create greater uncertainty on fibre investments and would clearly have negative impacts on future deployment. Moreover, it would most likely negatively affect the fibre rollout in rural areas.

Deutsche Telekom believes that the regulated demand for dark fibre might hamper investments.

BREKO supports freely negotiated solutions between market participants instead of imposing ex ante obligations, which could potentially curb the deployment of FTTB/H and other VHC-networks. Thus, it is important to encourage operators of emerging FTTB/H and 5G networks to negotiate solutions regarding mobile backhaul amongst one another and to incentivise private market investment. **BREKO** highlights the importance of allowing NRAs to address emerging market challenges through flexible remedies according to their national needs and expansion rates.

Regarding fixed backhaul, **GasLINE** warns against an extension of the existing obligations and reminds that freedom of competition may not be interfered without justification. It should be emphasised that non-existing infrastructures (in particular, FTTH networks) will not be newly built by imposing ex-ante regulatory interventions.

From a **GasLINE** perspective, the willingness to invest in the construction of new infrastructures is not increased by announcing regulatory interventions to companies willing to invest.

BEREC's response:

The aim of section 5 is to describe, on a structured manner, the regulatory approaches that the NRAs have adopted as regards the provision of backhaul based on the data that BEREC has collected from NRAs in the EU, Iceland, Kosovo, Liechtenstein, Montenegro, Norway, Republic of North Macedonia, Republic of Serbia and Turkey. It is mainly a fact-finding exercise and does not intend to reach any conclusion as to whether regulating (or de-regulating) backhaul is the right regulatory approach in each Member State.

The roll-out of 5G mobile networks might give rise to new business opportunities for backhaul. Nonetheless, it is yet to be seen whether both existing and new players can address the growing demand for backhaul to a sufficient extent or, on the contrary, mobile networks operators could face difficulties (in certain geographical areas) in case (i) they cannot supply the backhaul service to themselves profitably (self-supply) or (ii) such demand for backhaul could not be met by third parties because their networks lack sufficient coverage.

At this stage, BEREC is not able to issue any recommendation on how backhaul should be regulated and, more specifically, to make any statement as to the degree of competition in the provision of mobile backhaul and the negative impact that the regulation of mobile backhaul could have on certain market players and/or national markets.

Such analysis should be performed on a case-by-case basis by each NRA and the conclusion would be driven by the national circumstances. This appears to be the case in light of the different regulatory approaches that NRAs have adopted with regard to backhaul, as shown in table 16 of the Report.

BEREC shares the view that the regulation (and backhaul regulation is not an exception) should not artificially reduce the incentives to invest by imposing unnecessary ex ante remedies.

Backhaul regulation should not be, however, considered as detrimental for investment per se. Depending on the national circumstances, allowing the use of access services for backhaul purposes (namely access to ducts, dark fibre and leased lines) can facilitate the connection of the corresponding fixed access networks and base stations and ultimately enable the alternative operators to roll-out their own fixed and mobile networks.

Moreover, promoting investments is a key objective but not the only one; ensuring that the market (i) is competitive and (ii) provides end users with high quality and a sufficient variety of products at affordable prices, is equally important and should not play a secondary role.

BEREC further observes that the necessary investments for rolling out FTTH networks (more generally, very high-capacity networks) are made in markets that are subject to ex ante regulation. Consequently, the assessment of the key factors in the investment decision is a rather complex exercise and should not be oversimplified by considering that more regulation necessarily results in less investment.

Finally, BEREC considers that the analysis requested by **ECTA** exceeds the scope of the report as foreseen in the BEREC work programme, which sets the focus of the analysis on a European level rather than on a country level. Section 5 and the related conclusions in section 6 provide a sufficiently detailed and comprehensive overview of how fixed and mobile backhaul are regulated across the different markets and access services.

The Report shows that fixed backhaul is regulated in more countries than mobile backhaul (the former can be regulated as an ancillary service) and further identifies the most important services (leased lines but also access to ducts and poles) for backhaul purposes. Moreover, the various regulatory approaches are grouped into three categories: (i) regulated backhaul within a regulated market 2/2020 or market 4/2014, (ii) non-regulated backhaul because it is excluded from a regulated market 2/2020 or market 4/2014 and (iii) non-regulated backhaul because the market 2/2020 or market 4/2014 is effectively competitive. The Report therefore contains sufficient insights on how NRAs have structured their analysis and assessed the need for backhaul regulation.

The Report does not carry out a critical assessment of the analysis that NRAs have performed concerning backhaul regulation in the context of the market reviews. This is the reason why the questions that **ECTA** asks BEREC to address are considered to fall out the scope of the Report.

6. COMMENTS ON CHAPTER 6 - CONCLUSIONS

Open Fiber believes that regulation should be mandated in those areas with backhauling shortage due to the presence of only one (SMP) provider. Regulation should either be national or based upon geographic segmentation. **Open Fiber** also provides its views on the Italian market for backhaul.

Taking into account the regulatory intervention should be appropriate and proportionate, **Liberty Global** welcomes BEREC's recognition of these principles in its call to national regulators to prevent false positive (Type I) errors, which might lead to excessive regulation or insufficient deregulation, but also to avoid false negative (Type II) errors, which might result in insufficient regulation or excessive deregulation, when assessing backhaul in the different market reviews.

In **ECTA's** view, continuing existing regulation of operators with Significant Market Power represents a far lesser risk (= maintaining the status quo) than inappropriately deregulating markets (= disruption), where regulation is actually needed to ensure competition and protect end user interests. Therefore, in case of uncertainty, ECTA considers that NRAs should always regulate one cycle more rather than deregulate one (or more) cycle too soon.

ECTA suggests that, beyond the market definition issues, another key challenge going forward is for BEREC and NRAs to find the right way to structure regulatory intervention. **ECTA** suggests that BEREC and NRAs should give consideration to the structure and details of regulatory intervention, for instance by focusing on preventing that operators with SMP (which typically have nation-wide presence) use pricing mechanisms designed to crush fledgling competitors whose geographic reach is more limited, and whose fibre business models rely on revenue from backhaul provision. Preventing predatory pricing would ensure that adequate margins remain available for challenger backhaul providers to succeed where they are present or where they can be expected to expand within a relevant time horizon.

In **ETNO's** view, the conditions to work on a retail market analysis are not in place and are not expected to be in the near future. **ETNO** urges BEREC to let the 5G ecosystem reach a certain maturity before carrying out a proper analysis of the retail mobile market and the related backhaul market and other infrastructure elements, before taking any stance regarding the regulatory treatment of backhaul in this context.

Deutsche Telekom believes that there is no indication for the need of regulation of mobile backhaul. Moreover, any future regulation of those competitive markets and services would, paradoxically, lead to less deployment of 5G, as competitors would hope for excessively regulated low prices in order to rent ("buy") network facilities instead of investing and deploying infrastructure of their own ("make"). Therefore, derived from the findings of the draft report, NRAs should exclude mobile backhaul if they do not find special national competition problems. That also applies for dark fibre as a regulated product. NRAs have been very cautious to oblige SMP operators to provide it, and demand for dark fibre as a regulated product echoes the low willingness of competitors to invest into network infrastructure of their own. Therefore, the simple expression of demand for dark fibre should never lead to regulation of dark fibre. Otherwise, incentives for deploying infrastructure will be severely harmed.

Vodafone believes that backhaul is most likely to be regulated in the context of a different, wider market on the relevant markets list rather than a standalone market itself. For instance, through remedies relating to dark fibre access, rental of leased lines or access to ducts and poles. Therefore, **Vodafone** supports BEREC's observations in the report that NRAs should avoid both false positive and false negative errors in their market analysis to avoid both excessive and insufficient regulation/deregulation when assessing backhaul within the context of different markets and remedies.

BEREC's response:

On **Open Fiber's** comments, BEREC highlights that the regulatory action will be in any case preceded by a careful analysis of the specific situations before being applied. Regarding **Open Fiber's** comments on the Italian market, BEREC considers that the corresponding NRA is in the best position to analyse them and decide on the potential need of regulation for fixed backhaul.

BEREC agrees with **Liberty Global** on the issues raised regarding false positives and negatives. On the issues raised by **ECTA**, BEREC is aware of the risks of deregulating too soon and considers that any (de)regulation should be always supported by a prospective analysis justifying it.

BEREC agrees with **ECTA** that it may be of interest to further analyse the case for mobile backhaul in the future as well as how to structure intervention when needed. This report focuses on presenting a snapshot on the situation and **ECTA's** proposal goes further than the intended scope.

On the issue of preventing predatory pricing raised by **ECTA**, the application of predatory prices is clearly an issue that when detected should be addressed. However, lower prices are not necessarily predatory prices, and a demonstration of such behaviour should be built before taking any action. BEREC in any case agrees that pricing schemes are a relevant aspect to be considered when analysing competition dynamics, and that any abusive practice should be carefully assessed and taken into consideration.

On **ETNO's** proposal to let the 5G ecosystem reach a maturity before taking any regulatory action on backhaul, BEREC considers that since the 5G infrastructures are being deployed now, the availability of backhaul is key. In any case, market analysis in the context of the EECC has a prospective view, and ex ante regulatory action is aimed not only to solve, but also to prevent competition problems.

On the issues raised by **Deutsche Telekom**, as explained in the previous section, competition and investment should go hand in hand and BEREC agrees that regulation should not prevent investment via very low regulated prices. In this sense, BEREC neither promotes a lowering of regulated prices nor does it promote regulating prices in all situations. Many different models can be applied to grant access to backhaul or to any other infrastructure, when needed, that allow for conciliating all objectives in the EECC.

On the regulation of dark fibre addressed by **Deutsche Telekom**, BEREC does not present any views on whether, how, and under which circumstances to regulate it. The report only presents the views from different actors based on needs as well as its actual use. The analysis on the need -or not- to regulate dark fibre should be carried out at a national level.

BEREC agrees with **Vodafone** on taking a wider perspective when analysing backhaul that can be provided, as shown in the report, based on very different active and passive products.

7. COMMENTS ON CHAPTER 7 - FUTURE WORK

According to **ETNO**, the conditions for the preparation of a common position are not met and are not expected to be met in the medium term. Considering adopting a formal BEREC document under the form of a common position as regards definition of an ex ante regulatory relevant market (absent from 2020 RMR), might go beyond BEREC's tasks and competences.

On the contrary, **Liberty Global** recommends BEREC to consider the adoption of a common position on the methods for analysis as well as on potential remedies in an early stage. In **Liberty Global's** view, it is key that all regulatory interventions are consistent and coherent, particularly in their adherence to the principles of appropriateness, proportionality and technological neutrality.

ECTA welcomes that BEREC commits to continue monitoring backhaul markets and backhaul regulation as practiced by NRAs, with a special focus on backhaul needs and use for 5G deployment. **ECTA** asks BEREC to refrain from overly focusing on backhaul for 5G and for the deployment of VHCN in non-densely populated areas, considering that a wider perspective is necessary. **ECTA** considers that it may well be the case that there are needs for regulated backhaul in other circumstances, and in other geographic areas. **ECTA** encourages BEREC to work towards more guidelines and common positions.

ELFA considers that high attention should be paid on the impact of EC's telecom regulation (including EECC and BCRD) on local and regional fibre operators across Europe, as well as concrete market decisions by NRAs, and shows its willingness to attend an upcoming BEREC stakeholder workshop on mobile backhaul to present and discuss the cooperation between local fibre operators and mobile operators in a more detailed manner.

BEREC's response:

BEREC disagrees with **ETNO** that preparing a common position on the regulation of backhaul would fall beyond BEREC tasks and competences. BEREC has already taken and published several common positions on many different topics not necessarily related to relevant markets included in the recommendation. In this line, BEREC acknowledges the positions of **Liberty Global** and **ECTA** and, as stated in the report, BEREC considers the relevance of such common position, as high, but more experience is to be gathered in market reviews under the new relevant markets recommendation. Publishing a common position at an early stage, as proposed by **Liberty Global**, may risk not incorporating valuable experience on best practices, that is a key basis for a robust and useful common position.

BEREC takes note of the considerations by **ECTA** and **ELFA** regarding the future scope of the common position and future analysis of backhaul issues, and considers all the proposals for a wider perspective to be valuable.

BEREC thanks the willingness of **ELFA** to participate in a workshop on mobile backhaul and takes note for considering the case for such a workshop with the relevant stakeholders.

8. COMMENTS ON ANNEXES

No specific comments were raised regarding the annexes.