

BEREC Report on the outcome of the public consultation on the draft Work Programme for 2019

7 December 2018

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I. Introduction

During its 36th Plenary Meeting (3-5 October 2018 in Portoroz, Slovenia) BEREC approved for public consultation the draft BEREC Work Programme 2019 (WP 2019). The role of the public consultation is to increase transparency and to provide BEREC with valuable feedback from all interested parties. Indeed, this public consultation on the draft document follows BEREC's initial public consultation for inputs to the WP 2019, which closed on 20 April 2018 and prompted significant stakeholder engagement at the time.

In accordance with BEREC's policy on public consultations, the current report is a summary of how stakeholders' views have been taken into account. In addition, BEREC also publishes all individual contributions on its website, taking into account stakeholders' requests for confidentiality. The public consultation was open from 10 October to 7 November 2018. BEREC also held a public hearing on the WP 2019 on 17 October 2018, organised as part of the 6th BEREC Stakeholder Forum meeting, which was open to the participation of all interested parties.

This document, then, summarises the responses received to the public consultation and presents BEREC's position with regard to suggestions and proposals put forward in those responses, as relevant. In total 18 responses were received, 2 of which are considered as confidential, based on the request of the respective respondents.

The 16 non-confidential contributions were received from the following stakeholders: National Association of ISPs in Romania (ANISP), European Consumer Organisation (BEUC), EchoStar Mobile, European Competitive Telecommunications Association (ECTA), European Digital Rights (EDRi), European Emergency Number Association (EENA), Facebook, FTTH Council Europe, Global System for Mobile Communications Association (GSMA), Liberty Global, Microsoft, Mobile and Wireless Forum, MVNO Europe, Open Fiber, Patrick Leask, and United Group.

BEREC welcomes all contributions and thanks all stakeholders for their submissions. While the confidential submissions are presented in summary form in this document, they are not attributed to the stakeholder by name. The non-confidential contributions received from stakeholders will be published in their entirety on the BEREC website.

Generally, the responses are both supportive and positive towards the work BEREC will engage in through 2019, and indeed into 2020. Stakeholders are keen to engage further with BEREC, in many cases calling for further consultations beyond those already set out by BEREC, and will do so on an ongoing basis through BEREC's many public consultations on the work set out in the BEREC WP 2019. BEREC will continue in its efforts to ensure such ongoing engagement and in particular, with respect to the guidelines BEREC has been tasked with (in light of the EECC), BEREC commits to early engagement with stakeholders where appropriate. In total there were 229 individual responses from all 18 stakeholders across the 51 (line item) workstreams mentioned in the BEREC WP 2019. BEREC appreciates this willingness to engage on behalf of its stakeholders and is continually working to improve its transparency and engagement with all stakeholders.

II. Background

In its draft Work Programme 2019 (chapter 'II. Background'), BEREC elaborated on the focus of its work in 2019 and beyond into 2020, which will be primarily the mandatory projects (Guidelines), tasked to BEREC in light of the EECC, that indeed cover all five of BEREC's Strategic Priorities. Six stakeholders provided direct responses to this chapter and those responses are summarised below, along with BEREC's subsequent response.

ECTA explicitly supports most of BEREC's existing and proposed work and considers the Work Programme 2019 an appropriate step towards a multiannual way of working. ECTA also supports BEREC maintaining all five of its Strategic Priorities but notes that BEREC must guarantee adequate resources to deliver both on the full set of obligations placed on it and its other ambitions, without prejudice to day-to-day regulatory and supervisory activity.

EDRi welcomes BEREC's commitment to transparent consultations, but would encourage BEREC to implement longer consultations for workstreams that are likely to involve civil society. EDRi also describes BEREC as exemplary in terms of its transparency, though EDRi would appreciate more impact assessments and ex-post evaluations.

Facebook believes that one of BEREC's priorities should be to take the lead to ensure a harmonised implementation of the European Electronic Communications Code (EECC) by governments and NRAs. Facebook also believes that BEREC should work closely with stakeholders when fulfilling its tasks in the coming years as the markets will remain dynamic, and that BEREC should also consider opening up its Expert Working Groups to stakeholders.

Liberty Global recognises the significance of the work BEREC will undertake for the implementation of the EECC, and supports BEREC in achieving its very clear objectives. Liberty Global also supports BEREC's commitment to engage with stakeholders, but notes that for effective engagement, BEREC should consult stakeholders on all its initiatives and provide sufficient time to respond.

One confidential respondent appreciates BEREC's effort to plan ahead in this Work Programme (i.e. taking some 2020 work into account), but notes that BEREC should maintain the possibility to modify the Work Programme if required by specific emerging issues.

Another confidential respondent stated that with new tasks conferred on BEREC in light of the EECC, BEREC should be aware that such tasks come with a special responsibility requiring BEREC to observe more stringent rules in terms of transparency and consultation of stakeholders, the latter irrespective of whether the Code prescribes this explicitly.

BEREC appreciates the significant level of response to the overall draft Work Programme 2019, and thanks all respondents for taking the time to go into such detail in their submissions. Regarding these initial, high-level comments, BEREC welcomes the support for the work it will engage in through 2019 (and 2020), and notes the commentary with respect to stakeholder engagement, which is something that BEREC has continued to work at improving and will continue such efforts as it moves from its first decade of work into its second.

1. Strategic Priority 1: Responding to connectivity challenges and to new conditions for access to high capacity networks

Stakeholders have provided detailed responses across each of the workstreams falling under Strategic Priority 1. In total, 62 individual responses were provided to the 12 workstreams under this Strategic Priority. The general sense with respect to these workstreams is that stakeholders want BEREC to commit to further public consultations. However, while BEREC works to further engage with stakeholders, it simply cannot commit to public consultations for all workstreams.

1.1 Guidelines on very high capacity networks

BEUC notes that BEREC guidelines shall help ensure NRAs can still intervene in markets with ex-ante measures where necessary, even in cases of VHCN.

ECTA notes (with satisfaction) that BEREC refers explicitly to access to, and take-up of, very high capacity networks in the draft WP2019. ECTA asks BEREC to be particularly attentive to these elements. Further, ECTA considers that BEREC should be very cautious with regard to copper upgrade technologies which may in practice support SMP operator re-monopolisation, fibre network architectures specifically designed to avert competition, and claims on 5G networks allegedly being prospectively substitutable for fixed networks.

Facebook looks forward to engaging and continuing its work with BEREC and other stakeholders on the shared goal of expanding and improving connectivity for people in the EU.

FTTH Council Europe fully understands the constraints facing BEREC and the need to stagger its work across 2019 and 2020. Nevertheless, the FTTH Council Europe feels that the issue of what investments are 'VHCN' is a critical issue that must be addressed early in the cycle of the WP 2019. These guidelines are important not only as a means to identify the network types due to receive favourable treatment, but also the guidelines should indicate how regulators will seek to encourage investment in one network type rather than the other.

GSMA welcomes the identification of investments in new and enhanced mobile infrastructure and services as a strategic priority. Accordingly, the need to foster the investments required to achieve this objective should be recognized. In that respect, GSMA calls upon policy makers and NRAs to ensure that the implementing measures of the EECC will be designed and adopted in a way to ensure they truly support and foster investments in new networks.

Liberty Global notes it is key that regulation remains technology neutral. VHC networks should be defined as any network facilitating speeds in excess of 100Mb/s download – either fixed or mobile networks (5G).

MVNO Europe asks BEREC to be particularly attentive to fixed-mobile network integration, because it is likely that this may lead to new kinds of networks, which may (at least in part) meet the definition of "very high capacity network", and may therefore be subject to the guidelines that BEREC will issue.

One confidential respondent welcomes the call for initial stakeholder input. This call should comprise, to the extent possible, sufficient detail on BEREC's initial plans/direction, so that stakeholders can comment and give meaningful input.

BEREC takes note of the support received for this workstreams and accepts the general point made across a number of stakeholders regarding the need to consider high speed mobile networks in the context of this workstream. Furthermore, while BEREC understands the concern around timeliness raised by FTTH Council Europe, BEREC must allow for sufficient time for both this workstream and all other workstreams to have the necessary inputs required. At this point, BEREC will work towards developing the guidelines for very high capacity networks along the timeline set out in the EECC. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

1.2. BEREC Study on the determinants of investment in very high capacity networks

ECTA recommends that BEREC should perform extensive interviews with an as-large-as-possible sample of companies, investors and financiers. ECTA urges BEREC to adopt a clear and explicit approach for how to identify and address potentially one-sided findings, notably where these are due to a lack of representativeness in terms of business models and market structures. ECTA assures BEREC that it will be a constructive stakeholder if this study proceeds.

FTTH Council Europe believes that any report is acted upon and would like to see guidance from BEREC about how it intends to advise its members to use the new tools in the Code to promote investments in VHCNs (in light of this study and NRA experience) and in particular, how the wholesale-only and any further new investment model will be applied to stimulate new and innovative business models that promote investment. Even if there is to be no public consultation, the FTTH Council Europe would like to participate in giving some stakeholder input.

GSMA responds that this type of modelling is known to be chaotic, meaning that global evolution is really dependent on infinitesimal variation of initial parameters giving rise to random fluctuations. If BEREC maintains this project, the modelling should be submitted to an independent body of economists to validate the reliability and robustness of the model.

MVNO Europe states that there may be a case for assessing fixed-mobile integrated networks. MVNO Europe notes that BEREC does not intend to conduct a public consultation on this workstream, and asks BEREC to change its position on this: such an important study should be subject to public consultation. MVNO Europe also asks BEREC to include a clear identification, for each item of literature considered in the literature review, whether it is funded by particular industry stakeholders.

Liberty Global comments that the development of a system dynamics model, which captures the factors that impact investment decisions, is an extremely difficult exercise. Individual stakeholders take their own investment decisions based on a number of factors, including technology type and investment cycles. Capturing this in one model that fits all stakeholders and types of technology to stimulate the effects of regulatory choices and the interaction between investment and competition runs the risk of regulatory error. Liberty Global calls upon

BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in networks, that stakeholders at all times are consulted and that their interests are taken into account.

One confidential respondent notes that as BEREC did not consult the stakeholders for the Terms of Reference of the study, it is even more important to have stakeholders' views at the remaining phases of the study, even more so because there are not only material but also methodological issues involved.

BEREC recognises the willingness of a number of stakeholders, in their responses, to participate in the initial interview and input stage of the BEREC study on the determinants of investment in very high capacity networks. BEREC will clearly work closely with the vendor contracted to conduct the analysis, and will provide this material as appropriate. BEREC also notes the constructive criticism regarding potential one-sided findings, the general difficulty of such a study and the lack of a public consultation. While BEREC considers that stakeholder input can already be provided during the initial interview stage, in its early contact with the winning vendor¹, such concerns as expressed by stakeholders will be taken into account.

1.3. Guidelines on the identification of the network termination point

ECTA asks BEREC to be cognisant of the following: (i) operators deal with security threats constantly, and need to be able to update firmware on the first network-connected device to protect their customers, (ii) the number of end-users choosing to use their own directly connected router (as opposed to one provided by the operator they have chosen) is very low (likely below 1% of customers). If customers choose to use their own network-connected device, it should be very clear that this is exclusively under their own responsibility. ECTA welcomes that this matter will be subject to public consultation.

EDRi states that the identification of the network termination point (NTP) should not interfere with the requirements in Article 3(1) of the Open Internet Regulation, which establishes that end-users shall have the right to use terminal equipment of their choice.

FTTH Council Europe believes that the timeline for the project should be brought forward. Already, BEREC has published a significant survey of member NRAs' practices with respect to NTP identification and BEREC should move to a common set of guidelines using this input in a timelier manner than that indicated. The FTTH Council would be glad to share its technical expertise if and when appropriate.

Liberty Global notes that although the existing Regulatory Framework for electronic communications services already laid down a basis for NRAs to define the NTP, until now, NRAs have not succeeded in adopting a consistent, coherent and correct interpretation of this concept. Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations.

¹ The procurement period for submissions of tenders closed on 5 November – a winning bid has not, as yet, been decided on.

One confidential respondent urges BEREC to engage with network owners prior to the Consultation on the draft guidelines, e.g., through the organisation of hearings or workshops.

Another confidential respondent calls on BEREC to focus also on the impacts that regulation and legislation may directly and indirectly introduce, so as to map the most relevant ones and be able to share the impact of the introduction or on the modification of existing regulation in different Member States.

BEREC again notes the concern raised by stakeholders regarding the timeliness of the process, i.e. how long the Guidelines will take to be completed. However, given the level of work that BEREC must undertake across 2019 and into 2020, BEREC must allow for sufficient time (based on the timelines set out in the EECC) to develop and complete each workstream, and particularly those workstreams (e.g. Guidelines) mandated by the EECC. Constructive proposals offered by stakeholders regarding this workstream are very useful and will be taken into consideration during the development of the Guidelines, and regarding the point raised by Liberty Global, BEREC will indeed work towards ensuring that the measures will be designed and adopted in line with the text and spirit of the applicable regulations. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

1.4. Guidelines on the determination of the first concentration point

ECTA believes that this is one of the most important mandatory tasks for BEREC in the EECC. It is, in practice, a policy issue of principal importance for market functioning, on which BEREC is required to do the heavy lifting. ECTA asks BEREC to consider the viability aspect carefully. In particular, where a symmetric regime already exists in a Member State, and alternative operators have invested based on this regime, the BEREC Guidelines should be clear in ensuring that existing access arrangements are unaffected and will not be disrupted. It would be unreasonable to modify existing agreements already in place to the detriment of access seekers. It would further be particularly unreasonable and inefficient if the BEREC Guidelines would move the first concentration point to a less viable mutualisation point from the access taker's perspective than the one which has already been agreed for the long term.

EDRi recognise the importance of this issue, particularly for smaller ISPs which are an essential part for a competitive telecom market.

FTTH Council Europe notes with some concern that in certain instances, investments in 'non-economic' areas can be foreclosed through strategic investments (in part of these areas) by certain operators. In practice, even non-economic areas may have certain areas which are marginally economic or non-economic – by delivering services to these households, the foreclosing investor can raise the average investment costs for the remainder to a level that cannot be sustained for market actors, even with support. The FTTH Council Europe would be glad to share its technical expertise if and when appropriate.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in new networks and avoid wasting public money by crowding out private investment.

One confidential respondent calls on BEREC to engage with stakeholders prior to the Consultation on the draft guidelines, e.g., through the organisation of hearings or workshops.

Another confidential respondent welcomes the opportunity to participate in the planned consultation and finds that the BEREC Guidelines will certainly constitute a crucial tool for regulators in the process of assessing and understanding the new infrastructures specificities and the most appropriate regulatory tools to address them.

BEREC welcomes the importance placed on this task by ECTA, and indeed expressed by other stakeholders. The constructive advice offered by the FTTH Council Europe, Liberty Global, and indeed by ECTA will be taken on board and considered by the experts tasked with developing the Guidelines on the determination of the first concentration point. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

1.5. Opinion on the functioning of the roaming market

BEUC commented that the sustainability mechanism is necessary and legitimate only because wholesale prices have not been decreased sufficiently to ensure that all types of operators in all countries can sustainably offer RLAH, even if with volume limitations. Therefore, both BEREC and the European Commission should carefully evaluate what could be changed at the level of wholesale price caps to protect the entire value chain and ensure all consumers across Europe have easy access to RLAH tariffs.

ECTA thinks that the BEREC Opinion on the functioning of wholesale international roaming has to be subject to public consultation. A consultation is necessary to enable BEREC (and subsequently the European Commission) to fully understand the effects of Roam-Like-At-Home on all categories of operators.

EDRi suggests that the evaluation should consider the possible interplay between net neutrality and roaming. If a large fraction of the available bandwidth for mobile internet access services is “reserved” for roaming customers from other Member States which pay per megabyte traffic (via the wholesale market), while domestic customers have prepaid volumes, this should be viewed as passive discrimination under the EU Open Internet Regulation.

GSMA notes that BEREC mentions “the ability of the visited network to recover the efficiently incurred costs”. According to the provisions of the TSM and of the Roaming Regulation on wholesale costs, operators should be allowed to recover “all costs of providing regulated wholesale roaming services”; BEREC should therefore re-use this wording in its assessment instead of using “efficiently incurred cost”.

MVNO Europe comments that BEREC does not intend to conduct a public consultation on this workstream, and asks BEREC to change its position on this: such an important BEREC Opinion should be subject to public consultation. In addition, MVNO Europe considers it essential that the interplay between the retail and wholesale markets is fully examined, and indeed proposes a reform to the system for setting wholesale caps in the future.²

² Elaborated in further detail in the full MVNO Europe response, to be published on the BEREC website.

One confidential respondent believes that the opinion issued by BEREC has a potential significant impact on stakeholders and should therefore be subject to consultation.

BEREC again notes the importance placed on additional public consultations by stakeholders, but reiterates the point that BEREC has committed to significant numbers of public consultations with respect to the mandatory tasks conferred on it in light of the EECC. Realistically, not all BEREC workstreams can go through the rigorous and time consuming process of public consultations, yet BEREC strives to conduct as many consultations as possible. Nevertheless, BEREC thanks the stakeholders that took the time to respond to this workstream during the public consultation on the WP 2019, and particularly appreciates the innovation expressed by MVNO Europe with regard to reform to the system of setting wholesale caps, and also the wording suggestion made by GSMA which will be considered by the relevant BEREC experts involved in this workstream.

1.6. Guidelines on the consistent application of the co-investment criteria

BEUC welcomes that BEREC will develop guidelines to ensure the consistent application of the criteria for assessing co-investments. The BEREC guidelines shall help ensure NRAs can still intervene in markets with ex-ante measures where necessary.

ECTA has advocated that co-investment criteria should be based on meaningful and genuine physical network co-ownership, and therefore ask BEREC to include the manner in which the proposed market test is to be conducted in its forthcoming Opinion.

FTTH Council Europe notes that it is up to the individual NRAs to implement the new Code in their Member States but BEREC could play an important role in setting out a common understanding of how NRAs would act in specific circumstances. Such guidance should be high level and could guide industry on how BEREC sees the new Code being implemented across a range of issues. Nevertheless it could already be made clear that only co-investment vehicles promoting VHCN should be interpreted as co-investment and therefore gets regulatory relief.

One confidential respondent states that engagement with stakeholders prior to the Consultation on the draft guidelines should also take place in this case, e.g., through the organisation of hearings or workshops. The respondent went on to state that the applicable provisions of the EECC are already very complex and that BEREC should avoid over-detailed specifications that may add further bureaucracy or complexity or lead to a restrictive interpretation of the provisions which at the end risks not reaching the goal of fostering co-investment and risk sharing practices.

BEREC appreciates the positive comment and input provided by the four stakeholders in this case. Individually, the stakeholders have posited various perspectives that should be considered during the development of the Guidelines. In this case, the experts tasked with developing the Guidelines on the consistent application of the co-investment criteria will be briefed on stakeholder feedback and may take further opportunity to contact stakeholders as the workstream progresses, particularly in the early phase of the project.

1.7. Opinion on the Review of the EC Recommendation on Relevant Markets

BEUC looks forward to this Recommendation, and notes that it is essential for BEREC to keep a close eye on the market to identify those products and services within the electronic communications sector that may require the imposition of regulatory obligations set out in the EECC.

ECTA will ask the EC to consult on the actual text of the next iteration of its Recommendation. ECTA now asks BEREC to consult stakeholders on its Opinion on this key EC Recommendation, to ensure that this review is not conducted by the EC behind closed doors.

FTTH Council Europe hopes that BEREC will continue to engage with stakeholders in an open and transparent consultation process on these issues when they are finalised. While all parties have constraints on their resources, the use of workshops in addition to the proposed (longer) public consultations should help in that regard. While the FTTH Council Europe understands that a consultation is not available in every instance, greater use of workshops could give stakeholders a chance to input their views and feel connected to the process.

GSMA states that with regards to the process, they urge BEREC to consider allowing stakeholders to comment to its draft opinion, e.g. through a consultation. However, at the current time, since it is not known what substantive changes will be made to the Recommendation, it is difficult to take a view on the substance of this workstream.

Liberty Global notes that stakeholders will be able to provide input to the forthcoming consultation of the Commission proposal on the review of the Recommendation relevant markets itself. However, given that BEREC is committed to engage with stakeholders and this initiative to prepare an opinion impacts stakeholders interests, Liberty Global calls upon BEREC to ensure that stakeholders at all times are consulted and that their interests are taken into account.

MVNO Europe asks BEREC to change its position on its intention not to have a public consultation on this workstream; such an important BEREC Opinion should be subject to public consultation. MVNO Europe also note that the removal of Market 15 from this Recommendation in 2007 has had profound effects in terms of NRAs refraining from examining wholesale mobile markets.

One confidential respondent states that engagement with stakeholders is of the utmost importance in this case e.g., through the organisation of hearings or workshops. BEREC should also foresee a consultation with stakeholders at a later stage of the process (e.g. first draft of the opinion).

BEREC clearly sees the desire, among all stakeholders responding to this workstream in the public consultation, for some form of stakeholder engagement once the Review of the EC Recommendation begins and BEREC becomes involved and is, indeed, asked to provide an Opinion. BEREC will consider its options with respect to either a public consultation or indeed, as proposed reasonably by FTTH Council Europe, the option of a workshop.

1.8. Migration from legacy to fibre-based networks

ECTA strongly disagrees with BEREC's suggestion that its work on this topic would only consist of an internal workshop and summary report. The level of importance of this topic clearly justifies a public call for input, and a full consultation of stakeholders, to the same consultation standard as BEREC proposes for other topics. The importance of fit-for-purpose wholesale access, notably civil infrastructure access and fibre unbundling, sharing solutions such as wavelength division multiplexing, and future network slicing and virtualisation need to be properly assessed.

FTTH Council Europe states that BEREC could offer guidance to its members on the outcomes and all the issues that arise with copper switch-off beyond the decision of operators to invest or not (services such as video surveillance or security devices that draw power from the copper telecom network is another challenge for a migration from copper to fibre). The FTTH Council Europe believe that it would be timely for BEREC to look to the experiences gained thus far to look at the issues involved in a full copper-network switch off.

Open Fiber believes it is critical that a consistent European approach insists both on a procompetitive design of the process and on the necessity to monitor carefully the ways in which incumbents work out the migration processes, in order to safeguard the alternative operators' network/investments. More specifically the NRAs should guarantee that migration processes allow end customers to migrate towards the most performing VHC networks in order to maximise the consumer welfare. Since Open Fiber believes that the migration from legacy infrastructures to fibre-based networks will be the most relevant competitive process of the next decade in the telecom sector, Open Fiber communicates its willingness to bring its contribution in the upcoming workshops.

One confidential respondent comments that a simple internal workshop before the issuing of a report seems inadequate to address in detail all the technical, operational, regulatory and commercial challenges at stake. It is therefore necessary to establish a closer relationship with the stakeholders before the issuing of the report, e.g., by sharing the background information BEREC is considering as reference, ahead of the workshop and allow further discussion on the draft conclusions before the adoption and publication of the report.

Another confidential respondent invites BEREC to call for a public consultation rather than for a workshop so as to be able to collect a wider range of experiences, and maximize the outcome in terms of shareable knowledge across stakeholders, and to provide NRAs with a valuable tool to foster consistent approach across the Member States.

BEREC understands the point raised by all stakeholders responding to this workstream that an internal workshop alone cannot hope to cover and provide a sufficient output for such a complex topic. However, BEREC in 2019 (and indeed into 2020) is faced with an already heavy workload, with respect to the mandatory tasks in light of the EECC. Nevertheless, BEREC, in its WP 2019, sought to, in parallel to the mandatory tasks, include some discretionary work, and this workstream is one such project. In March 2019, BEREC will once again call on stakeholders, this time to provide initial input to the draft Work Programme 2020; the details mentioned here with respect to the migration from legacy to fibre-based networks, could indeed form part of a more comprehensive BEREC workstream in 2020. It should be

noted that the report to be produced in light of the workshop will simply be a summary report of the workshop and will not, in any way, make policy conclusions or proposals.

1.9. Guidelines for geographical surveys of network deployments

ECTA has policy concerns on the way in which geographical surveys may be conducted, and how they may influence regulation and competition. ECTA would therefore welcome an early call for input, prior to full consultation.

FTTH Council Europe states that BEREC is correct and justified to express concern to have market boundaries which are stable, not for the administrative burden it might impose on Regulators but rather because of the uncertainty it can create in a context where returns may take 20 years to be realised. The most extensive and detailed cost modelling exercise conducted in Europe was commissioned by the FTTH Council (and in which its Members co-operated and participated) and 'the' key cost driver that was identified in that study is population density and the associated built environment characteristics. The fact is that over a 20 year period, some areas can support entry whilst others have a much less likely capacity to do so. An appropriate differentiation of regulation in these areas will be important for investors. The cost drivers identified above will remain stable over time and thus can form the basis of a predictable regulatory delineation of geographic markets.

GSMA note that data collected on future mapping represents market intervention and public disclosure of it may lead to less investment, as operators will be reluctant to commit to investments that may be inefficient. Therefore, in order to ensure investment certainty and to best address end-user interests, data from surveys on NGN deployment, which would be made available to end-users, should not concern future deployments, but only focus on existing networks and already confirmed plans of networks deployments.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in new networks and avoid wasting public money by crowding out private investment.

One confidential respondent comments that BEREC Guidelines to assist NRAs on the consistent application of Geographical surveys of network deployments should be aimed at supporting an effective geographical market segmentation. Moreover, BEREC should also note that the possibility to designate areas where no undertaking or public authority has deployed or is planning to deploy a very high capacity network, might overlap with the segmentation of areas (white, grey, black) for State aid purposes, with the risk of creating different definitions for the same concepts, therefore reducing legal certainty.

BEREC appreciates the concerns regarding data collections on future mapping. This is absolutely an issue for the experts involved in developing the Guidelines to take into account. In addition, such experts will also be briefed on the issue raised by a confidential respondent regarding overlapping areas. With respect to ECTA's call for initial input, BEREC commits to engaging with stakeholders through the prescribed public consultation process. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

1.10. Guidelines on the minimum criteria for a reference offer (obligation of transparency)

ECTA agrees on BEREC's approach, particularly with respect to initiating the work early. ECTA also provides proposals regarding a useful approach – i.e. for BEREC to conduct a rapid benchmark of the reference offers that have seen take-up by alternative operators, and those that have had limited or no take-up. Examining which specific elements (or subsequent modifications on iterations of reference offers) triggered material take-up, would also be highly relevant. Furthermore, the benchmark should also reveal how sustainable for alternative operators those reference offers have been and when and how they affected alternative operators' competitiveness as well as the time it took for NRAs to solve identified issues.

EDRi very much welcome this effort by BEREC because it contributes to much-needed transparency and non-discrimination in the field of inter-connection. This approach can lead to better comparisons between Member States and help identify persistent inter-connection disputes in the Digital Single Market.

One confidential respondent recommends the engagement with stakeholders ahead of the publication of the draft for discussion. The market has already a long experience of reference offers that should be taken into account.

BEREC appreciates the comments of all stakeholders responding to this workstream, and particularly thanks ECTA for its proposals, which will be taken into consideration by the experts involved in drafting the Guidelines on the minimum criteria for a reference offer. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

1.11. Carry-over work on pricing for access to infrastructure & civil works

ECTA considers that NRAs and BEREC do not currently have a sufficient sample of information on wholesale access pricing resulting from the implementation of the Broadband Cost Reduction Directive. Therefore, ECTA recommends that BEREC delays the finalisation of this Report, until a more robust set of information becomes available.

FTTH Council Europe is happy to participate in the ongoing consultation. However, the FTTH Council Europe hopes that BEREC will continue to engage with stakeholders in an open and transparent consultation process on these issues when they are finalised. While all parties have constraints on their resources, the use of workshops are a useful way to give stakeholders a chance to input their views and to continue to feel connected to the process.

Open Fiber considers that the access to existing infrastructures is of the utmost importance in order to build VHC networks in a timely and efficient way. Open Fiber expresses its concerns about the fact that the analysis concentrates on prices, while on field experience has taught that the most relevant barrier to accessing existing infrastructures are:

- the availability of information in a standardised format (in particular in the case of in-building infrastructure);
- the processes designed to access infrastructures, that normally do not allow to place massive orders for an area in which an operator is building a competitive network.

Open Fiber suggests that the analysis should include these issues.

Liberty Global refers to its 7 November 2018 response to the public consultation on the report on pricing for access to infrastructure and civil works.

BEREC notes that some respondents have already contributed to the public consultation on the report on pricing for access to infrastructure and civil works. BEREC appreciates such contributions and will respond to them in the respective BEREC report on the outcome of the public consultation on the draft BEREC Report on Pricing for access to infrastructure and civil works according to the BCRD.

1.12. Carry-over work on access to physical infrastructure in market analyses

ECTA states that it has no material comments on this workstream, other than to ask for the full call for input and public consultation process.

FTTH Council Europe is happy to participate in the ongoing consultation. However, the FTTH Council Europe hopes that BEREC will continue to engage with stakeholders in an open and transparent consultation process on these issues when they are finalised. While all parties have constraints on their resources, the use of workshops are a useful way to give stakeholders a chance to input their views and to continue to feel connected to the process.

BEREC thanks both stakeholders for their inputs to this consultation and the consultation on the report on access to physical infrastructure in market analyses.

2. Strategic Priority 2: Monitoring potential bottlenecks in the distribution of digital services

Stakeholders have provided detailed responses across each of the workstreams falling under Strategic Priority 2. In total, 27 individual responses were provided to the 5 workstreams under this Strategic Priority. The general sense with respect to these workstreams is that stakeholders are engaged with the matters at hand and consider them to be worthwhile and important. BEREC appreciates the positive support and valuable information provided by stakeholders during this public consultation on these matters.

2.1 Guidelines on intra-EU communications

BEUC does not see why any operator would have to charge more than the proposed fixed rates, considering today's origination, transit and termination costs. Therefore, BEUC disputes the necessity of having a sustainability mechanism in this case, but since the co-legislator foresaw it, understand and welcome that BEREC wants to ensure consistency of application. BEREC should thus be very strict in the criteria laid out for operators to justify an unsustainable scenario, and any application to be exempt from the rules and have the retail cap put at a higher level should be reviewed regularly and not later than one year after concession.

ECTA thinks that it is implausible that sustainability derogations will be granted on the basis of the Regulation, but ECTA will engage on this matter as a stakeholder if there are real questions for consideration.

EDRi urges BEREC to approach data collection with caution. In particular, the data collection should:

- not lead to more personal data being collected or generated by operators than otherwise would have been the case;
- aggregate and depersonalise all personal data to the greatest extent technically possible;
- ensure effective cooperation with competition and data protection authorities in all activities falling under Strategic Priority 2.

EDRi questions whether this work can be undertaken without a public consultation, not least due to the changes that have happened since 2015, when BEREC assessed the possibility of benchmark indicators.

GSMA states that as there is no BEREC consultation foreseen for this workstream, mostly due to the short time frame to adopt such guidelines, GSMA calls for BEREC to organise exchange with stakeholders before its adoption.

MVNO Europe formally ask BEREC to consider finding some way of at least informing stakeholders of its intentions in useful time, and to run an accelerated or mini-consultation on the proposed approach. MVNO Europe understands from the BEREC Stakeholder Forum that these guidelines will be focused on sustainability derogations, unless stakeholders ask for other points to be addressed. As regards sustainability derogations, MVNO Europe does not think that the draft text leaves much room for operators to successfully apply for derogations.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account. As there is no BEREC consultation foreseen for this element of the BEREC guidelines, Liberty Global calls on BEREC to organize exchanges with the stakeholders before its adoption. For reasons of clarity and consistency it is critical that stakeholders have a clear idea of what proper implementation would entail.

One confidential respondent regrets that no consultation is planned for this exercise. The respondent believes that such an approach does not match the principles of good law making and the application of the law.

BEREC accepts that the timeline for these Guidelines is particularly short, given the timelines set out for other Guidelines. However, this is what the regulation calls for and BEREC is acceding to this. To those stakeholders concerned about the lack of a public consultation, BEREC states that it will engage and exchange with stakeholders ahead of adoption of the guidelines, by holding a stakeholder workshop in January 2019 (as per the BEREC Work Programme 2019). In addition, BEREC notes the concerns expressed by both BEUC and EDRi and will take such comments into account during the work on these Guidelines.

2.2 Report on harmonised collection of data from Authorised Undertakings & OTTs

ECTA has no material comments on this workstream, other than to ask for it to be subject to public consultation. More generally, where BEREC proposes to make a workstream not subject to public consultation, ECTA would expect BEREC to articulate a reasoned justification.

Facebook welcomes harmonisation efforts by BEREC in this area. These efforts will be critical to avoid duplication of information requests by different NRAs and BEREC, and consistent with the fundamental goal of a Digital Single Market. Facebook encourages BEREC to continue its efforts in the design of a harmonized approach to data collection from OTTs in the EU. The report, however, should be open to public consultation in order to provide the opportunity to stakeholders to comment on any eventual operational/technical difficulties in providing the information requested, both relating to the indicators themselves and to the intended gathering periodicity. Finally, once a draft report has been developed, BEREC could consider organising a technical workshop to take into account stakeholders' views in a flexible way at the initial phase of the BEREC decision-making process.

GSMA notes that since OTTs that provide ECS have become crucial market players and are fully in scope of the EECC, the GSMA in principle supports that NRAs gain a better understanding of these services and improve respective data collection. BEREC may provide a valuable guidance in this regard, as data gathered by OTTs are an important tile to get a wider picture of competitive dynamics within the market. The GSMA also urges BEREC to consult with stakeholders on this report.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

One confidential respondent is convinced that OTTs hold valuable data that are useful in informing both regulators and consumers. This particularly refers to ECS provided by OTTs and which are fully in the scope of the EECC. The lack of such information would lead to incorrect assessments of the competitive landscape in the electronic communications market. A case in point was the lack of information on OTT voice and messaging services highlighted by the recent BEREC analysis of the intra-EU communications market in the EU. It appears highly valuable if BEREC facilitates the development of data gathering through NRAs with regard to ICS provided by OTTs, supporting a consistent approach across Member States. The starting point should be to gather the same data as collected from telecom operators. BEREC should also consider the collection of additional data specifically relevant for Number-Independent ICS, particularly with regard to data-based business models and possible lock-in effects through.

BEREC again notes the call for public consultation in relation to this workstream, but reiterates the point that, given the number of public consultations and the required resource intensity (not just for BEREC but indeed for stakeholders also) the focus of public consultations, with respect to the WP 2019, has to be the Guidelines mandated to BEREC in light of the EECC. However, the experts involved in producing this report can certainly engage in an ad hoc and informal basis with relevant stakeholders to take on board such soundings and inputs as provided here. The proposal by Facebook for BEREC to consider a technical workshop in light of a draft of the report is a very valid one, and well received by BEREC.

2.3 Ex-ante margin squeeze tests

ECTA is disappointed to note that BEREC proposes not to involve stakeholders in this workstream. From ECTA's perspective, representing challenger operators whose business can be severely damaged by margin squeeze practices engaged in by SMP operators, this is not acceptable. ECTA strongly insist that BEREC change its position, and ensures both a call for input, and a public consultation on ex-ante margin squeeze tests, even if this means that the workstream will be delivered at a later date than currently planned.

FTTH Council Europe is concerned that the whole approach in this area is creating uncertainty particularly relating to new products and services. Market operators are told that the pricing flexibility will facilitate 'penetration pricing' in order to promote new networks and services but the FTTH Council Europe believe that it simply creates a kind of double jeopardy since both an ex-ante and ex-post pricing regimes will apply. In the face of such uncertainty and in particular in the context of the double jeopardy that exists by virtue of two relevant supervisory authorities, the likelihood that market operators will develop innovative and radical pricing solutions to drive take up looks weakened rather than strengthened. In a context where all the relevant research point to take-up rates as the determinative metric in determining the success or otherwise of FTTH projects, this is particularly problematic.

GSMA notes that as margin squeeze tests also cover bundles, including mobile services, BEREC should not limit this workstream to a workshop, but consult stakeholders on the draft report and on criticalities related to margin squeeze tests.

Liberty Global states that margin squeeze tests are relevant to stakeholders. BEREC should not limit this workstream to an internal workshop.

Open Fiber highlights the experience of selective price cuts which have followed the market entry of wholesale-only operators. This experience required that wholesale prices charged by incumbents should be subjected to some ex-ante economic test in order to reduce the risk of setting prices at levels aiming at the exclusion of competitors. Since the same issue at retail level has been successfully solved through the development of replicability tests, Open Fiber suggest that an economic test similar to the replicability test applied for retail offers should be applied at wholesale level. The test should ensure that the wholesale price charged by an incumbent operator does not exclude an equally efficient wholesale operator from the market and should take as a reference cost orientation principles. Open Fiber suggests that the workshop should encompass also margin squeeze or other fit for purpose tests with the aim to assess the economic replicability of the incumbent offer at wholesale level.

One confidential respondent recommends the engagement with stakeholders before the issue of the report. It is important that the report addresses:

- how NRAs take account of divergent geographical competitive conditions in margin squeeze tests on UBB offers;
- whether the test on retail NGA offers replaces the cost orientation on wholesale access services, as envisaged by the Recommendation on non-discrimination measures and cost methodologies.

Another confidential respondent invites BEREC to call for a public consultation rather than for a workshop so as to be able to collect a wider range of experiences, and maximize the outcome in terms of shareable knowledge across stakeholders, and to provide NRA with a valuable tool to foster consistent approach across the Member States.

BEREC wishes to clearly state that the intention of this internal workshop is to allow NRAs to share experiences on the matter of ex-ante margin squeeze tests. No policy conclusions or proposals will be published in the summary report intended to follow the workshop itself. Having said that, BEREC recognises the importance of this matter for stakeholders and will gladly accept proposals for further work on this topic early in 2019, during the call for inputs to the BEREC Work Programme 2020. The information provided during this public consultation by FTTH Council Europe, Open Fiber, and also one confidential respondent is very pertinent to the matter at hand, and BEREC would willingly further engage on this topic once it has considered the experiences of its constituent NRAs by the means of this internal workshop.

2.4 Carry-over work on the data economy

BEUC welcomes the work of BEREC on the data economy. Issues around data, as one of the main sources for innovation in digital markets, need to be addressed holistically and this includes regulatory agencies working in tandem to ensure that consumers are not harmed by anti-competitive or unfair practices undermining their rights and eroding consumer choice. BEUC will continue providing input to BEREC on this important workstream to ensure that policy-makers and regulators put the consumer's interest at the centre of a European data policy.

ECTA has not yet determined whether or how it may answer BEREC's ongoing public consultation on the data economy.

EDRi notes that there are very significant issues regarding the anti-competitive use of personal data in the electronic communications services market. NRAs have particular experience, resources and powers, which means that there is potential for very effective and beneficial activities to be undertaken. Taking a purely market-driven approach will lead to problems, as this can lead to free-riding and breaches of trust that undermine confidence, take-up of services and, ultimately, innovation. This is clear from research undertaken both in the EU and in the US. On the other hand, there are clear market and regulatory failures related to how personal data are monetised in the electronic communications services market that could be effectively addressed by cooperation between BEREC and the European Data Protection Board. EDRi will provide further recommendations in our response to the BEREC consultation on the data economy.

Facebook will respond separately to BEREC's ongoing public consultation on the "Draft Report on the data economy".

GSMA will submit its input to BEREC with regards to this workstream when responding to the public consultation on the data economy.

BEREC thanks all respondents for considering their responses to the BEREC public consultation on the data economy and notes that further information will be submitted through that process. BEREC particularly thanks EDRi, in this instance, for elaborating its thoughts on the data economy in this process. Such consideration will be passed to the experts working on the data economy workstream for BEREC.

2.5 Carry-over work on Internet of Things indicators

BEUC welcomes BEREC's initiative to provide a realistic statistical overview of the IoT landscape. Figures and predictions about the number of connected devices on the market differ depending on the source. Reliable, independent, statistics are necessary to inform regulatory actions in this area, in particular to overcome the challenge of ensuring the level and quality of connectivity necessary to enable the large-scale deployment of connected products and services and to allow consumers to take up all the opportunities brought about by the Internet of Things.

MVNO Europe explicitly wishes to support this workstream.

One confidential respondent also welcomes BEREC's initiative to provide a realistic statistical overview of the IoT landscape.

BEREC appreciates the support expressed by stakeholders for this workstream and looks forward to receiving responses to the public consultation on the matter once it is launched in light of the BEREC Plenary in December 2019.

3. Strategic Priority 3: Enabling 5G and promoting innovation in network technologies

Stakeholders have provided detailed responses across each of the workstreams falling under Strategic Priority 3. In total, 18 individual responses were provided to the 3 workstreams under this Strategic Priority. Stakeholders are very interested in the work of BEREC on the impact of 5G on regulation workstream, which will (in the final version of the WP 2019) essentially be a ‘two-headed’ project covering a broad ‘pathfinder’ study on the impact of 5G on regulation and the ecosystem, as well as a feasibility study with respect to the expected benefits from a consistent and coherent presentation of coverage information on 5G deployments for use by market sectors other than mobile network operators.

3.1 The impact of 5G on regulation

ECTA broadly agrees with what BEREC proposes in terms of substance, as BEREC refers to the role of regulation in ‘enabling the 5G ecosystem’, and mention is made of sharing of small cells, enabling competition in vertical applications, roaming, etc. which ECTA understands to imply a pro-competitive approach and looking after end-user interests. ECTA suggests that BEREC makes a slight adjustment to this section of the draft WP2019, to put all the potential issues on an equal footing, i.e. put all of them in the same bullet-point list (alongside monitoring coverage/QoS and roll-out and sharing of small cells). A call for input, preceding a public consultation, seems essential, and ECTA therefore formally requests BEREC to apply its full consultation standard to this workstream.

EchoStar Mobile notes that BEREC made 5G a key focus of its Work Programme. BEREC intends, within the scope of its competence, to continue actively and closely following the development of 5G and will, where relevant, work in cooperation with other EU bodies (in particular RSPG) to identify potential hurdles to a smooth and quick implementation in the Member States. EchoStar Mobile would like to attract BEREC’s attention to the following points. Whilst the importance of the smooth roll out of 5G in Europe cannot be underestimated, in particular for the vertical sectors, regulators should not overlook the importance of satellite services in the 5G ecosystem. It will not be possible to realise a ubiquitous coverage without the integration of satellites into 5G networks. When BEREC assesses the impact of the regulation on the 5G roll out, it is important that BEREC considers the important role of satellite in the 5G network to meet all of Europe’s needs including for ubiquity and resiliency. BEREC should be closely cooperating with RSPG in order to promote the most comprehensive and technology neutral approach that will be beneficial to the European consumers.

EDRi strongly believes the existing net neutrality regulation and the current BEREC net neutrality implementation guidelines provide enough protection and flexibility when it comes to 5G. It is vital that BEREC does not base its assessment on marketing promises or simple commercial interests of certain stakeholders, but instead provides evidence-based guidance on concrete use-cases of 5G accordingly to existing legislative requirements. In this sense, EDRi welcomes BEREC’s chair and regulators’ recent findings concluding there is no evidence on the table that would demonstrate that current net neutrality rules are not flexible enough for 5G. In addition, EDRi also supports the position taken by EDRi’s member organisation Article 19, for example:

“... In relation to BEREC’s obligations to ensure robust and secure networks and its proposed obligations to empower consumers under its Strategic Priority 5, BEREC must pay close attention to the proposed security enhancements in the 5G standard. BEREC should consider whether the technological standardisation that is being undertaken by industry-driven bodies is indeed undertaken with a view to enable vertical separation. It or its members should consider capacity building in the field of technical standards development in the same way that they are committing, for example, to capacity building in ex ante margin squeeze. BEREC and its members should also consider monitoring more closely the work of standard setting fora by attending meetings and stimulating debate on the impact of technological standards on competition and users’ rights.”

Facebook fully supports BEREC’s work to better understand the impact of 5G on regulation and the role of regulation in enabling the 5G ecosystem. Facebook encourages BEREC to seek broad input on these topics with the goal of promoting innovation, competition and investment. Facebook encourage BEREC to ensure these new innovations are adopted in a way that is consistent with the principles of net neutrality. While regulation should provide the flexibility needed to encourage innovation, it important that BEREC maintain strong net neutrality protections that will ensure the internet remains open for everyone. We look forward to working with BEREC to consider these issues in more detail.

FTTH Council Europe is currently conducting a cost study to compare the sequential investment in fibre and then 5G overlay compared to a co-ordinated investment plan. Significant cost savings appear to be available if there is a co-ordinated approach to investment. FTTH Council Europe would welcome work to look at restrictions to small cell development in Europe such as exclusivity agreements, planning and practical constraints. Given the symbiotic nature of the relationship between Fibre and 5G, BEREC should also consider the question of economic substitutability and/or complementarity and how that is changing in view of technical developments. FTTH Council Europe would be happy to share the results of its study with BEREC.

GSMA supports BEREC’s view that new technologies, such as SDN or NFV are still at their formative stage, hence GSMA believes that there is no justification to include such new technologies or new innovative interfaces/services in the scope of the sector specific regulation. GSMA supports a fit for purpose and future proof regulatory framework that incentivizes long-term investments in 5G technology. GSMA encourages BEREC to liaise with RSPG and ensure consistency of the work of the two bodies.

Liberty Global notes that the promotion of innovation in network technologies should be broader than mobile only. The development of other radio technologies like WiFi and several fixed network technologies is essential. Hence, BEREC should not to look at mobile in isolation but to give due weight to promoting innovation of all networks. Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

MVNO Europe note with satisfaction that BEREC refers explicitly to – among others – impacts in terms of market definition, network slicing, roaming, numbering and wholesale access to

mobile networks to enable competition in vertical applications. MVNO Europe hopes that the suggestions it made at the call for input stage were helpful in this regard, and asks BEREC to examine these again when carrying-out this workstream. MVNO Europe believes that BEREC needs to set up a specific team which focuses on understanding IoT and 5G markets (retail, 'industry vertical' and wholesale, including how 'network slicing' will really materialise), covering all technologies and ecosystems involved, and the competitive dynamics at play – including specific attention for potentially anticompetitive developments.

Patrick Leask set out a lot of technical detail regarding the technologies inherent in 5G networks, which mean that modelling the network is becoming impractical due to increased complexity and a dynamically evolving network configuration. Patrick Leask presented material covering virtualisation, cell heterogeneity, massive MIMO and beamforming, self-optimising networks, KPIs and KQIs.

One confidential respondent comments that such a complex issue as this requires further stakeholder engagement ahead of the publication of the draft report. The respondent believes that the focus should rather be on the regulatory incentives for the fast roll out of 5G, considering the mobile/fixed convergence and the possible impact on the outlook on the ECS markets, identifying the costs and administrative hurdles and recommendations to public authorities to facilitate deployment.

Another confidential respondent appreciates BEREC's approach to this project. In particular, the respondent believes that only NRAs under the BEREC guidance are capable of assessing the true potential of wholesale access ex ante measures in terms of competition. The respondent truly regards regulation as an engine to unleash the potential of infrastructure, by correcting inefficiencies in market functioning. Furthermore, the respondent believes that this BEREC project will also raise the due attention on the opportunities that wholesale access to mobile networks represent in order to enable competition, foster investments, and enhance consumers' access to innovative services.

BEREC appreciates the significant level of interest in this workstream (indeed it is the most commented on workstream across the entire WP 2019), and thanks stakeholders for their engagement. The work overall will take in a broad 'pathfinder' study on the impact of 5G on regulation and the ecosystem, as well as a feasibility study with respect to the expected benefits from a consistent and coherent presentation of coverage information on 5G deployments for use by market sectors other than mobile network operators (which will, indeed, provide input to the 'pathfinder' study). Therefore, as this 'two-headed' project is still germinating within BEREC, the material and commentary provided by all stakeholders here will be taken into consideration by the relevant BEREC experts for their consideration as they continue to elaborate the details for the workstream.

3.2 Peer review process

ECTA understands that the EECC implies that the RSPG-led peer review process on radio spectrum assignment will occur in a closed forum. ECTA thinks that it is essential for stakeholders to understand how and by whom BEREC may be represented in this context, and what its contributions might be. ECTA emphasises that if peer reviews on radio spectrum assignment occur in practice (which is uncertain at this stage, given that it is an option for NRAs or competent authorities), it needs to be clear that any changes to a draft decision which

would already have been the subject of national consultation, needs to be subject to a new national consultation.

BEREC appreciates ECTA's commentary on this workstream, but cannot, at this time, comment on the hypothetical situation, or the likelihood, of new national consultations for draft decisions changed in light of peer review processes.

3.3 Carry-over work on Common Position on infrastructure sharing

ECTA has no material comments on this workstream. ECTA supports this initiative and the manner in which it is carried out.

FTTH Council Europe believes that this work should be extended to include an assessment of the efficacy of fixed network sharing.

GSMA considers that infrastructure sharing can play a useful role, however should remain a voluntary commercial step between operators as it has already been achieved in different Member States by several mobile network operators, under the control of competition rules. If NRAs opt for sharing obligations when granting spectrum licenses, as foreseen in the EECC, this should be done after having assessed the impacts of such measures on investments and infrastructure competition.

Mobile and Wireless Forum calls on BEREC to address the adverse impacts of arbitrarily low EMF exposure limits in the WP 2019. Science-based and harmonised EMF exposure limits are crucial for an effective and efficient roll-out of 5G infrastructure. Thus, Mobile and Wireless Forum encourages BEREC to promote at Member States level the implementation of EMF exposure limits as laid down in Council Recommendation 1999/519/EC. The Mobile and Wireless Forum noticed that in the draft WP 2019 BEREC again highlights the importance of infrastructure sharing. The Mobile and Wireless Forum draws BEREC's attention to the EMF exposure limits at Member States level as one of the most important determinations of infrastructure sharing.

Open Fiber notes that the development of the 5G licensing process throughout Europe is taking place within a multi-operator environment and this may entail a relevant risk of under-investment in infrastructures, if operators do not put in place effective cost sharing programs. One of the most promising scenarios is the appearance of Neutral Hosts, acting as wholesale-only operators, which build and manage relevant infrastructures for a plurality of network operators. The resulting cost sharing could in fact prove to be effective both in maintaining competition among a higher number of operators and in extending network coverage, to the benefit of all customers. Open Fiber suggests an investigation in order to identify how NRAs may help foster this scenario within the boundaries set by the new EECC.

One confidential respondent recommends the engagement with stakeholders prior to the Consultation on the common position, e.g., through the organisation of hearings or workshops, to discuss preliminary findings and possible conclusions.

BEREC thanks all stakeholders for responding to this workstream, and particularly for the support expressed for it. Regarding the calls for additional work suggested by FTTH Council Europe and Open Fiber, BEREC would note that in early 2019, BEREC will call again for inputs to the draft BEREC Work Programme 2020, at which point stakeholders can propose

new work for BEREC to engage in. Regarding the comment made by the confidential respondent, BEREC conducted a consultation in 2018 on this project and therefore does not now intend to engage with stakeholders again. Finally, with respect to the comments made by the Mobile and Wireless Forum, the EC intends to undertake a study to assess whether there is a requirement to address matters specifically related to EMF exposure limits. As recently as 8 October 2018, the ICNIRP consulted on the limits to which the respondent refers. This is not a task for BEREC.

4. Strategic Priority 4: Fostering a consistent approach of the net neutrality principles

Stakeholders have provided detailed responses across each of the workstreams falling under Strategic Priority 4. In total, 21 individual responses were provided to the 3 workstreams under this Strategic Priority. Stakeholders are particularly engaged with all of BEREC's work on Net Neutrality and have offered suggestions in terms of the update to the Guidelines as well as pointing out some concerns with respect to the development of the Net Neutrality measurement tool.

4.1 Update to the Guidelines on Net Neutrality

BEUC welcomed BEREC's 2016 guidelines as the necessary compromise to ensure a consumer-focused, coordinated implementation of the Net Neutrality Regulation. A few areas remained unfortunately weak or under-developed though, such as the rules on zero-rating and the rules on speeds of internet access services. Should BEREC re-assess its guidelines, the changes should be focused mainly on these two areas.

ECTA welcomes that BEREC will consult again on potentially updating the Guidelines on net neutrality (after calling for input in 2018). This is necessary, and is the right approach.

EDRi welcomes the ongoing importance that BEREC accords net neutrality for freedom of expression, competition and innovation in Europe. EDRi would also request particular attention to be given to the issue of zero-rating. According to BEREC's own analysis, right now 27 EU countries have Zero-Rating offers in their markets while not a single regulator has issued a remedy against any of these offers. The regulation clearly prohibits harmful types of commercial practices and agreements. This issue needs further attention and study. To this end, it is important that BEREC proactively publicise the consultation among relevant market players that are the victims of this practice.

Facebook supports BEREC's implementation of strong net neutrality protections to ensure that providers of IAS do not interfere with end-users' ability to access the online content and services of their choice. With respect to zero-rating practices, Facebook supports BEREC's approach that zero-rating is not an automatic or 'per se' violation of net neutrality but, instead, can be reviewed by NRAs on a case-by-case basis. Facebook believes, however, that the text of the Guidelines, as well as the application of the Guidelines in practice, should provide greater flexibility for consumers to benefit from zero-rating offers where there is no evidence of actual consumer harm. Facebook respectfully encourages BEREC to build in a general concept of flexibility as the guiding principle to NRAs in their application of the Guidelines. Providing NRAs with clarity and flexibility is particularly important in fast-changing markets with new technologies, such as 5G, which allow for a range of new services, applications and business models, many of which cannot yet be anticipated. An overly prescriptive and narrow interpretation of the Guidelines at such an early stage of 5G technology development could potentially hamper innovation and undermine the inherent principle of technology neutrality in the Regulation and Guidelines. It also risks undermining regulatory and business certainty, and depriving consumers in their choice of new and innovative products and services.

GSMA, together with ETNO and Cable Europe, has previously submitted a joint response to the BEREC public consultation on Evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines. GSMA encourages BEREC to take utmost account of that contribution with regards to potential updates to the existing BEREC NN Guidelines foreseen by BEREC in 2019. Beyond this, BEREC should take care that transparency requirement in the scope of connectivity quality should support end-users informed choice and must not harm innovation. Information requirements need to be strictly limited to what most end-users consider as useful and must not encompass parameters operators cannot provide.

Liberty Global would like to bring to BEREC's attention a potential discrepancy between the WP2019 and BEREC's report of 8 October 2018 on "the implementation of Net Neutrality Regulation and BEREC Net Neutrality Guidelines". In the conclusions section the report quotes: "BEREC concludes so far that the net neutrality guidelines are well suited to assist NRAs in performing their tasks of supervision and enforcement as set out in Article 5 of the Regulation". Hence the need for updating the net neutrality guidelines is unclear. Considering that an evaluation of the net neutrality regulation by the Commission will be conducted by 30 April 2019, it would be more appropriate to await the outcome of this evaluation before deciding on an update of net neutrality guidelines.

One confidential respondent welcomes the initiative of BEREC to update the guidelines on net neutrality. BEREC Guidelines should clearly acknowledge that:

- One end user can have multiple IASs with different traffic management settings
- Different end users can have different IASs with different traffic management settings

The BEREC Guidelines should acknowledge that new traffic management methods contribute to better quality and a more efficient use of network resources and that these have both commercial and technical benefits for operators and consumers. The BEREC Guidelines should clearly recognise:

- What is "necessary" as a quality requirement for services should be defined by the needs of the end user of the service;
- When assessing the quality of networks, today's measurement systems and performance indicators should be avoided in relation to future networks;
- A co-regulatory European expert working group should be established to monitor developments and encourage innovation in relation to 5G and quality differentiation for services other than IAS within the framework of the Open Internet Regulation.

Another confidential respondent welcomes BEREC's view on maintaining and improving the guidance on the appropriate implementation of Net Neutrality. Moreover, the respondent invites BEREC to tackle the negative effects that a loose application of NN principles might generate in terms of reduced competition. This scenario affects negatively alternative operators, in particular MVNOs, which cannot compete with MNOs on the offer of unlimited data traffic for categories of services in zero rating scenarios. Therefore, the respondent welcomes public consultation planned by BEREC on the Opinion, in which it may be recommended to update selected parts of the 2016 NN Guidelines and invites BEREC to tackle also the economic constraints suffered by MVNOs in the application of the NN principles, in particular with regard to zero rating policies.

BEREC welcomes the proposals for development of the Net Neutrality Guidelines made by BEUC, EDRi, Facebook, and one confidential respondent. This workstream includes a period of public consultation in 2019, which will allow for stakeholders to engage actively with BEREC on the update to the Guidelines. In addition, as with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

4.2 Report on the implementation of the Net Neutrality Regulation

ECTA has no material comments on this workstream, and assumes that this concerns a factual BEREC Report.

EDRi welcomes the attention that will be accorded to zero-rating. EDRi requests that the activity be broadened, however, in order to conduct a study about the current situation on commercial practices and agreements (zero-rating and application-specific data volumes) and their impact on the cross-border provisioning of content, application and services. Such a study should create an open data set about such commercial offerings, similar to the Mobile Broadband Monitor of the European Commission.

Facebook encourages BEREC to increase transparency in its working processes, particularly at the experts working group level. Facilitating more dialogue with stakeholders at this stage is crucial for BEREC to fulfil its tasks, particularly considering the new responsibilities provided by the EECC.

GSMA state that the BEREC NN Guidelines have formulated a too restrictive interpretation of the Regulation on some aspects, while acknowledging the need of the greater legal certainty when it comes to implementation of the Regulation. Regulators should be extremely cautious when assessing or implementing the rules at a time new network evolutions are ongoing; compared to the date of adoption of the Guidelines, 5G networks and its specific features are now becoming a reality. Such evolutions and corresponding investments should be supported by a clear, predictable and future proof framework, for the benefits of the European citizens, businesses and EU competitiveness.

Liberty Global considers the report on the implementation of the Net Neutrality Regulation to be an annual report, as done in previous years. Liberty Global would like to point out that compared to previous reports, some discrepancies exist between the feedback provided by NRAs and/or interpretation and compilation from BEREC and what stakeholders are actually observing and experimenting. Liberty Global believes it would be of great value to involve stakeholders in feeding back.

One confidential respondent stated that the report should be subject to public consultation, before adoption.

Another confidential respondent is thankful that BEREC intends to discuss national cases including expressly cases of zero-rating.

BEREC thanks stakeholders for responding to this workstream in the WP 2019. Again, a number of stakeholders have requested that BEREC includes a public consultation period for this workstream, and BEREC must reiterate that, practically speaking, not all of its workstreams can include a public consultation. This report is, akin to what ECTA and Liberty Global state in their responses, essentially an annual, factual monitoring report, and BEREC

does not consider it necessary to consult for this workstream. Regarding the comment made by EDRi that BEREC should conduct a study about the current situation on commercial practices and agreements (zero-rating and application-specific data volumes) and their impact on the cross-border provisioning of content, application and services; BEREC would welcome EDRi's proposal when it consults on inputs for the draft BEREC Work Programme 2020. Unfortunately, at this time, the workload and timeline for the WP 2019 is already comprehensive and additional work cannot be accommodated.

4.3 Carry-over work on BEREC Net Neutrality measurement tool

ECTA has previously expressed doubts on the costs a net neutrality measurement tool may impose on operators, but currently does not have comments on this workstream.

EDRi welcomes the BEREC Net Neutrality measurement tool and look forward to its deployment. EDRi hopes BEREC will continue to advertise the take-up of this tool among its members and observers. The interest of the Indian regulator TRAI and the increasing interest of municipalities in the USA about this tool proves the correct decision of BEREC to lead the way. EDRi recommends BEREC to also think about ways in which this measurement tool can be tied into complaint and enforcement procedures. Users that measure potentially unreasonable traffic management behaviour on a tool from a regulatory authority are important stakeholders for the fulfilment of the mandate of every NRA. Transparent and comprehensive complaint procedures would greatly benefit from such integration.

Facebook welcomes BEREC initiatives aimed at providing transparency in the market and proven data-based evidence of how net neutrality is preserved in the EU.

GSMA welcome BEREC's carry-over work on NN measurement tool. However, the work dedicated to development of such a tool should result in a product that is robust, provide reliable information to consumers that build trust, while avoiding inappropriate burdens or misleading conclusions. The tool must be also tailored in a way that fraud is not possible, and compatible with the operators' internal control of information systems. Measurement tools that generate non-reliable performance indications undermine trust and lead to unjustified complaints and legal disputes about contractual compliance. Taking into account the vast experience of operators concerning and many constructive dialogues between NRAs and operators in this regard, BEREC should closely consult with the operators.

Liberty Global would advise to run the development of this tool through the appropriate ESO (European Standards Organizations) channels. Even though it is a good step forward towards finding harmonization across NRAs, this tool is not guaranteed to be standardized and may create discrepancies with other tools used by the industry. Liberty Global strongly urges BEREC, NRAs and the industry to find a common approach for measuring Internet performance and believe the ESO is the right forum for reaching such consensus.

One confidential respondent noted that cooperation between NRAs and operators on national levels with regard to the development of measurement tools for IAS speed parameters have proven to be very fruitful. This practice should thus be adopted also by BEREC, as this ensures adequacy and efficiency, and is also part of a good administration of such development. The tool must be also tailored in a way that fraud is not possible, and compatible with the operators' internal control of information systems.

BEREC again thanks stakeholders for their interest in this significant BEREC workstream in the area of Net Neutrality. As BEREC is committing a lot of resource to this project, ensuring that the end product is a quality output is of the utmost importance to BEREC, and taking on board such comments as provided by stakeholders here is crucial. EDRI's complimentary comments are well received as are the proposal to take into account complaint and enforcement procedures. GSMA refers to further consultation with stakeholders, but BEREC must reiterate that consultation on the tool has already been conducted. However, opportunities such as this (i.e. input to the WP 2019) for stakeholders to provide further comment are noted by BEREC. Finally, Liberty Global's comment regarding ESO channels will also be taken into consideration by BEREC.

5. Strategic Priority 5: Exploring new ways to boost consumer empowerment

Stakeholders have provided detailed responses across each of the workstreams falling under Strategic Priority 5. In total, 51 individual responses were provided to the 10 workstreams under this Strategic Priority. Stakeholders are particularly engaged with respect to BEREC's proposed vision for Europe's telecom consumers as well as BEREC's proposed report on defining adequate broadband internet access service.

5.1 Guidelines on general authorisation notifications transmitted to competent authorities

BEUC questions the reason for including this workstream under the Strategic Priority on consumer empowerment.

ECTA supports this workstream for its potential to lead to reduced regulatory burdens on operators and facilitating market entry and transparency. At the same time, ECTA wishes to emphasise that the new Guidelines should not suggest the introduction of unnecessary additional information requirements. A common template and a common database at BEREC level will avoid fragmentation, and avoid operators having to notify activities and be subject to regulation imposed by, and fees levied by, multiple national authorities.

Facebook welcomes the acknowledgement in the EECC of the technical and market differences between IAS, NB-ICS and NI-ICS. Such fundamental differences pose different regulatory challenges, which, as set out in the EECC, lead to variances in the obligations applicable to the various categories of ECS. This is reflected, for instance, in the scope of the general authorisation regime, limited to the provision of ECN or the provision of ECS other than NI-ICS. BEREC's work on the General Authorisation notifications should reinforce this important distinction to ensure full harmonization.

GSMA notes that the CircaBC databank on Article 7/7a proceedings has proved to be a valuable source for stakeholders, and that BEREC should copy the way the EC deploys the official correspondence that is clearly arranged of those proceedings on CircaBC's website.

One confidential respondent reflects the same comments made by GSMA.

BEREC appreciates the question posed by BEUC, however it considers that inclusion under the consumer empowerment Strategic Priority remains appropriate. BEREC appreciates the suggestion proposed by GSMA and a confidential respondent, and also thanks both ECTA and Facebook for their support, and their useful and supporting comments, for this workstream. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

5.2 Guidelines on common criteria for undertakings other than ECN/ECS to manage numbering resources

BEUC questions the reason for including this workstream under the Strategic Priority on consumer empowerment.

ECTA has no material comments on this workstream, but is concerned about BEREC's sequencing of its workstreams. This appears to ECTA to be a low priority item, which could conceivably be pushed back in BEREC's calendar.

GSMA states that BEREC should aim at ensuring that undertakings other than ECN/ECS are under the obligations to ensure that numbering resources are used efficiently, and in case where allocated resources are not used within a given period, they are returned to the national authorities.

One confidential respondent commented that this work should not only be based on a benchmarking of NRA best practices; it should also be based on the most important criterion that entities who are assigned numbering resources should be able to exhibit a relationship with a public network and/or service operator, since the numbering resources will have to be implemented inside the public networks and publicly available services in order to be useable.

BEREC appreciates the question posed by BEUC, however it considers that inclusion under the consumer empowerment Strategic Priority remains appropriate. While BEREC appreciates ECTA's concern with respect to prioritisation, BEREC has undertaken a detailed prioritisation of the workstreams in the WP 2019, and therefore will maintain the timing for this project. Regarding GSMA's comment – BEREC does not have such responsibility. With respect to the comment of the confidential respondent – as BEREC develops the Guidelines for common criteria, such input will be taken into account. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

5.3 Input to EC regarding contract summary template

BEUC welcomes BEREC's input to the Commission on the contract summary template ahead of the implementing report. A single European contract information sheet should help consumers to better understand telecom offers and easily compare between them. BEUC welcomes the separate public consultation on this issue, to which it has submitted a contribution.

ECTA is filing comments on BEREC's consultation on a contract summary template, which is conducted in parallel. Given that BEREC's 2018 consultation does not contain any indication of the expected contents of its Opinion on a contract summary template, it is essential for BEREC to consult in 2019 on the exact contents of its forthcoming Opinion.

Facebook will contribute separately to the ongoing BEREC consultation on the Draft Report on contractual simplification.

GSMA will submit its input to BEREC with regards to this workstream when responding to the public consultation on contractual simplification.

Liberty Global supports the view that providing easily understandable information is an essential element for ensuring the welfare and protection of end-users. Liberty Global does not see the necessity for a specified format for this information (e.g. font size, layout). When a specific format is required, it should be kept to the minimum. Implementation of a specified format comes with significant administrative costs and it is unclear whether consumers view the product information sheets as helpful in their decision making process. Liberty Global refers to its 7 November 2018 response to the consultation.

MVNO Europe asks BEREC to bear in mind that contract summaries, as will be required by the draft EECC, are intended to make things simple. MVNO Europe hopes that BEREC is not envisaging to include significant levels of information in summary templates, as this would make matters complex rather than simplifying them. MVNO Europe requests BEREC to hold a public consultation on the actual draft contract summary template, before or providing its input to the European Commission.

One confidential respondent believes that the introduction of a contract summary would greatly benefit final users; indeed the respondent has already introduced its own simplified form, but at the same time warns BEREC that the introduction of a regulated contract summary should not negatively affect the possibility of operators to bring to the market innovative offers comprising also new services. In this light, the respondent asks BEREC to assess the risk of an excessive standardisation that might risk reducing the competition.

BEREC appreciates that some (or indeed all) of the respondents are also providing a separate response to the public consultation on this topic, and clearly it is more appropriate for BEREC to respond to such comments through that process. However, regarding the requests from some stakeholders for BEREC to hold another public consultation on the draft contract summary template, BEREC's role is clear in this matter, i.e. to provide input to the EC on basic minimum information elements which the contract summary template should contain. Finally, regarding the point mentioned by the confidential respondent about excessive standardisation, BEREC will take this into account as it develops its input to the EC.

5.4 Guidelines detailing quality of service parameters

BEUC welcomes BEREC's input to the Commission on the contract summary template ahead of the implementing report. A single European contract information sheet should help consumers to better understand telecom offers and easily compare between them. BEUC welcomes the separate public consultation on this issue, to which it has submitted a contribution.

ECTA asks BEREC to be cognisant of the fact that alternative operators relying on wholesale access to SMP operators' networks (or other operators' networks) do not control the most essential elements of the quality of the service provided. Prior to imposing QoS parameters/QoS parameter publication in substantial detail, NRAs and BEREC should initiate explicit workstreams focusing on ensuring proven non-discrimination on QoS between wholesale access providers, and access takers.

EDRi refers to a statement made at the public debriefing for the 36th BEREC Plenary meeting, according to which "in almost half of the countries, ISPs have not yet included required speed information in their contracts". According to EDRi, the enforcement of Article 4 of the Open Internet Regulation is devastating and needs to be urgently addressed.

GSMA comments that BEREC should recognise that quality of service measurement parameters and methodologies must be based on already existing consolidated technical and scientific foundations. According to GSMA, BEREC needs to avoid duplication of work concerning the definition of quality of service parameters already done in the scope of the BEREC Guidelines referring to Art. 4 of the Open Internet Regulation. BEREC should provide clear guidance concerning the transposition of the EECC in national law. Far reaching or

overly prescriptive guidance should be avoided to not provide disincentives for operators to offer ICS with ensured quality. Instead, BEREC should ensure that ICS-providers have an incentive to offer services with ensured quality. As a matter of principle, when identifying the parameters for quality BEREC should consider the view of the majority of end-users and concentrate only on key information. Parameters that are hardly relevant for consumers and possibly only of interest with regard to a small minority, should not become part of a regulatory information requirement.

Liberty Global states that BEREC should run this or parts of this report through ESO's (European Standards Organizations) channels, as it is of great importance that industry and ESOs are involved in the definition of these parameters. Liberty Global urges BEREC to address the need of identifying different technologies and access networks in order to assess the different QoS parameters. A one-size-fits-all solution or parameter may not be appropriate.

Patrick Leask noted work that the ITU is currently undertaking to create some very relevant specifications in this area³ and states that it would seem sensible for BEREC to align its QoS approach with these⁴.

One confidential respondent comments that BEREC needs to keep in mind that in IP-based networks the offering of ensured quality of ICS is a commercial decision of the undertaking.

BEREC thanks all stakeholders for responding on what is clearly an important workstream. BEREC particularly appreciates the support expressed by BEUC. Regarding ECTA's suggestion that NRAs and BEREC should initiate explicit workstream, BEREC would suggest to ECTA that it could propose such workstreams during the call for inputs to the BEREC Work Programme 2020. The suggestions offered by GSMA, Liberty Global, Patrick Leask and a confidential respondent will be provided to the relevant BEREC experts involved in this workstream.

5.5 Report on Member States' best practices to support the defining of adequate broadband internet access service

BEUC welcomes BEREC's work on broadband IAS, and will be happy to contribute with national examples that have worked for consumers in different EU countries.

ECTA looks forward to BEREC's public consultation and think that a call for input is also warranted. ECTA asks BEREC to be cognisant of the fact that those alternative operators which rely on wholesale access to SMP operators' networks (or other operators' networks) do not control the most essential elements of the quality of the service provided. ECTA considers that the completion of this workstream should be moved to the end of 2020.

EDRi states that in relation to mobile services, any data cap should be carefully considered, particularly if combined with zero-rating services. As is clear from all relevant research, socially disadvantaged users are very concerned about predictable costs. As a result, zero-rating

³ <https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx>

⁴ E.RQUAL: Strategies to Establish Quality Measurement Frameworks; E.MTSM: Measurement Scenarios, Advanced Measurement Systems and Sampling Methodologies to Monitor the QoS in Mobile Networks.

(even if combined with a high data cap) will have the practical impact of preventing the consumer's full social and economic participation in the digital economy.

FTTH Council Europe notes that there should be a consistency between the ambitions stated for Europe and the definition of adequate broadband IAS. Since the European legislators have set network targets of VHCN across the EU, even though these targets are independent of the end user experience, the FTTH Council Europe believes that BEREC should reflect in some way the capacity of VHCNs in the definition of adequate broadband IAS.

GSMA states that BEREC should specify the criteria "minimum bandwidth enjoyed" with regards to the speed actually used or subscribed to by most consumers.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

One confidential respondent noted that the obligation for MS to define adequate broadband IAS based on "the minimum bandwidth enjoyed by the majority of consumers" risks leading to very high quality requirements, far beyond any safeguard provision based on the primary criteria to define the speed that is based on a list of indispensable services. BEREC should strive for a consistent approach, not providing a guidance to Member States that conflicts with the safeguard criteria of "indispensable services".

BEREC thanks all stakeholders for their early input to this workstream. ECTA states that this workstream should be moved to the end of 2020, but BEREC has gone through a prioritisation of workstreams and the timing set out in the draft WP 2019 is the most appropriate timing for this project that BEREC can achieve. Again, clearly stakeholders have put thought, time and consideration into their responses and BEREC thanks EDRi, FTTH Council Europe, GSMA, Liberty Global, and a confidential respondent. BEREC will provide such inputs to the experts that will lead this project to set out MS best practices with respect to the definition of adequate broadband internet access service, and further engagement between the relevant experts and stakeholders will proceed.

5.6 Workshop to move towards a vision for Europe's telecom consumers

BEUC welcomes that 'consumer empowerment' continues to be a strategic priority for BEREC and applauds the launch of this specific workstream on a vision for Europe's telecom consumers. BEUC welcomes that BEREC and its members recognise the importance of working closely with consumer organisations and look forward to contributing to this crucial work.

ECTA often agrees with BEUC positions, in that these are often pro-competitive. However, ECTA feels compelled to comment that a bilateral process between BEREC and BEUC, which would apparently not involve other stakeholders, is a matter of concern. ECTA believes that all BEREC initiatives should be open to all interested stakeholders, and that specific stakeholders should not be given a greater weight than others. ECTA considers itself to be a key stakeholder on these matters, and hereby asks to be included in any BEREC initiatives on consumer markets and business services markets.

EDRi warmly welcomes this initiative. Insofar as any such discussions would touch on fundamental rights issues (personal data protection, privacy and freedom of expression, for example), EDRi would be happy to provide complementary support for these discussions.

Facebook encourages BEREC to extend the dialogue for a vision of Europe's telecoms consumers to a broader audience, including other public and industry stakeholders.

FTTH Council Europe believes that, for this project, BEREC should also consider the accuracy of advertising of speeds. The FTTH Council Europe has noted a significant discrepancy between advertised and delivered speeds, a phenomenon remarked upon by BEREC and the Commission but it is not something being actively monitored.

GSMA comments that most of the areas in the context of consumer empowerment are relevant beyond the telecoms sector and should not be considered in an isolated way, but in the broader context as perceived by consumers. In general, consumer protection is one of the most important issues for the end-user experience. The use of digital applications, of which the most used are provided by OTTs, will continue to rapidly grow in the future. Therefore, the GSMA has continuously advocated the importance of consumer protection in terms of transparent information and terms of conditions of the used application independently of the provider of the application on a level playing field basis. GSMA is looking forward to discuss the above-mentioned points in further detail in the relevant BEREC workshop foreseen in 2019. GSMA would like to emphasize that not only consumer agencies but also operators are very crucial stakeholders in this context and can provide valuable input to this important discussion.

Liberty Global states that most of the areas in the context of consumer empowerment are relevant beyond the telecoms sector and should not be considered in an isolated way, but in the broader context as perceived by consumers. Liberty Global is looking forward to participate in the BEREC workshop in 2019, not only consumer agencies but also operators are very crucial stakeholders in this context and can provide valuable input to this important discussion.

MVNO Europe notes that BEREC intends to engage in a bilateral workshop with BEUC, the body bringing together various national consumer associations. Whilst MVNO Europe enjoys excellent working relations with BEUC, it would be justified to open the workshop to interested stakeholders, or at least to allow them to be observers.

One confidential respondent strongly suggests that BEREC involves a broader range of stakeholders, including service providers, in the planned workshop. In addition, enhanced cooperation between NRAs and consumer organisations – including national agencies- should take place in full transparency towards other interested parties.

BEREC thanks the stakeholders for commenting on this workstream and responds by stating that the intention of the workshop is to gain a deeper understanding of consumer concerns and perspectives, and BEREC feels that this can, at least initially, be best achieved through collaboration with BEUC. However, that is not to say that BEREC can't gain such understanding through collaboration or connection with other organisations, and indeed the responses here confirm that. BEREC seeks to gain deeper understandings on a range of matters across a range of stakeholders. A number of respondents have proposed that they

would be happy and available to participate in such a workshop, however BEREC cannot confirm attendance at such a workshop at this stage.

5.7 Guidelines on how to assess the effectiveness of public warning systems transmitted by alternative means to mobile NB-ICS

ECTA understands that the deadline for this BEREC workstream is well beyond all other deadlines. ECTA has no position on it at this stage, and asks BEREC to push it back in its calendar, so as to not divert resources away from immediate priorities.

EENA would like to highlight the importance of such guidelines in order to ensure a correct implementation of the EECC. The assessment of "effectiveness" of the alternatives is indeed crucial. In that context, EENA welcomes BEREC's approach in this Work Programme. When assessing the effectiveness of such alternatives, EENA would like to stress on the fact that visitors should also receive the alert. As a consequence, the assessment of some KPIs, such as the 'reach' or the examination of what is considered to be "receivable by end-users in an easy manner" should look not only at the citizens but also at the visitors. EENA welcomes the fact that BEREC will also seek the input from emergency services and their related national authorities. In addition, EENA, which has worked on this topic for the last 10 years remain at the disposal of BEREC for any specific information.

EDRi believes that there should be no privacy cost in such a system. In particular, the location of an identified or identifiable user should not be collected by the provider of the public warning system. Privacy by design requirements are instrumental in ensuring this. The text describing this priority provides no insights into what the perceived benefits of an app would be and it also fails to mention any perceived benefits of a registration system. EDRi recommends BEREC to approach this question from the opposite perspective – what are the limitations of an SMS-based system that would justify financial and other costs of any other measures that may be considered?

Facebook recognises the important role of public warning systems in order to protect citizens in case of a major emergency situation and is fully committed to contribute to BEREC work in this area. With respect to emergency services obligations in general, Facebook believes that the approach adopted in the EECC strikes an appropriate balance given the different functionalities of NB-ICS and NI-ICS, and agrees with the overall approach adopted under the EECC to subject NI-ICS to lighter touch regulation. As BEREC and other policymakers consider whether extension of the public warning system is necessary, Facebook encourages BEREC to ensure that any requirements are flexible enough to allow mobile apps to innovate and build new experiences that benefit their users and complement the emergency services of network-based service providers. Mobile apps including NI-ICS can offer services that are different than those of NB-ICS, but that are complementary and valuable to people in an emergency. Facebook remains fully committed to working with BEREC on this item. Facebook is available to explain the challenges that NI-ICS may face related to mimicking technical functions performed by NB-ICS, and to share experience with our Safety Check and other Crisis Response tools. Facebook encourages BEREC to consider organising a workshop to learn more about the role that NI-ICS play during emergencies.

GSMA comments that when assessing the effectiveness of PWS, BEREC should take into account end-users actual usage habits, particularly with regard to messaging. Also,

proportionality concerning costs and benefit need to be taken into account when assessing effectiveness. Resulting costs for providers of ECN and ECS should be publicly refunded, keeping in mind that PWS are a public objective and lead to considerably high costs for providers particular in case of network-based solutions.

One confidential respondent commented that the purpose of the Guidelines should not only be to ensure a common approach across Member States to the assessment of the effectiveness of alternative public warning systems (those using mobile NB-ICS; and those using ECS, other than mobile NB-ICS and broadcasting, or through a mobile app) but also on the costs incurred by industry to develop such systems. When assessing effectiveness of PWS, BEREC should take into account end-users actual usage habits, particularly with regard to messaging. Moreover, proportionality concerning costs and benefit needs to be taken into account when assessing effectiveness.

BEREC thanks all respondents for their comments on this workstream. Noting ECTA's request to push this workstream back, BEREC has conducted a prioritisation process for all workstreams in the WP 2019 and is satisfied that it has prioritised projects appropriately. BEREC thanks EENA, Facebook, EDRI, GSMA and one confidential respondent for providing very valuable feedback. The experts responsible for preparing these Guidelines will be briefed accordingly on the information offered by the stakeholders, and will consider such feedback as appropriate. Further contact between stakeholders and BEREC experts can occur at a later date on this matter. As with all guidelines that BEREC has been tasked with, BEREC will look to engage early with stakeholders for this workstream.

5.8 Workshop on the use of E.164 numbers in cross-border fraud and misuse

ECTA considers that restricting this topic to a BEREC-internal workshop and summary report is not the way to go. NRAs and BEREC probably only see the tip of the iceberg on telecoms fraud. Involvement of industry stakeholders is essential to help root out issues which strongly affect the industry and, can hurt end-users.

One confidential respondent states that this workshop should not only discuss and examine the cross-border aspect of purposely fraudulent connection fees, but also issues related to spoofing (e.g. Calling Line Identity modification or removal) and possibility the direct support by EC towards extra-UE countries practices.

BEREC thanks ECTA and the confidential respondent for submitting their comments. While the outline of the project presented in the WP 2019 won't be adjusted at this time, experts responsible for delivering the workshop will be briefed on the responses and can take such advice on board. As a first step, BEREC believes that the internal workshop is the best option for a sharing of experience. BEREC would be happy for ECTA to make a proposal for an open workshop at a future date, when BEREC calls for inputs to the Work Programme 2020.

5.9 Carry-over work on termination of contracts and switching providers

ECTA currently has no comments on this BEREC workstream, but has a high interest in understanding what BEREC may propose. Therefore, it is essential for BEREC to conduct a public consultation on what it intends to put forward in a final Report.

GSMA states that such an assessment needs to anticipate the broader digital market, since potential barriers for switching and termination are not at all a sector-specific challenge. This particularly refers to developments such as data-portability, which are much more relevant with regards to data-based business models that are mostly found with regard to other services than IAS or NB ICS. The GDPR has only recently introduced new obligations that are meant to tackle also issues with regards to lock-in effects caused by personal data.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

One confidential respondent states that the EECC includes numerous updates and new provisions that are supposed to further facilitate termination and switching of contracts. An assessment of switching and termination just before Member States transpose all of these rules will therefore only provide an outdated retrospective picture. To truly add value to the discussion BEREC should postpone this assessment. BEREC's report should have a balanced approach that takes into account the complexity of switching and portability processes and that possible mistakes may from any party involved: by the transferring and receiving providers as well as by the end-user.

BEREC appreciates all stakeholder input to this carry-over workstream from 2018, which has indeed included a public consultation already. Regarding ECTA's comment, stakeholders have had the opportunity to provide input already during that public consultation. GSMA, Liberty Global and one confidential respondent all make similar points with respect to postponing the assessment. BEREC intends to publish the report in light of the first Plenary of 2019 as scheduled. However, during the drafting of the final document, relevant BEREC experts can take into account such information submitted here by GSMA, Liberty Global and one confidential respondent, which, no doubt, has also been provided to the public consultation on this matter.

5.10 Input to European Commission methodology on pricing of bundles

ECTA currently has no comments on this BEREC workstream, but we have high interest in understanding what BEREC may propose. Therefore, it is essential for BEREC to conduct a public consultation on what it intends to put forward in a final Report.

Liberty Global states that as bundles are by no means sector-specific, BEREC should base its consideration on the specification of bundles included in horizontal consumer law and strive for consistency.

GSMA notes that consumers demand bundles across the digital market, which allows a seamless and convenient user-experience. Any assessment of bundles should therefore

consider this broader picture. The draft directive on digital content, which is at a final stage of legislation and also covers NI ICS, defines bundles as “different elements of the bundle are offered by the same trader to the same consumer under a single contract”.

One confidential respondent urges BEREC to take a broader perspective and consider bundles offered by telecom operators in a larger context. Also, BEREC should take neutral perspective, equally assessing the significant benefits linked to bundled offerings, e.g. convenient and seamless customer experience. BEREC’s input should take into account the new obligations on bundles introduced by the EECC, which are likely to affect the factors involved in the calculation of bundle pricing (e.g., predictability of customer retention) and, beyond, the offering of bundles in general.

BEREC has, in 2018, already provided input to the EC’s methodology on the pricing of bundles.⁵ The current workstream will involve BEREC’s participation in an EC workshop (date to be confirmed). BEREC notes the inputs from stakeholders and will consider its input at the workshop in light of these comments.

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https://bereg.europa.eu/eng/document_register/subject_matter/bereg/regulatory_best_practices/methodologies/8255-european-benchmark-of-the-pricing-of-bundles-8211-methodology-guidelines

6. BEREC obligatory work and stakeholder engagement

Stakeholders have provided detailed responses across each of the workstreams falling under BEREC's obligatory work and stakeholder engagement. In total, 50 individual responses were provided to the 18 workstreams presented, including the additional comments/proposals, which BEREC greatly appreciates the time that stakeholders took to provide input on (as well as across all other workstreams).

6.1 Ad hoc input to the European Commission

ECTA considers that all BEREC input to the EC should be subject to public consultation. This is important, notably given the EC's poor track record on not (fully) publicly consulting on the actual text of iterations of the EC Recommendation on Relevant Markets, as well as on the Implementation Act on mobile international roaming. BEREC can help to improve transparency and consultation in these and other areas. ECTA will, of course, also insist on the EC improving its own transparency and consultation practices.

GSMA states that all ad hoc work should be carried out transparently and be open for stakeholder input.

MVNO Europe understands that a certain extent of confidentiality of discussions is inevitable. However, MVNO Europe thinks that – as BEREC has done at various points leading up to the Roaming Regulation and draft EECC – BEREC should publish its Opinions, Reports input papers and technical background analyses, and consult stakeholders where possible.

One confidential respondent suggests that all the requests and outcomes thereof should be public and open to consultation and stakeholder feedback.

BEREC thanks all stakeholders for providing input to this workstream. BEREC looks to be transparent across all its workstreams but, as MVNO Europe recognises, a certain extent of confidentiality of discussions is inevitable. BEREC will publicly consult where it considers it appropriate with respect to such ad hoc input to the European Commission.

6.2 Implementation of the BEREC Regulation

ECTA is firmly of the opinion that BEREC's rules of procedure and the internal guidelines for the operation of BEREC Expert Working Groups are a matter for legitimate public scrutiny, befitting a public authority entrusted with having to 'do the heavy lifting' to resolve major aspects of outstanding key policy issues (in some cases going well beyond merely technical implementation issues). ECTA considers that these documents, which are not merely administrative in nature, as they may affect the way in which policy is formulated, should be published, and indeed should be subject to public consultation.

GSMA comments that the update of the BoR Rules of Procedure and the update of the EWG guidelines should lead to more transparency, e.g. by publications of minutes, enhanced stakeholder consultation and engagement as well as interim reports.

One confidential respondent notes that the revised rules applicable to Expert Working Groups should account for the need for enhanced transparency. Publication of minutes, interim reports, and the establishment of structured channels of stakeholder engagement and

consultation procedures are paramount to increase the transparency and quality of work of the EWGs.

BEREC thanks all stakeholders for providing input to this workstream and notes that it will indeed publish the documents set out in the Deliverable section for this workstream.

6.3 Database of E.164 numbers of European emergency services

ECTA has not at present considered this matter, and therefore has no comments to make at this time.

EENA welcomes the fact that this database will be handled at an institutional level and is at the disposal of BEREC and CEPT/ECO if any assistance is needed.

One confidential respondent noted that this database of E.164 numbers of European emergency services aimed at ensuring that they are able to contact each other from one Member State to another may be very useful in order to speed the emergency procedures. It is essential that this DB be internal among PSAPs, supplied and updated directly by competent national Administrations and strictly not publicly accessible.

BEREC thanks all stakeholders for providing input to this workstream and makes no further comment.

6.4 Database of numbering resources with a right of extraterritorial use within the European Union

ECTA has not at present considered this matter, and therefore has no comments to make at this time.

One confidential respondent noted that this central registry database on the numbering resources with a right of extraterritorial use within the Union, would be very useful provided that the NRA of country A (donating the block of national numbers to be used extraterritorially in Country B) and the NRA of country B (receiving the block of national numbers of country A, to be used extraterritorially in country B) are both involved in the registration process in the central registry database. That would help minimize risks of frauds and misuse of numbers, and ease legal intercept procedures. This central Registry should be populated and updated by all NRAs and accessible also by authorized operators since it is essential for awareness of different numbering origin and handling and of applicability to not interpersonal services as defined by EECC.

BEREC thanks stakeholders for providing input to this workstream and makes no further comment.

6.5 BEREC input to the setting of single EU-wide maximum fixed/mobile voice termination rate

ECTA is concerned that the manner in which this work is being conducted by the EC makes it nearly impossible for industry stakeholders to provide meaningful input. Stakeholders are basically excluded from interacting with the EC and the EC's consultants, and are required to reach out to NRAs, or to expect ultra-short-term NRA consultations. The effect of the EC's approach may be that most NRAs are side-lined from this exercise, and that only those

industry stakeholders which have the most resources to interact with NRAs may be able to effectively address this subject. ECTA considers it essential for BEREC to conduct a public consultation on its proposed inputs to the EC, covering all elements and issues at stake, for meaningful discussion. To be very clear, this comment mostly addresses ECTA criticism of the EC's process.

MVNO Europe welcomes that BEREC will play a role in this, but is frustrated about the current process led by the European Commission, its consultants, and with a steering committee composed of NRAs. MVNO Europe appeals to BEREC to ensure that this exercise does not lead to termination rates rising rather than falling.

One confidential respondent recommends BEREC to engage with stakeholders in the development of such input.

BEREC appreciates the comments received by stakeholders regarding this workstream. BEREC obviously cannot comment on the EC's process and any stakeholder frustrations regarding such. In addition, BEREC has prioritised its public consultations and at the moment has no plans to publicly consult on its input to the EC. As ECTA states, stakeholders do indeed have the opportunity to input by reaching out to NRAs or engaging with NRA consultations.

6.6 BEREC input on the weighted average of maximum mobile termination rates across the EU

ECTA comments that as this is basically a calculation, as it has been carried out in previous years, it has no new comments.

One confidential respondent recommends BEREC to engage with stakeholders in the development of such input.

BEREC thanks both stakeholders for commenting on this workstream and, as per ECTA's comment, simply notes that this is now a multiannual project which BEREC is satisfied with the progress of.

6.7 International Roaming benchmark data report

ECTA emphasises that BEREC's mandatory tasks require a detailed examination of the relationship between the wholesale caps set by regulation, actual wholesale charges for balanced and for unbalanced roaming traffic, and retail prices. BEREC is explicitly required by regulation to assess how closely those elements relate to each-other. ECTA thinks that a public consultation on BEREC's examination in this regard is justified.

MVNO Europe welcomes this BEREC workstream, which has already yielded interesting information, notably on the wholesale charges set by MNOs when they negotiate roaming bilaterals. More attention is needed to the level of wholesale charges incurred by MVNOs, how (and why) these are far higher than charges for domestic wholesale access to mobile networks. More attention is also needed to the very large discrepancy between retail tariffs and the wholesale caps.

One confidential respondent appreciates the work done so far, and recognises that the average price information is crucial to offset part of the information asymmetry suffered by MVNOs on wholesale prices. On the other hand, the respondent calls for a more focused effort

by BEREC in tackling the huge differences between retail and wholesale average prices. Lacking a common knowledge across the EU on retail/wholesale price discrepancy leads to compromising the position of MVNOs that are forced to suffer damages even in the case derogation is in place.

BEREC thanks stakeholders for responding to this multiannual workstream, again noting that to add another public consultation to an already busy Work Programme is simply possible. BEREC does note the constructive proposals mentioned by all three respondents and will provide such information to the relevant experts responsible for delivering this workstream who can consider and take on board the comments.

6.8 Transparency and comparability of international roaming tariffs

ECTA commented that this is a technical reporting matter for BEREC but provided no other comments. No other stakeholder commented on this workstream.

BEREC thanks ECTA for its contribution.

6.9 Termination rates at the European level

ECTA has no comments other than to support continued monitoring of both voice call and SMS termination rates.

MVNO Europe welcomes this BEREC workstream, which has already yielded interesting information, notably on the wholesale charges set. The inclusion of information on SMS termination rates is particularly useful, and MVNO Europe urges BEREC to continue to monitor these.

BEREC thanks both stakeholders for their contributions.

6.10 Article 7/7A Phase II process

ECTA appreciates BEREC's work on Art 7/7a cases, but thinks that the time is right for BEREC to assess how it has exercised its duties on Art 7/7a cases, and what its impact (or lack thereof) has been. The treatment of stakeholder input is also clearly a relevant matter for reflection and review. ECTA has experienced explicit resistance to stakeholder input on Art 7/7a cases. ECTA thinks that it is important that stakeholder input can be welcomed. As part of the negotiations on the draft Code, ECTA advocated a longer timeframe for assessment of key regulatory decisions.

One confidential respondent deems useful the publication of the database on Article 7/7a Phase II cases.

BEREC thanks the stakeholders for responding to this workstream and, as per the outline of the project, in 2019 BEREC will consider the applicability of BEREC's Guidelines for the elaboration of Opinions in Article 7/7 and whether an update is required.

6.11 Report on regulatory accounting in practice

ECTA has no immediate comments on this workstream, but welcome a full analysis of cost allocation methods and their impacts.

BEREC thanks ECTA for its input on this workstream.

6.12 BEREC Annual reports

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

BEREC appreciates ECTA's comment here and directs ECTA to its comments above.

6.13 Stakeholder Forum

BEUC welcomes BEREC's drive to engage and cooperate more effectively with stakeholders. In this regard, BEUC welcomes that next year there will be a new stakeholder forum. In addition to maintaining this forum dedicated to interacting with stakeholders, BEUC would like to put forward the idea of creating a permanent stakeholder group to ensure constant, regular, interaction between BEREC and key stakeholders in a structured manner.

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

EDRi applauds BEREC's efforts to ensure maximum participation in stakeholder dialogue and its openness to taking all stakeholder perspectives into consideration. Due to the particular constraints faced by civil society in responding to consultations, EDRi request that BEREC allows adequate time for the consultation to be completed by all stakeholders.

Facebook places high value in the annual Stakeholder Forum. However, there is room for improvement in terms of stakeholders' involvement in BEREC's work. Facebook appreciates and supports BEREC measures to strengthen such engagement by, for example, providing stakeholders more time to respond to public consultations. Facebook encourages BEREC to make all working levels as transparent as possible and to engage with stakeholders as early as possible. Facebook also urge BEREC to devote a section of the Draft WP to Stakeholders Engagement that includes concrete and measurable commitments in the field of transparency and engagement.

FTTH Council Europe appreciates the efforts that BEREC have taken to enhance stakeholder involvement in the process of defining BEREC's work outputs and believes that Stakeholder forum is an important element of that work. FTTH Council Europe hopes that BEREC will continue to engage with stakeholders in an open and transparent consultation process on these issues when they are finalised.

MVNO Europe is thankful for having been invited to make a statement from the room at the recent Stakeholder Forum. However, MVNO Europe does consider it appropriate to comment that the panels did not contain as diverse a representation of stakeholders as necessary, notably in terms of those providing wholesale access, and those who take up wholesale access.

One confidential respondent noted that debates during the Stakeholder Forum have particular visibility in the sector. The Stakeholder Forum became one of the important events of the year for the industry. On the substance, it is important that the choice of topics continues to reflect the most important issues for the market in a given period, as it did in 2018, addressing the relation with stakeholders and the incentives for investment in better connectivity in Europe.

Equally important is to ensure that the views of all relevant players, in particular the key interlocutors of BEREC and main addressees of its decisions are heard and have the opportunity to participate in the discussions and debates.

BEREC appreciates all stakeholder comments on this matter and particularly appreciates the positivity towards BEREC's transparency and engagement. Regarding the permanent stakeholder group mentioned by BEUC, BEREC would note that through public consultations and events like the Stakeholder Forum, BEREC does engage with stakeholders as regularly as possible, and BEREC strives to continually improve such engagement. Regarding Facebook's comment about a section of the WP 2019 on stakeholder engagement – essentially, this is what chapter 6 of the document is. Finally, with respect to MVNO Europe's comment about diverse representation on Stakeholder Forum panels, BEREC puts a lot of time and effort into finding the right balance for such panels, and can only state that it will continue to work to have a balance of representation going forward.

6.14 BEREC Communications Plan 2019 (including 10th anniversary programme of activities)

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

BEREC thanks ECTA for its comment.

6.15 BEREC Work Programme 2020

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

FTTH Council Europe notes that BEREC have responded to the need to issue a large number of guidelines resulting from the legislative cycle in an intelligent and coherent way by extending their work programme to cover 2020. This is welcomed and allows stakeholders to plan ahead. While all parties have constraints on their resources, the use of workshops in addition to the proposed (longer) public consultations should help in that regard.

One confidential respondent notes that although the outline is not subject to public consultation, stakeholders could be given the opportunity to make suggestions to be taken into account, ahead of the preparation of the draft programme for consultation.

BEREC thanks stakeholders for their input to this workstream. Regarding the suggestion made by a confidential respondent, BEREC would note that stakeholders will be provided with the opportunity to submit comments to the Work Programme 2020 during a call for inputs in the first quarter of 2019.

6.16 Cooperation with EU institutions and institutional groups

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

One confidential respondent noted that with the strengthening of powers of BEREC this workstream is essential. BEREC also has a key advisory role to other regulators exerting their powers over telecom operators and in the broader digital economy. In this context, publication of initiatives, documents, interim reports, establishment of structured channels of stakeholder engagement and consultation procedures are paramount to increase the transparency and enable stakeholders to provide their views.

BEREC thanks both stakeholders for their comments, and particularly the confidential respondent in terms of the positive reaction to the strengthening of BEREC's powers and the reflection on how BEREC is enabling stakeholders to provide their views through various channels.

6.17 International cooperation

BEUC welcomes BEREC's approach and reiterate that, in an ever more complex digital world where bundling of products and services from different markets is becoming the norm, it is essential that BEREC and its NRAs collaborate closely with other relevant national and EU authorities such as the European Data Protection Board (data protection), the Consumer Protection Cooperation Network (consumer protection), the European Competition Authorities Network (competition policy), the Council of European Energy Regulators (energy), etc.

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

United Group has provided a detailed response and welcomes BEREC's dialogue with NRAs based outside the EU, in particular since in spite of the efforts undertaken in the Western Balkan region, business in general, and United Group in particular, today still encounters many hurdles that have to do with varying degrees of adherence to the rule of law by policymakers, as well as the National Regulatory Authorities (NRAs), the National Media Regulators (NMAs) and the National Competition Authorities (NCAs). These hurdles protect the incumbent operators, contribute to market fragmentation, hamper competition in the Western Balkans, and ultimately prevent consumers and business users to fully take advantage of top quality services. United Group highlights

- Rule of law
- Proper implementation of EU rules whenever Western Balkans NRAs refer to them in their positions and decisions
- Higher standards in line with EU NRAs' practice and European Commission guidance and independence of NRAs
- Market-oriented approach

United Group calls on BEREC to further coordinate practice and guidance at European level among NRAs, including those from the Western Balkans. In particular, United Group welcomes measures in support of a Digital Agenda for the Western Balkans, which can be implemented at BEREC level United Group calls for sharing of practices with and continuing to provide technical guidance to the Western Balkans NRAs, in order to achieve a truly consistent application of the regulatory framework in line with the rule of law. From its perspective of managing a business on the ground, United Group insists that such efforts are

urgently needed, in order to better promote an effective market in the telecoms sector in these countries, which will greatly benefit both eager private and business users across the region.

BEREC thanks all stakeholders for their comments, notes the request for collaboration made by BEUC, and particularly appreciates the detailed response from United Group. As stated in the WP 2019, BEREC will continue to provide support to the European Commission with respect to the Western Balkans initiative, and BEREC looks forward to engaging further with United Group as appropriate.

6.18 Additional comments

ANISP proposes a topic regarding regulating IP peering. ANISP believes that there should be:

- General rules for IP peering
- Obligations for operators to negotiate a peering agreement if so required
- Obligations to publish a Reference Peering Offer
- Limitations on tariffs that could be requested for IP traffic interconnection
- Obligation of the party requiring fees for the IP traffic being exchanged to also pay for the service it gets from the other party (as, in telephony, both parties are obliged to pay wholesale tariffs for terminating the call in the other network).

ECTA has no additional comments, other than to reiterate their emphasis that a two-stage consultation, consisting of a call for input, and a consultation on precise text proposals, is clearly necessary in mostly all cases.

Facebook encourages BEREC to include a specific workstream devoted to providing guidance to NRAs on the harmonized implementation of the new ECS definition in order to ensure NRAs take an aligned view on what kind of services belong to each ECS category (IAS, NB-ICS and NI-ICS).

Microsoft believes there are two additional areas in which BEREC could play an important clarifying and coordinating role with respect to transposition of the EECC. These two areas are:

- Expanding Emergency Calling to One-Way Number Based Interpersonal Communications Services (NBICS)
- Real-Time Lawful Intercept of NBICS communications that are provided “over the top” of other providers’ networks.

MVNO Europe emphasises that it has generally been able to work well with BEREC, and indeed publicly thanked BEREC in responses to consultations, and at the Stakeholder Forum. MVNO Europe hopes that this fruitful cooperation will continue.

Open Fiber believes that because of the significant development of the wholesale only model, BEREC should address the definition of appropriate guidelines for the imposition of ex-ante measures, aimed at guaranteeing a fair competition in the wholesale market and therefore the market entry of efficient wholesale-only operators.

One confidential respondent invites BEREC to add to its 2019 WP a work stream on the Common Methodology on WACC definition that is in the process of being proposed by the

European Commission, focused on identifying the necessary room for NRAs discretionary powers addressing specific national market conditions.

Another confidential respondent noted that international cooperation should focus on deepening the knowledge on digital markets and on the exchange of best practices that have demonstrated to deliver results in other markets with comparable characteristics and also to draw conclusion from experiences that were not successful.

BEREC thanks all stakeholders for these final additional comments. While, as is clear from the fact that BEREC is planning elements of its next Work Programme indeed into 2020, the WP 2019 is a resource intensive and heavy workload for BEREC and its member NRAs (and indeed for all stakeholders intending to contribute during public consultations). Unfortunately, at this time BEREC cannot commit to consider any of the proposals above with respect to the WP 2019. However, the call for inputs to the BEREC Work Programme 2020 will be initiated in the first quarter of 2019 and BEREC would ask all respondents to provide their input with such proposals at that time.

Abbreviations

BCRD	Broadband Cost Reduction Directive
BEREC	Body of European Regulators for Electronic Communications
BEUC	The European Consumer Organisation
BIAC	Broadband Internet Access Cost
CEPT	European Conference of Postal and Telecommunications
CRTC	Canadian Radio-television and Telecommunications Commission
EaPeReg	Eastern Partnership Electronic Communications Regulators Network
ECN	Electronic Communication Network
ECN	European Competition Network
ECO	European Communications Office
ECS	Electronic Communication Service
EECC	European Electronic Communications Code
EMERG	Euro-Mediterranean Regulators Group
ENISA	European Union Agency for Network and Information Security
ERGA	European Regulators Group for Audiovisual Media Services
ERGP	European Regulators Group for Postal Services
ETSI	European Telecommunications Standards Institute
FCC	Federal Communications Commission
FTR	Fixed Termination Rate
IAS	Internet Access Service
IoT	Internet of Things
ITU	International Telecommunications Union
MS	Member State

MTR	Mobile Termination Rate
NB-ICS	Number-based Interpersonal Communications Services
NN	Net Neutrality
NRA	National Regulatory Authority
OECD	Organisation for Economic Cooperation and Development
PSAP- DIR	Public Safety Answering Point Directory
QoS	Quality of Service
Regulate1	Latin American Forum of Telecommunications Regulators
RO	Reference Offer
RSPG	Radio Spectrum Policy Group
TRAI	Telecom Regulatory Authority of India
VHCN	Very High Capacity Networks
VULA	Virtual Unbundled Local Access