

Outline BEREC Work Programme 2023

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I. INTRODUCTION

The Body of European Regulators for Electronic Communications (BEREC) was established in 2009 and now operates under Regulation (EU) 2018/1971¹ with the aim of pursuing the objectives under the European Electronic Communication Code (EECC) and in particular to ensure the consistent implementation of the regulatory framework for electronic communications.

This document is the Outline of the annual work programme of BEREC for 2023, which has to be adopted by 31 January of the year preceding that to which the annual work programme relates².

The objectives of the Outline BEREC Work Programme 2023 continue to be based on the mandatory tasks falling to BEREC stemming from the European electronic communications regulatory framework³. Implementing the relevant regulatory framework in a consistent way is to the forefront of BEREC's work. Furthermore, the objectives of this Outline, and the Work Programme will be aligned with the BEREC Strategy 2021-2025.

The Outline Work Programme 2023 reflects BEREC's commitment to serve as a body for thoughtful and proactive debate that provides advice to the European Parliament, the Council and the European Commission in the field of electronic communications. Furthermore, BEREC's future aims are to play an important role in further improving the consistent and harmonised application of regulatory rules, to enhance its working methods and to engage cooperatively and effectively with stakeholders.

In line with the practice of previous years and in accordance with Article 21 of the BEREC Regulation, the draft BEREC Work Programme 2023 will be consulted to the European Parliament, the Council and the European Commission on their priorities and will be subject to a public consultation. The public consultation will run for a 4-week period in October and November 2022. The final BEREC Work Programme 2023 will be adopted at the fourth BEREC Board of Regulators meeting in December 2022. BEREC will publish and transmit the annual work programme to the European Parliament, the Council and the Commission as soon as it is adopted.

II. BACKGROUND

The four objectives of the EECC (Article 3 (2))⁴ remain the foundation of the assignments set out in BEREC's annual work programmes and continue to be the guiding force of the proposed Work Programme. These four objectives are:

¹ Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009

² According to Article 21 of the BEREC Regulation

³ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast), Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 and Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012, as amended

⁴ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast)

- Promoting connectivity and access to very high capacity networks (VHCN),
- Promoting competition and efficient investment,
- Contributing to the development of the internal market,
- Promoting the interests of the citizens of the Union.

While the EECC, the BEREC Regulation, the Open Internet regulation, the Roaming Regulation and the mandatory tasks stemming from these legislative instruments provide the basis for the Outline BEREC Work Programme 2023, BEREC has adopted a strategy for the years 2021-2025. The strategy and its high-level strategic priorities will be fundamental to the work that BEREC will undertake in 2023. While the Outline Work Programme 2023 seeks to address current regulatory challenges, it has also been developed to prepare for the new challenges ahead resulting from political, economic and technological developments.

This Outline Work Programme 2023 contains those items from the 2022 Work Programme which will need to be carried over into 2023, in addition to *ad-hoc* or recurring items, including some preliminary identified potential workstream proposals. BEREC has recently consulted those potential workstreams⁵ and will consider the received input.

As required by the BEREC Regulation, when developing its annual Work Programme, BEREC seeks the views and proposals from the National Regulatory Authorities (NRAs) participating in BEREC and BEREC's own Working Groups, the European institutions (Article 21.1 Regulation (EU) 2018/1971), and indeed third parties and stakeholders. Furthermore, BEREC organizes on a yearly basis a forum with stakeholders ('Stakeholder Forum') with the aim to enhance transparency and collect the interested parties' views on BEREC's current and future work and, in particular, for the elaboration of the work programmes. In March 2022, BEREC is planning to hold a Stakeholder Forum during which BEREC will request input from Stakeholders about the Work Programme 2023. The public consultation of the Work Programme 2023 will be launched soon after the third BEREC Plenary meeting, in October 2022.

⁵ Section 'IV. Potential work for 2023 and beyond' of the draft BEREC Work Programme 2022 (BoR (21) 133)

III. BEREC WORK IN 2023

BEREC will execute its work streams around the four strategic objectives of the EECC and in doing so BEREC will take into consideration the BEREC high-level strategic priorities for the period of 2021-2025 that will be identified as most relevant for meeting the objectives as well as the institutional and international cooperation.

1. High-level strategic priorities

The high-level BEREC 2021-2025 strategic priorities are based on the market developments and on the expected evolution of the European regulatory and political framework and refer to areas of interest that BEREC should cover under one or several of the strategic objectives of the EECC. In addition, Europe's Digital Decade will be taken into account when formulating future BEREC work programmes.

BEREC will pursue working on its contribution to ICT-related goals provided by the Green Deal and the United Nation's Agenda 2030 by adding an environmental dimension to its workstreams as well as identifying how BEREC can contribute to the achievement of the sustainable development goals as an organization.

Furthermore, the BEREC 5G Radar will serve as an important source for projects that can be linked to the strategic priorities.

Strategic priority 1: Promoting full connectivity

Promoting connectivity and access to electronic communication networks will be a strategic priority for BEREC in the years 2021 - 2025. This implies prioritizing work that improves the conditions for the expansion and take-up of secure, resilient, competitive and reliable very-high-capacity networks (both land and undersea fixed and wireless) across Europe.

Strategic priority 2: Supporting sustainable and open digital markets

Under this priority, BEREC will prioritize work that relates to the functioning and sustainability of the digital markets. This implies focusing on issues that explore regulatory conditions and address issues for digital service providers and end-users in the digital market. In addition, BEREC will further contribute to the assessment of the Commission regarding how to reduce the carbon footprint of providing digital and electronic communications services under the aspect of sustainability.

Strategic priority 3: Empowering End-users

Promoting the interests of consumers in the fast-evolving digital ecosystem will require strong consumer protection rules, consumer transparency and digital skills

BEREC will continue to prioritize work that empowers end-users to make better informed choices in relation to digital services. BEREC will also further support building trust in ICT.

This strategic priority relies on a regular dialogue with consumer, civil society representatives and relevant stakeholders.

2. Cooperation with EU institutions and institutional groups

Institutional cooperation

In 2021, BEREC explored ways to have closer collaboration and dialogue with other European bodies, by joining forces on certain topics in which synergies can be obtained with other European regulatory cooperation platforms and bodies operating both in adjacent and different economic sectors.

In addition, in 2021, BEREC published its Medium-Term Strategy (MTS) for relations with other institutions 2022-2025, which seeks to identify those institutional relationships, that are most beneficial to the attainment of BEREC's priorities and fulfilment of its work programme, in line with BEREC's resources. Additionally, the MTS helps to meet the legal requirement in article 35(3) of the BEREC Regulation to adopt BEREC's strategy for relations with institutional entities in the annual work programme.

This MTS recognises the importance of prioritising collaboration with RSPG in the Peer Review Forum and also to address spectrum related matters and EMF. Cybersecurity is another thematic area that BEREC has identified as key to reach its strategic objectives, thus the MTS identifies the European Union Agency for Cybersecurity (ENISA), as one of the EU institutions with whom it should continue collaborating. BEREC will also seek to collaborate with the European Regulators Group for Audio-visual Media Services (ERGA), the European Regulators Group for Postal Services (ERGP), the European Data Protection Board (EDPB) and the European Competition Networks on matters related to the function of the digital markets in line with Strategic Priority 2 of the BEREC strategy 2021-2025. The MTS also recognises the importance of collaborating with entities who are competent in matters related to sustainability, QoS/QoE, Infrastructure Sharing, and Article 39 of the EECC.

BEREC will continue to be open to information-sharing with all of the institutional entities, identifying thematic areas and relevant entities with whom it can have a more intensive relationship according to its Medium-Term Strategy for relations with other institutions 2022-2025.

International cooperation

The increasing volume of electronic communications between the EU and the rest of the world shows the global nature of such services and means that policies, legislation and regulation must be seen from a more global perspective. BEREC benefits from the cooperation with NRAs and with international regulator networks, policymakers and institutions involved in communications matters based beyond the EU. In 2021, BEREC published its Medium-Term Strategy for International Cooperation 2022-2025. The Medium-Term Strategy for International Cooperation seeks to identify those international relationships, which are most beneficial to the attainment of BEREC's priorities and fulfilment of its work programme, in line

with BEREC's resources and to help meet the legal requirement in article 35(3) of the BEREC Regulation to adopt BEREC's strategy for relations with international entities in the annual work programme.

BEREC will continue to engage in a dialogue with NRAs based outside the EU, as well as with international regulatory networks, policy makers and institutions in the field of electronic communications. These activities will be based on its Medium-Term Strategy.

BEREC international activities complement the policies of the European Union both in terms of the subjects of cooperation and the priority regions to cooperate with.

In 2023, BEREC will continue to develop and strengthen its ties with regulatory authorities such as the FCC, TRAI, CRTC⁶ and with regional regulatory networks (EMERG, EaPeReg, PRIDA, and Regulatel)⁷, in accordance with the BEREC Regulation and in cooperation with the EU external action services.

3. BEREC tasks under the EU legislation

There is also a significant number of tasks that BEREC carries out and follows up on an ongoing basis, described hereunder, under the following headings:

- The European Electronic Communications Code (EECC);
- Open Internet;
- Roaming and intra-EEA communications

3.1 EECC

***Ad hoc* input to the EU/NRAs**

BEREC will remain available to provide *ad hoc* input on request to the EU institutions (EC, Parliament and Council), particularly during the implementation of new legislation. BEREC will also be the forum for its member NRAs to discuss newly emerging questions and issues.

BEREC Opinions under Article 32/33

BEREC will continue to issue opinions concerning new Phase II cases when they arise based on the expertise of the market analysis of its NRAs. The aim is to achieve a high degree of consistency regarding measures imposed by NRAs in order to contribute to the development of the internal market for electronic communications.

⁶ FCC (Federal Communications Commission, USA), TRAI (Telecom Regulatory Authority of India), CRTC (Canadian Radio-television and Telecommunications Commission).

⁷ EMERG (European Mediterranean Regulators Group), EaPeReg (Eastern Partnership of Regulators for Electronic Communications Networks and Services), PRIDA (Policy and Regulation Initiative for Digital Africa), and Regulatel (Latin American Forum of Telecommunications Regulators).

Guidelines detailing Quality of Service parameters

In accordance with Article 104(2) of the EECC, the present Guidelines are issued to provide guidance to National Regulatory Authorities (NRAs) in order to contribute to the consistent application of Article 104(2) and Annex X, with the aim of defining:

- the relevant Quality of Service (QoS) parameters, including the parameters relevant for end-users with disabilities;
- the applicable measurement methods for these QoS parameters, including, where appropriate, the ETSI and ITU standards set out in Annex X of the EECC in relation to Interpersonal Communications Services (“ICS”) and Internet Access Services (“IAS”), respectively;
- the content and format of publication of the QoS information;
- the quality certification mechanisms.

These Guidelines⁸ are expected to be reviewed by 2023 in accordance with paragraph 71 of the Guidelines (BoR (20) 53).

Peer review process

According to the EECC (Article 35), when an NRA and/or competent authority intends to undertake a selection procedure in relation to radio spectrum bands for which technical conditions have been harmonised in order to enable their use for wireless broadband electronic communications networks and services, it shall inform the RSPG about any such draft measures and indicate whether and when it will request the RSPG to convene a Peer Review Forum. The Peer Review forum shall be open to experts from BEREC.

Report on the monitoring of the termination rates for mobile and fixed voice call

This report will reflect on the requirements of Article 75(3) EECC, which states that NRAs are to report annually to the Commission and to BEREC with regard to the application of the Article’s provisions, more specifically on the implementation of the Delegated Regulation (EU) 2021/654 setting a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate.

⁸ https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/9043-berec-guidelines-detailing-quality-of-service-parameters

3.2 Open internet

Implementation of the Regulation (EU) 2015/2120 and BEREC Guidelines on the Implementation of the Open Internet (OI) Regulation

Regulation 2015/2120 prescribes that NRAs shall “closely monitor and ensure compliance” with the Regulation, and that NRAs shall “publish reports on an annual basis regarding their monitoring and findings”. BEREC will publish a report on the implementation of the Regulation, based on the NRAs’ annual reports and NRAs’ answers to internal questionnaires. In addition to the implementation report, it will also be about exchanging practices concerning the supervision of the implementation of the OI regulation. The adoption of the final report is foreseen in October 2023. BEREC will also contribute to the potential revision of the Open Internet Regulation according to the current review provisions.

3.3 Roaming and intra-EEA communications

International Roaming benchmark data report

The proposed recast of the Roaming Regulation foresees the production of one BEREC Report which will include the information that is currently reported in the context of the two BEREC benchmark Reports and the BEREC transparency and comparability Report, as well as additional data to be collected. During 2022, BEREC will work in formulating the template that will be used for the collection of the required information with a view to launching the relevant data collection at the end of September 2022. The information that will be received from operators will be used for the preparation of the first comprehensive yearly BEREC Roaming report which will be published after Plenary 1 2023.

Intra-EU communications Benchmark Report

According to Article 5a (6) of the Regulation (EU) 2015/2020 as amended by Regulation (EU) 2018/1971, NRAs shall monitor the price developments of regulated intra-EU communications services. For this purpose, BEREC provides a template to contribute to a harmonised data collection in the EU/EEA. NRAs are therefore collecting data from both fixed and mobile operators on a yearly basis and will submit the data to BEREC. In 2023 BEREC is planning to publish the 4th Benchmark Report on the findings, based on data collection.

4. Quality and efficiency

An important role of BEREC is the establishment of best practices and share learnings among its members. BEREC carries out a number of tasks to increase quality and efficiency in regulation in Europe.

Article 32/33 Phase II process

Since 2014, BEREC has undertaken an annual analysis of Article 32/33 EECC Phase II cases, aimed at gaining a better understanding of both the procedural and substantive aspects of these cases and at informing the prospective review of the BEREC Common Positions. In 2015, a comprehensive database of Phase II cases was developed, including the main elements of the cases, in particular the reasoning put forward by the EC, the analyses in the BEREC Opinions, and the final outcomes of the cases.

BEREC will continue to add new Phase II cases to this database as and when they arise. The objective is that the database can be consulted by BEREC members, in particular experts of Phase II cases, both for referencing a particular case and to analyse key themes amongst the cases over time.

WACC parameters' calculation according to the EC Notice

Following the Commission's Notice on the WACC of 7 November 2019, BEREC's task is to calculate various parameters of the WACC formula according to the methodology laid down in the EU WACC Notice. BEREC in close collaboration with the EC will identify a peer group of EU SMP operators for the calculation of some of these parameters.

In order for NRAs to be able to take the parameters into account when calculating the WACC for the national markets BEREC will calculate the parameters until 30 June at the latest.

Report on regulatory accounting in practice

The Regulatory Accounting in practice Report will provide an up-to-date factual overview of the regulatory accounting frameworks used in Europe and an assessment of the level of consistency achieved by NRAs. The Report is prepared annually and updates the previous versions published since 2005. In 2022, emphasis will continue to be placed on consistency in regulatory accounting with respect to key access products (including e.g. fibre) and will seek to maintain the detail and the in-depth analysis of the methods covered to identify commonalities and reasons for differences. The Report will continue to collect data on the methodology and input parameters used to calculate the rate of return on capital employed and look into the impact of both on the result. It will be updated to take into account the remedies provisions of the EECC, the 2020 Recommendation on relevant markets susceptible to ex ante regulation and a new access recommendation.

Collaboration on the Net Neutrality Measurement tools

In 2023 and beyond, BEREC will continue to work towards a harmonised measurement framework and to support NRAs in their national measurement tool deployments. This could include for example providing a forum for NRAs to share information and exchange experiences and best practices and by working together to improve the measurements and by sharing code or components between NRAs.

Stock-taking on national experiences of the implementation of the EECC

The national implementation process of the EECC was due to be finalised by the end of 2020. By 2023, NRAs would have experiences of applying the new regulatory framework and could give assessments on how the new electronic communication framework contributes to achieving the objectives of the EECC.

5. Communication and engagement

BEREC will continue to engage with stakeholders, with the goal of focusing its work on issues that are relevant to them. The Outline Work Programme 2023 therefore includes the following activities that contribute to BEREC's objective with respect to these principles.

BEREC Annual reports

According to the BEREC Regulation, BEREC shall provide its annual activity report to the European Parliament, the Council, the EC and the European Economic and Social Committee by 15 June of the year subsequent to the year reported on in the annual activity report. BEREC shall report annually on technical matters within its competence, in particular on the market developments in the electronic communications sector.

BEREC will continue to publish its annual report on its activities and an annual report on developments in the sector as part of a single document. Whereas the Annual Report on BEREC activities focuses on the outcome of the work of its Working Groups and ad-hoc teams based on the Work Programme, the Annual Report on developments in the electronic communications sector summarises BEREC's view on the past year as well as a perspective of future developments and challenges in the sector.

Stakeholder Forum

The focus of the Stakeholder Forum in 2023 will be the BEREC Work Programme for the following year (i.e. 2024), and it will provide a platform for stakeholders and BEREC to engage in a dialogue for BEREC's future work. The feedback received at the Stakeholder Forum will continue to be an important complement to the written inputs received during the first call for input and the public consultation for the BEREC Work Programme.

BEREC Communications Plan 2023

In 2016, BEREC developed its first external Communications Strategy, which was afterwards complemented by the annual communications plans. BEREC's Communications Plan 2023 is finalised for internal use in December 2022, setting in place the communications activities that BEREC is committed to in 2023. Typically, BEREC conducts 5-6 communications projects per year to support and promote specific work streams in its Work Programme. The projects are normally linked to the regular BEREC events, such as public debriefings and the Stakeholder Forum, and include several specific communications activities, for example the organisation

of events, the production of a video, press releases, information for the website, a social media campaign, press interviews etc.

BEREC Work Programme 2024

The BEREC Regulation sets out a new process for developing the Work Programme. According to the Regulation, the Board of Regulators shall adopt the outline of its annual work programme by 31 January of the year preceding that to which the annual work programme relates. After consulting the European Parliament, the Council and the Commission on their priorities, as well as consulting other interested parties, the Board of Regulators shall adopt the final annual work programme by 31 December of the same year. The Board of Regulators shall transmit the annual work programme to the European Parliament, the Council and the Commission as soon as it is adopted. BEREC will provide a draft/provisional Work Programme outline by the end of January 2023, and then work through the year to finalise the Work Programme for 2024 by the end of the year.

6. Carry-over projects from 2022

This chapter contains items that are continuations or follow up projects of work started in previous years. In some cases the second phase of a project is the finalization of a report after processing the stakeholder input from a public consultation.

Report on the 5G Value Chain

The BEREC 5G Radar had identified “New business models and value chains” as one of the thematic areas that BEREC should look into as 5G has the potential to impact existing value chains and ecosystem. This thematic area and the anticipated pace of innovation was the focus of the BEREC workshop on 5G organised in 2021, during which distinguished speakers and researchers from the telecommunications ecosystem provided their insight based on past an ongoing research activities and commercial developments. This workshop sought to gather information on the envisaged impact of the new 5G technologies and 5G use cases on the supply chain and when such transformation can be expected.

New 5G technologies promise multiple opportunities such as network slicing, software virtualisation, disaggregated and interoperable products leading to multi-vendor solutions. Unlike previous generations, 5G was designed with the 5G Verticals in mind, as instead of solely connecting people, it aims to connect everything and everyone. The new 5G technologies and the 5G use cases will transform the supply and demand side respectively. Thus BEREC shall extend the focus adopted in 2021 for the BEREC workshop on 5G to study the impact of the anticipated changes on the entire 5G value chain i.e. both supply and demand. This shall be done with the intent to analyse further how regulation can continue to support the objectives stipulated in the European Electronic Communications Code (Article 3 (2)). This is in line with BEREC’s strategy which seeks to promote full connectivity and empower end-users.

BEREC is planning to adopt its final report on the 5G Value Chain at Plenary 1 (March) 2023.

BEREC Report on competition amongst multiple operators of NGA-networks in the same geographical region

When defining relevant markets in accordance with Article 64(3) of Directive 2018/1972/EC, national regulatory authorities should identify geographic areas where the conditions of competition are similar or sufficiently homogeneous, and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. NRAs have to pay attention to whether the potential Significant Market Power (SMP) operator acts uniformly across its network area (territory) or whether it faces appreciably different conditions of competition to a degree that its activities are constrained in some areas but not in others.

In addition regional operators of VHCN/NGA-networks play an increasingly important role in the broadband market in many countries. The networks of different operators may for example partly overlap in some areas or could be very close to each other and could easily be expanded. Also network operators may use different business strategies – to differentiate (or not) prices across their networks depending on the presence of other operators.

The project will investigate how competition between multiple VHCN/NGA regional operators, depending on the degree of network overlap, different business strategies and other relevant factors for competition, is handled in the context of SMP-analysis of the market for wholesale local access provided at a fixed location. This project will be a follow up to BEREC's Report on the application of the Common Position on geographic aspects of market analysis⁹, but will focus on the outcome of competition, namely retail prices and product diversification as a result of the presence of competing networks.

BEREC is planning to adopt its final report on competition amongst multiple operators of NGA-networks in the same geographical region at Plenary 2 (June) 2023

BEREC Report on the regulatory treatment of business services

Business services consisting of, or based on, electronic communication services are a key input to ensure that the EU companies and public administrations can benefit from the digital economy. It allows for better provision of new innovative services for citizens and increases productivity and competition in a globalised world.

In the last years business services have evolved and are expected to evolve even more to include new high-speed services supported by deployment of VHCNs. Moreover, they are increasingly being combined with IT services as cloud computing or the merging of ECS services with IT services via edge computing.

NRAs are regulating wholesale business markets such as M2/2020 and other markets, including a series of wholesale products used by alternative operators to compete with incumbents in the market for large companies, SMEs and all type of public administrations.

⁹ See BoR (18) 213.

The report will focus on key issues regarding the competitive dynamics at the retail level (where an external study on the evolution of business services will be used as a key input).

Moreover, BEREC will analyse the regulatory treatment of these wholesale products, providing a snapshot of the markets in which these services and products are offered, their geographical scope and the remedies applied. BEREC will also include case studies of good practices used by NRAs to encourage effective and sustainable competition, as well as investment and innovation in the business market.

BEREC members and stakeholders will benefit from the results of this report by getting a complete view on how these services are approached, on the challenges faced by NRAs and on good practices for ensuring competitive and innovative business markets

BEREC is planning to submit the draft report to public consultation after Plenary 1 (March) 2023 and publish the final report at Plenary 3 (October) 2023.

Report on the impact of Artificial Intelligence (AI) solutions in the telecommunications sector on regulation

The promise that Artificial Intelligence (AI) can assist our society must be substantiated with a clear understanding of both the benefits and risks associated with use cases relying on AI. As can be seen by the EC's draft Artificial Intelligence Act, there is a European agreement on following a human-centered approach. This insight will help anticipate the effects of AI on the Digital Single Market and the regulation of electronic communications. BEREC's Report on AI intends to inform the current EU procedure to adopt the Artificial Intelligence Act. It is expected that AI with the support of 5G and IOT, together referred to as 'Intelligent Connectivity', will enable new use cases in a number of Vertical Sectors such as energy supply, transportation, industrial automation and healthcare. In practice, there are already use cases of AI for network automation, network optimization, preventive maintenance and also to provide virtual assistance for customer support.

BEREC seeks to determine how AI can impact electronic communications networks and services by first looking into different use cases in the telecoms sector. This study is a first step towards this goal and it will seek to identify those solutions / use cases which fall within BEREC's remit and gain a high-level understanding of the possible impact of these solutions on regulation. The information collected will then be analysed to determine the opportunities and challenges which BEREC must take into consideration in its future work to ensure that it continues to fulfil its strategic priorities, in particular to support sustainable and open digital markets and empowering end users. This high-level understanding will help BEREC understand the role it can play in the future with the commercial uptake of AI solutions in the telecoms sector.

BEREC is planning to adopt its final report on the impact of AI solutions in the telecommunications sector on regulation at Plenary 2 (June) 2023

BEREC Report on Indicators to measure environmental impact of ECNs/ECSs

The aim of this item is to consider the indicators contributing to the evaluation of the environmental sustainability of electronic communications networks and services to be ready to take part in the process of identification and definition of indicators and setting a basic framework for a, if possible, common and harmonised EU assessment methodology for the environmental sustainability of ECNs / ECSs.

BEREC will launch a call-for-input from stakeholders (operators, service providers, end-user associations, environmental organizations, etc.) to help identify, which indicators they deem feasible and useful for the purpose of setting an assessment methodology, in the form of a technical workshop and a questionnaire that will be circulated in 2022 to relevant third parties. The results of stakeholders' inputs and BEREC analysis of the issue based on its work and research on the digital sector sustainability lead since 2020 will be presented in the draft report.

The presentation of the draft report on sustainability indicators for public consultation is scheduled for Plenary 1 (March) 2023 and the adoption of the final report is planned for Plenary 3 (October) 2023.

Report on Comparison Tools and Accreditation

The aim of this project is to offer insights on the comparison tools which enable consumers to compare and evaluate IAS and publicly available NB-ICS as set out in Article 103 of the EECC.

The Report will also capture details of the certification processes within each Member State that is, upon request, available to providers of a comparison tool that meet the requirements set out in Article 103 of the EECC.

While a number of Member States have already put in place comparison tools and/or certification processes, BEREC has never collated information on this issue, since the requirement that end-users have access free of charge to at least one independent comparison tool which enables them to compare and evaluate different offers in a new requirement was set out in EECC. Therefore, this exercise has not been undertaken previously by BEREC. It may also include comparison tools that compare bundles of IAS with other electronic communication services.

BEREC is planning to adopt its final report on Comparison Tools and Accreditation at Plenary 2 (June) 2023.

BEREC Report on Member States' best practices to support the defining of adequate broadband internet access service (IAS)

As it has been already mentioned above, in accordance to Article 84 (3) of the EECC each Member State shall, in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within the territory of that Member State, and taking into account the BEREC Report on best practices, define the broadband internet access service for the

purposes of paragraph 1 of Article 84 with a view to ensuring the bandwidth necessary for social and economic participation in society.

In 2020 BEREC published the first Report on Member States' Best Practices to support the definition of Adequate Broadband¹⁰. The review of the best practice Report shall seek to gather and analyse relevant information including:

- The continued suitability of the evaluation criteria consulted on in the "BEREC Report on Member States' best practices to support the definition of adequate broadband internet access service".¹¹

- Relevant experiences to support Member States in defining Adequate Broadband. The work will commence in Q4 2022 to ensure there is sufficient time to gather up to date information.

BEREC is planning to adopt its draft report for public consultation in Plenary 3 (October) 2023 with the view to finalizing its report at Plenary 1 (March) 2024.

Update of criterion four of the BEREC Guidelines on very high capacity networks

The European Electronic Communications Code (EECC) has amongst others the general objective to "promote connectivity and access to, and take-up of, very high capacity networks" (Art. 3.2a). The EECC (Art. 82) provides that "BEREC shall, after consulting stakeholders and in close cooperation with the Commission, issue guidelines on the criteria a network has to fulfil in order to be considered a very high capacity network, in particular in terms of down- and uplink bandwidth, resilience, error-related parameters, and latency and its variation." BEREC approved the BEREC Guidelines on very high capacity networks at Plenary 3 2020 (BoR (20) 165).

The BEREC Guidelines on VHCN¹² define four criteria and any network that meets at least one of these criteria is considered to be a VHCN. Criterion 4 provides that any network providing a wireless connection which is capable of delivering, under usual peak-time conditions, services to end-users with a certain quality of service (performance thresholds 2) is considered to be a VHCN. Criterion 4 is based on data collected from mobile network operators on LTE Advanced (4G).

The BEREC Guidelines on very high capacity networks (para. 25) state „since it was not yet possible to take 5G fully into account for the release of these Guidelines, as it has not yet reached mature deployment and significant penetration, BEREC intends to update criterion 4 (performance thresholds for wireless networks) as soon as possible and not later than 2023." The objective of this project is to update criterion 4 based on data collected from mobile network operators on 5G.

BEREC is planning to adopt its draft guidelines for public consultation in Plenary 1 2023 with the view to finalizing its guidelines at Plenary 3 (October) 2023.

¹⁰ See BoR (20) 99.

¹¹ See BoR (19) 260.

¹² See BoR (20) 165, para 18.

7. Potential work for 2023 and beyond

In addition to the items described above, the items in this section will be considered for the Work Programme 2023 and beyond in future work programmes. The list of items mentioned below is exemplary and is not a final list. BEREC will also consider other new workstreams for 2023, including those that will be brought forward by stakeholders in the different consultation phases. The list of project deliverables will be defined during the preparation of the 2023 work programme over the course of 2022.

Update of the report on third party payment charges

In 2021 BEREC published a report giving an overview of the status of third-party payment charges in Member States. As in most countries the legal transposition of the EECC processes were not yet completed at the time, an update of the report could be drafted to include all Member States and thereby create a benchmark for comparisons after proper implementation of the EECC.

Report on key elements of the functioning of the EECC

In line with BEREC's responsibility for monitoring the functioning of the EECC, one additional element would be to monitor the impact and effectiveness of the newly inserted provisions, with a view to collecting enough quantitative and qualitative data for future EECC reviews (as required under Articles 122-123).

Experience sharing on Implementation of Guidelines

The BEREC Guidelines stemming from the EECC need to be taken into utmost account by NRAs and Competent Authorities. There could be a specific workstream for dealing with experience sharing on the implementation of Guidelines.

BEREC Review of the Guidelines detailing Quality of Service Parameters

The BEREC Guidelines detailing Quality of Service Parameters committed to undertaking a review of the Guidelines commencing two years from the adoption and publication of BoR (20) 53 in March 2020. The Guidelines also stated that subsequent reviews will be determined by BEREC and will be agreed and set out in future BEREC work programmes. BEREC could start the process in 2023, three years after the adoption of the initial guidelines.

Internal workshop to assess the need for updating BEREC Guidelines on the minimum criteria for a reference offer (EECC related)

In December 2019, BEREC issued the Guidelines on the minimum criteria for a reference offer. BEREC planned to conduct a workshop after application of the Guidelines to assess if there is a practical need and demand for reviewing and updating the Guidelines. A year after

implementation of the Code into national laws it is a relevant time to perform this planned assessment and decide on a validity and up-to-date of the Guidelines.

Report on best practices for termination of contracts and switching provider

This proposed project builds on the work done by BEREC in 2018 resulting in the most recent report being published BoR (19) 27 that collated information from NRAs on the approaches to switching across different communications services.

Article 106 EEC provides that NRAs may establish the details and the timing of the switching and porting processes. It also sets out obligations where there is an instance of porting failure. The proposed project could focus on the national implementation of the measures provided by article 106 at both wholesale and retail level and could feed into subsequent Article 123 opinions in respect to the End User Provisions. In addition, the project would cover switching processes for bundles and share insights at national level in respect to complexity of switching for multiple services.

Further work on ICTs sustainability

In continuity with its report on sustainability assessing BEREC's role limiting the sector impact on the environment to be published in 2022 and its report on indicators to assess ECNs/ECSs sustainability, BEREC could decide to engage in additional work on sustainability issues in 2023 also taking into account the European Commission and other competent authorities' agenda on this matter.

Further work on 5G cybersecurity

In its Joint communication to the European Parliament and the Council on the EU's Cybersecurity Strategy for the Digital Decade¹³, the European Commission has set out three key objectives for the next steps on cybersecurity of 5G networks.

The exchange of information and best practices on strategic measures related to suppliers is one of the areas of the first key objective to ensure convergent national approaches for effective risk mitigation across the EU. Continuous knowledge building and cooperation amongst stakeholders are amongst the areas of the second key objective. The third key objective is to promote supply chain resilience.

BEREC could continue to provide support to the European Institutions (European Commission, NIS Cooperation Group and ENISA) to help them achieve the three key objectives for the next steps on cybersecurity of 5G networks.

¹³ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=JOIN:2020:18:FIN>