

Outline BEREC Work Programme 2024

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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 2024, 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 2024 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 2024 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 2024 will be consulted with 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 2023. The final BEREC Work Programme 2024 will be adopted at the fourth BEREC Board of Regulators meeting in December 2023. BEREC will publish and transmit the annual work programme to the European Parliament, the Council and the Commission as soon as it is adopted.

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

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:

- 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.

The EECC, the BEREC Regulation, the Open Internet Regulation, the Roaming Regulation, the Digital Markets Act (DMA) and the mandatory tasks stemming from these legislative instruments provide the basis for the Outline BEREC Work Programme 2024. In line with the legislative framework, BEREC has adopted a Strategy for the years 2021-2025⁵. The Strategy defines the high-level strategic priorities that guide the work that BEREC will undertake in 2024. While the Outline Work Programme 2024 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 2024 contains those items from the 2023 Work Programme which will need to be carried over into 2024 in addition to *ad-hoc* or recurring items, including some preliminary identified potential workstream proposals. BEREC has recently consulted those potential workstreams⁶ 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 and the European institutions (Article 21.1 Regulation (EU) 2018/1971). Third parties and stakeholders are also invited to participate by means of the annual meeting with stakeholders and the public consultation on the draft Work Programme. Namely, 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 2023, the Stakeholder Forum will be organized in March. The public consultation of the Work Programme 2024 will be launched soon after the third BEREC Plenary meeting, in October 2023. The final BEREC Work Programme 2024 will be adopted at the fourth BEREC Board of Regulators meeting in December 2023.

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

⁵ <https://www.berec.europa.eu/en/document-categories/berec/berec-strategies-and-work-programmes/berec-strategy-2021-2025>

⁶ Section IV. Potential work for 2024 and beyond' of the draft BEREC Work Programme 2023 (BoR (22) 143

III. BEREC WORK IN 2024

BEREC will execute its work streams around the four strategic objectives of the EECC and in doing so BEREC will take into consideration the 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.

In addition, considering that the digital transformation is posing new challenges to current roles and mandates of the NRAs to which regulators need to adapt (e.g. technological and market developments, sustainability, cybersecurity), BEREC will continue to develop on this path and include in the BEREC Work Programme emerging challenges and issues beyond the traditional scope of the telecommunications regulation, in line with BEREC's three strategic priorities.

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 as well as and the role that BEREC will play for the enforcement of the DMA 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. Based on its experience, BEREC will continue to contribute to the implementation of the DMA within the High-Level Group. Furthermore, BEREC will be following the developments regarding the Data Act, the Artificial Intelligence Act and the Digital Services Act (DSA). 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 2022-2025⁷, 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) the European Competition Networks (ECN), and Consumer Protection Cooperation Network (CPC) 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 EEC.

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

⁷ <https://www.berec.europa.eu/en/document-categories/berec/berec-strategies-and-work-programmes/berecs-medium-term-strategy-for-relations-with-other-institutions-2022-2025>

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 2022-2025⁸. 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 2024, BEREC will continue to develop and strengthen its ties with regulatory authorities such as the FCC, TRAI, CRTC⁹ and with regional regulatory networks (EMERG, EaPeReg, Regulatel and African regulators' groups)¹⁰, 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;
- The Digital Markets Act (DMA).

3.1 EECC

⁸ <https://www.berec.europa.eu/en/document-categories/berec/berec-strategies-and-work-programmes/berecs-medium-term-strategy-for-international-cooperation-for-the-period-2022-2025>

⁹ FCC (Federal Communications Commission, USA), TRAI (Telecom Regulatory Authority of India), CRTC (Canadian Radio-television and Telecommunications Commission).

¹⁰ 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).

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.

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.

Monitoring of the termination rates for mobile and fixed voice calls

Article 75(3) EECC requires NRAs to report annually to the Commission and to BEREC with regard to 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. This BEREC report will summarize and reflect on the national reporting obligations for the year 2023.

With this publication, BEREC aims to increase transparency in the market and provide a means for the assessment of the Regulation implementation.

BEREC opinion on the national implementation and functioning of the general authorisation

Article 122(3) of the EECC establishes BEREC to publish by 21 December 2021, and every three years thereafter an opinion on the national implementation and functioning of the general authorisation, and on their impact on the functioning of the internal market. Pursuant to this obligation, BEREC published its first opinion on the national implementation and functioning of the general authorisation on 9 December 2021¹¹. Considering an obligation of periodical review the functioning of general authorisation (every three years starting from 2021), the following review should be conducted by the end of 2024.

Therefore, BEREC envisages a specific item for this review in the BEREC Work Programme 2024.

End user rights – BEREC opinion

Article 123 of the EECC establishes BEREC to publish, by 21 December 2021 and every three years thereafter an opinion on the market and technological developments and on their impact on the application of rights of end-users in the EECC (Title III of Part III).

Pursuant to this obligation, BEREC published its first opinion on 9 December 2021¹².

Considering an obligation of periodical monitoring (every three years starting from 2021) of the technological and market developments in the use of the different types of electronic communications services and analysis of their impact on the application of the end-user rights, BEREC shall envisage a specific item in the BEREC Work Programme 2024.

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

According to Article 82 of the EECC, BEREC has to update the BEREC Guidelines on very high-capacity networks by 2025. BEREC published the first version of these Guidelines in October 2020 (BoR (20) 165)¹³, and according to the BEREC Work Programmes 2022 and 2023, BEREC will update criterion four of these Guidelines in October 2023. Furthermore, BEREC will update criterion three of these Guidelines in 2025 and needs to start this work already in 2024. The other criteria of these Guidelines (criteria 1 and 2) result directly from the EECC, do not depend on technological developments and therefore do not need to be updated.

¹¹ <https://www.berec.europa.eu/en/document-categories/berec/opinions/berec-opinion-on-the-national-implementation-and-functioning-of-the-general-authorisation-and-on-their-impact-on-the-functioning-of-the-internal-market-pursuant-to-article-122-paragraph-3-eecc>

¹² <https://www.berec.europa.eu/en/document-categories/berec/opinions/berec-opinion-on-the-market-and-technological-developments-and-on-their-impact-on-the-application-of-rights-of-end-users-in-the-eecc>

¹³ <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-on-very-high-capacity-networks>

3.2 Open internet

Implementation of the Open Internet (OI) Regulation

Regulation (EU) 2015/2120 (the ‘Open Internet Regulation (OIR)’) prescribes, among other things, that NRAs should ‘closely monitor and ensure compliance’ with the OIR and should ‘publish reports on an annual basis regarding their monitoring and findings’.

Since 2017, BEREC has been publishing an annual report on the implementation of OIR and the Open Internet WG has provided a forum for discussion of national cases and questions in order to ensure a predictable and consistent application of the OIR.

In the 2024 work stream, BEREC will monitor the implementation of the open internet provisions among NRAs for the period 1 May 2023 to 30 April 2024. BEREC will collect the annual national Open Internet reports and the responses to an internal questionnaire in order to prepare the annual European-level Open Internet report.

To support the NRAs’ obligation to ‘closely monitor and ensure compliance’ with the Regulation, a forum will be held to discuss questions relating to the consistent application of the OIR on an informal basis. The sharing of experience and exchange of important decisions in national cases is essential to foster a consistent application of the OIR throughout Europe in light of evolving markets and technologies. In addition to discussing the national cases, the forum covers the sharing of information on relevant market deployments.

When appropriate, the work stream may also include questionnaires, surveys, workshops, etc. to collect information on topics of particular relevance to the open Internet and to monitor emerging trends, as the market continues to develop and contribute to the work of other Working Groups related to Internet evolution. This work stream should build on experience from previous years.

3.3 Roaming and intra-EEA communications

International Roaming benchmark data and monitoring report

Article 21 of the Roaming Regulation establishes a yearly obligation for BEREC to collect data and provide report for the European Commission, on the basis of the collected data, on the evolution of pricing and consumption patterns in the Member States, both for domestic and roaming services, the evolution of actual wholesale roaming rates for balanced and unbalanced traffic and the relationship between retail prices, wholesale charges and wholesale costs for roaming services. During 2023, BEREC will launch the relevant data collection at the end of September 2023. The information that will be received from operators will be used for the preparation of the comprehensive yearly BEREC Roaming data report which will be published after Plenary 1 2024.

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 2024 BEREC is planning to publish the 5th Benchmark Report on the findings, based on data collection.

3.4 The Digital Markets Act (DMA)

As a part of a dedicated High-Level Group created under the DMA¹⁴, BEREC continues to assist the European Commission by means of advice, expertise and recommendations relating to the implementation, evolution and enforcement of the DMA.

In addition, BEREC is at European Commission's disposal advising on matters related to the interoperability obligation for number independent interpersonal communication services (NI-ICS) imposed on gatekeepers pursuant to Article 7 of the DMA, as well as any other issue in relation to electronic communication services or where BEREC experience can be valuable. In the context of the interoperability obligations for NI-ICS, BEREC is assigned an important role as a body that may be consulted¹⁵ by the European Commission in order to determine whether the technical details and the general terms and conditions published in the reference offer that the gatekeeper intends to implement or has implemented ensures compliance with the abovementioned obligation.

Furthermore, BEREC keeps monitoring and analysing the developments in the digital markets and the impact and effects of the practices implemented by large online platforms. Such monitoring exercises may translate into different types of BEREC deliverables (opinions, workshops, etc.).

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

¹⁴ Article 40 DMA

¹⁵ Recital 64 DMA

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 weighted average cost of capital (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 2024, 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.

Collaboration on the Internet access service measurement tools

In 2024 and beyond, BEREC will continue to work towards a harmonised measurement framework and to support NRAs in their national measurement tool deployments.

For this purpose, BEREC intends to:

- a) provide a forum for NRAs to share information and exchange experiences and best practices related to development and deployment of national measurement tools, taking also into account the support by new technologies; this workstream will also consider best collaboration practices so as to maximise the benefits of existing NRA cooperation in this area;
- b) support the migration of interested NRAs towards a harmonised measurement tool by working together to improve the measurements and by sharing codes or components.

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 2024 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 must 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 has to 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 2024 will be the BEREC Work Programme for the following year (i.e. 2025), 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 2024

In 2016, BEREC developed its first external Communications Strategy, which was afterwards complemented by the annual communications plans. BEREC's Communications Plan 2024 is finalised for internal use in December 2023, setting in place the communications activities that BEREC is committed to in 2024. 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 2025

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 2024, and then work through the year to finalise the Work Programme for 2025 by the end of the year.

6. Carry-over projects from 2023

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. More details about these projects are included in the BEREC Work Programme 2023 (BoR (22) 193).

BEREC Report on cloud services and edge computing

BEREC considers there is a merit in assessing the provision of cloud and edge computing services in the context of 2030 Digital Compass targets (one of them requiring 75% of the European enterprises to use cloud computing services, big data and Artificial Intelligence) and the European Commission's ambition of looking at new digital opportunities and trends, such as the metaverse, considering cloud and edge computing, among other technologies, key enablers of these developments.

In 2023 BEREC will therefore start assessing the provision of cloud and edge computing services. The public consultation is planned after Plenary 1 2024 while the final report is planned to be adopted at Plenary 3 2024.

BEREC Report on the entry of large content and application providers into the markets for electronic communications networks and services

Building on the conclusions of the BEREC Report on the Internet Ecosystem (BoR 22/167)¹⁶, this report will aim to provide an overview of the presence/entry of large CAPs in(to) the markets for ECN and ECS. After providing an overview of the market, the report may further investigate the relations between content and application providers and ECS/ECN providers. In order to gather input for its analysis, BEREC plans to organize several internal workshops with experts and relevant stakeholders during 2023 to gather their inputs and insights on the topic, while the final report is planned to be adopted at Plenary 4 2024.

BEREC Report on M2M and permanent roaming

¹⁶ <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-internet-ecosystem>

BEREC plans to analyse M2M services that allow for roaming for 'periodic travelling' but also that rely on permanent roaming. In the second half of 2023, BEREC will be launching a call for input.

The inputs received as well as information from the BEREC Roaming Data Report, which is planned to be published after Plenary 1 2023, will be used to carry out the analysis. BEREC is planning to adopt its final report at Plenary 4 2024.

BEREC workshop on the perspectives and regulatory/competition challenges of Internet of Things

In 2023, BEREC plans to organize a workshop with the twofold purpose of reviewing the state of play of IoT services and discussing emerging regulatory/competition challenges for IoT services in view of 5G and 6G. The summary report of the workshop is planned to be adopted at Plenary 1 2024.

BEREC report on empowering end-users through environmental transparency on digital products and services

In 2023, BEREC will engage in a fact-finding process to raise NRAs' knowledge of existing work and analysis of the end-users' awareness of environmental issues as critical for end-users' empowerment and for ICT sustainability. To this end, BEREC plans to organize a workshop on end users' empowerment by providing them with environmental information, potentially in cooperation with relevant stakeholders (e.g., BEUC and the European Environmental Bureau).

Building on the inputs received during this workshop BEREC is planning to deliver a report, which should provide a general overview of initiatives by NRAs and other relevant stakeholders regarding the empowerment of end users in terms of sustainability plus an analysis of most effective ways of reaching out to end users in this regard.

The report is planned to be adopted at Plenary 2 2024.

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

Building on the first report on Member States' best practices to support the defining of adequate broadband (BoR (20) 99)¹⁷, published in 2020, and in the context of necessary regular updates of this report that should reflect technological advances and changes in consumer usage patterns, as prescribed in Article 84 (3) of the EEC, BEREC is planning to gather and analyse relevant information including:

- the continued suitability of the evaluation criteria consulted on in the previous report;

¹⁷ <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-member-states-best-practices-to-support-the-defining-of-adequate-broadband-internet-access-service-ias>

- relevant experiences to support Member States in defining the adequate broadband;
- the minimum set of services that the adequate broadband is capable of supporting.

Based on the information gathered, BEREC is planning the update of the best practice report, with a final report planned to be adopted at Plenary 1 2024.

BEREC Guidelines detailing Quality of Service (QoS) parameters

In 2020, BEREC published the first guidelines detailing QoS parameters (BoR (20) 53)¹⁸, as an obligation prescribed by the Article 104 (2) of the EECC.

The guidelines provide that the process of undertaking a review will commence two years from the adoption and publication of the guidelines by BEREC. In addition, the progress indicators for 5G deployment need to be improved in the context of the annual monitoring cycle of the future Digital Policy Programme 'Path to the Digital decade'.

Therefore, the purpose of this project is to prepare and publish the first review of the guidelines. This process will start in 2023, with a plan to adopt the final guidelines at Plenary 1 2024.

BEREC Report on the IP Interconnection ecosystem

The debate about IP interconnection has been reviewed in 2021/2022 and gained momentum. In 2017, BEREC updated its study about the IP interconnection market (BoR (17) 184)¹⁹. After more than five years, BEREC sees a need to assess the current state of the market and to reevaluate its earlier findings. In this study, BEREC will assess the current trends and the developments in the market since 2017, such as the relationships between different parties, utilisation of paid peering and on-net CDNs.

If necessary, the work stream may also include questionnaires, surveys, workshops, etc. to collect further information relevant to this analysis.

The adoption of the report is planned at Plenary 2 2024.

BEREC report on national experiences of the implementation of the EECC

In view of the review of how the EECC is functioning that, pursuant to Article 122 of the EECC, the Commission must carry out by 21 December 2025, and considering the progress in national transposition activities, BEREC must review the national implementation status throughout the Union.

¹⁸ <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-detailing-quality-of-service-parameters-0>

¹⁹ <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-ip-interconnection-practices-in-the-context-of-net-neutrality>

It will also start considering to what extent the new electronic communications framework is enabling the achievement of the EECC's objectives and whether (a reasoned selection of) the framework's provisions are effective to that end.

The assessment will start with a NRAs workshop, followed by a public workshop with the aim of exchanging views with stakeholders about how the EECC has been working to date. Based on the workshops and experiences of the NRAs, BEREC will compile a list of regulatory areas where the current framework functions well and will put forward topics where there could be further improvement. All this work will also benefit from internal discussions throughout 2023 and 2024, as BEREC will continue providing a forum to exchange views on the national implementation of the legal framework, to ensure a common understanding of the rules in all the areas covered by the EECC and throughout the EU.

BEREC is planning to hold a public workshop in Q2 2024 and adopt its final report at Plenary 4 2024.

7. Potential work for 2024 and beyond

In addition to the items described above, the items in this section will be considered for the Work Programme 2024 and beyond in future work programmes as candidates for preparing BEREC reports, opinions or analysis or organizing workshops. The list of items mentioned below is exemplary and is not a final list. BEREC will also consider other new workstreams for 2024, 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 2024 work programme over the course of 2023.

Report on best practices for termination of contracts and switching provider

This project builds on the work done by BEREC in 2018 resulting in a report that collated information from NRAs on the approaches to switching across different communications services (BoR (19) 27)²⁰.

The report now proposed here will analyse the different aspects that affect switching providers, considering number portability procedures, but also identifying other matters that facilitate or hinder switching.

The report will focus on the national implementation of the measures provided for by Article 106 of the EECC and, among other things, will cover issues related to the details and the timing of the switching and porting processes, porting failures and switching processes for bundles, and it could also provide information for subsequent Article 123 opinions in respect to the End User Provisions.

Implementation report on the BEREC Guidelines on Geographical surveys of network deployments

²⁰ <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-terminating-contracts-and-switching-provider>

Article 22(1) of the EECC establishes that NRAs and/or other competent authorities must conduct a geographical survey of the reach of electronic communications networks (GSND) by 21 December 2023. In March 2020, the BoR approved the core Guidelines on GSND, which specified the relevant data to be produced by authorities, the data definitions and their granularity (BoR (20) 42)²¹.

The implementation report is meant to formally collect information on the stage of development of the national GSND, the status of implementation of BEREC Guidelines including the issues faced in implementing these Guidelines (if possible reasons behind these issues) and the ways in which Member States are dealing with those issues. It would also examine if/how Member States have extended the information.

The report should reflect on the national experiences in procuring for this information in order to anticipate future BEREC work in updating these Guidelines.

Report on market definition and SMP analysis for access to physical infrastructure

Where civil engineering infrastructure exists and is reusable, effective access to such infrastructure may significantly facilitate the roll-out of very high capacity networks and encourage development of infrastructure-based competition to the benefit of end-users. The recommendation on relevant markets published in December 2020 concluded that the definition of a separate market for physical infrastructure access (PIA) would be particularly relevant in Member States where one single operator owns a physical infrastructure network which is ubiquitous and suitable for the deployment of alternative fibre networks.

The objective of this report would be to address relevant issues to be taken into account when analysing this market, building on previous work done by BEREC in 2019 (BoR (19) 94)²², as well as on the market analysis for PIA carried out by NRAs.

Experience sharing in relation to Articles 76, 79 and 80 EECC

This project will include an exchange of experience regarding the new tools of the EECC (e.g. co-investment, commitments, promotion of cooperative arrangements and wholesale-only operators). In the context of an internal workshop, NRAs could discuss the experiences and the consequences as regards the implementation of these tools.

Implementation of Equivalence of Inputs (EoI) by NRAs

²¹ <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-to-assist-nras-on-the-consistent-application-of-geographical-surveys-of-network-deployments>

²² <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-access-to-physical-infrastructure-in-the-context-of-market-analysis>

Following suggestions from stakeholders received during the call for input regarding the Work Programme 2023, BEREC plans to look closer at the issue of EoI implementation in the relevant markets in 2024. This task is closely connected to the final shape and scope of the new Access Recommendation review, which is still ongoing.

Further work on ICTs sustainability

In continuity with its Report on sustainability assessing BEREC's role limiting the sector impact on the environment published in 2022²³, in 2024 BEREC could continue further work on sustainability by collecting relevant data related to defined indicators²⁴ as well as decide to engage in additional work on sustainability issues also taking into account the European Commission and other competent authorities' agenda on this matter.

Further work on cybersecurity

In its Joint communication to the European Parliament and the Council on the EU's Cybersecurity Strategy for the Digital Decade²⁵, 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 with 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.

BEREC's further engagement on DSA, Data Act, Data Governance Act, Artificial Intelligence Act

Given BEREC's strategic priority 2 Supporting sustainable and open digital markets, BEREC could further continue its work relating to "digital" topics by following the developments regarding the Data Act, the Data Governance Act, the Artificial Intelligence Act and the Digital Services Act (DSA).

In this regard BEREC could continue to assist the Commission by means of advice, expertise and recommendations relating to the implementation, evolution and enforcement of these acts. Furthermore, BEREC could consider analysing the role that the NRAs should have in relation to the implementation of Data Act, Data Governance Act and DSA as well as the

²³ <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-sustainability-assessing-berecs-contribution-to-limiting-the-impact-of-the-digital-sector-on-the-environment>

²⁴ Indicators' definition is planned for 2023

²⁵ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=JOIN:2020:18:FIN>

impact of artificial intelligence on electronic communications services, end users as well as NRAs.

Review of the BEREC Guidelines on Symmetric Access Obligations

These guidelines provide guidance to the NRAs on criteria to determine key aspects for the application of the extended and amended provision on symmetric access regulation according to Article 61(3) EECC. BEREC published these Guidelines in 2020. According to paragraph 11 of the published Guidelines BEREC committed to report on the practical application of these guidelines in accordance with Art. 4 (1)(j)(i) of the BEREC regulation and to provide input to an assessment of the need to revise the guidelines within five years after the adoption of the guidelines.

Review of the BEREC Guidelines on Co-Investment Criteria

The Guidelines contributes to the consistent application by NRAs of the conditions which co-investment offers must comply with when commitments associated with those offers are being assessed by the NRAs in the context of Article 76 of the EECC. BEREC published these Guidelines in 2020²⁶. According to Article 3 of the Guidelines BEREC committed to report on the practical application of these guidelines in accordance with Article 4 (1) (j) of the BEREC Regulation and to provide input to an assessment of the need to revise the guidelines within five years after the adoption of the guidelines.

Universal services review

In view of the review of the scope of the universal services, pursuant to Article 122 of the EECC, the Commission must carry out by 21 December 2025, and every five years thereafter this review in light of social, economic and technological developments.

The review should also take into account, inter alia, mobility and data rates in light of the prevailing technologies used by the majority of end-users in particular with a view to proposing to the European Parliament and to the Council that the scope be changed or redefined.

BEREC intends to assist the European Commission in the review process by providing all necessary information, collect relevant data from Member States and provide opinion on relevant aspects of the report.

Roaming Regulation Report

Article 21(1) provides for the review procedure of the Roaming Regulation. The Commission shall, after consulting BEREC, submit, by 30 June 2025, the first assessment report on the functioning of the Roaming Regulation to the European Parliament and to the Council,

²⁶ <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-to-foster-the-consistent-application-of-the-conditions-and-criteria-for-assessing-new-very-high-capacity-network-elements-article-76-1-and-annex-iv-eecc>

followed, if appropriate, by a legislative proposal to amend this Regulation. BEREC intends to provide its opinion to the Commission taking into account the assessment criteria required by this Article.

8. BEREC Strategies beyond 2025

The current BEREC Medium term Strategy covers the period 2021-2025 and, as such, BEREC will need to draft a new strategy for the period beyond 2025. The work on the next BEREC Medium term Strategy should be initiated in 2024.

In addition, the current BEREC Medium-Term Strategy (MTS) for relations with other institutions covers the period 2022-2025 and the Medium-Term Strategy for International Cooperation covers the period 2022-2025 and, as such, BEREC will need to draft new strategies for the period beyond 2025. The work on these strategies should also be initiated in 2024.