

# 52<sup>nd</sup> Ordinary Plenary Meeting of the BEREC Board of Regulators (BoR)

Hosted in hybrid format

# **Conclusions**

**Chair: Annemarie Sipkes** 

Director of Telecommunications, Transport and Postal Services Department Netherlands Authority for Consumers and Markets (ACM)

6-7 October 2022

# Contents

Ма	ain Results of the 52 <sup>nd</sup> Meeting of the BEREC Board of Regulators	3
Int	roduction and participation	5
Lis	st of documents	5
lte	ms discussed	5
1	Opening of the Meeting and adoption of the Agenda	5
2	Election of the BEREC Chair 2024 and Vice-Chairs 2023	5
3	List of 'A' items	6
4	Information from the BEREC Chair	7
5	Information from the BEREC Office	7
6	Information from the European Commission (EC)	8
7	Announcement of the election results for BEREC Chair 2024 and Vice-Chairs 2023	9
8	Open Internet (OI)	10
	8.1 BEREC preliminary assessment of the underlying assumptions of payments from CAPs to ISPs	
;	8.2 Oral update on zero-rating coordination, sanctions on Russia and OIR Opinion	11
9	Wireless Network Evolution (WNE)	11
10	End-User (EU)	12
11	Remedies (REM)	13
12	Regulatory Framework (RF)	14
13.	. Planning and Future Trends (PFT)	16
•	13.1 Draft Work Programme 2023	16
•	13.2 Draft Report on the 5G Ecosystem	16
14.	. 5G Cybersecurity WG	17
	14.1 Update on the draft Report on the participation of NRAs in different cybersecurity fo	
t	14.2 Oral update on the future WG activities related to the Recommendations of the E0 the Special Report. 5G roll-out in the EU: delays in deployment of networks with security is remaining unresolved	sues
15	BEREC international cooperation	18
16	Exchange of regulatory experience	19
17	AOB	20
17.	.1 Information on the 53rd BoR Ordinary Meeting (8-9 December, Czech Republic)	31

Annex I – List of documents

### Main Results of the 52<sup>nd</sup> Meeting of the BEREC Board of Regulators

The BEREC Board of Regulators held its 52<sup>nd</sup> Ordinary Plenary Meeting in hybrid format on 6-7 October 2022.

During the Meeting, the BoR discussed and/or approved the following documents:

### 1. Documents approved as 'A' items

#### 1.1 For publication:

- BoR (22) 128 BEREC Report on the implementation of the Open Internet Regulation;
- BoR (22) 129 Summary Report on the Heads' Workshop on the Digital Divide;
- BoR (22) 130 3rd Intra-EU communications Benchmark Report;
- BoR (22) 131 Annex I BEREC Benchmark Intra-EU communication;
- BoR (22) 132 BEREC Western Balkan Roaming Benchmark Data Report.

### 2. Documents approved as regular items:

### 2.1. For publication:

- BoR (22) 138 Report on the Workshop on Open RAN (including any possible Next Steps);
- BoR (22) 141 Opinion on a harmonised Europe-wide helpline number (116 016) to violence against women;
- BoR (22) 144 Report on the 5G Ecosystem.
- BoR (22) 137 BEREC preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs (amended version of the document submitted to the BoR on 6 October 2022);

#### 2.2. For internal use:

- BoR (22) 140 Updated BEREC's internal Guidelines for the elaboration of opinions in Art. 32 and 33 EECC Phase II cases.

#### 2.3. For public consultation:

- BoR (22) 139 Draft Report on Comparison Tools and Accreditation;
- BoR (22) 143 Draft BEREC Work Programme 2023.

### 3. Documents submitted for information purposes:

- BoR (22) 133 Contact lists pack;
- BoR (22) 134 Information on the electronic voting procedures since the last plenary meeting;
- BoR (22) 135 Information on planned electronic voting procedures between P3 and P4;
- BoR (22) 136 Work Programme 2022 status update;
- BoR (22) 142 draft BEREC Opinion on the draft Commission Delegated Regulation supplementing Directive (EU) 2018/1972 of the European Parliament and of the Council with measures to ensure effective access to emergency services through emergency communications to the single European emergency number '112';

- BoR (22) 145 draft Report on the participation of NRAs in different cybersecurity fora at EU level;
- BoR (22) 155 Communication on BEREC work on IP interconnection: A preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs.

### 4. Other main topics discussed

The BoR was briefed on the recent activities of the BEREC Chair, important projects carried out by the BEREC Office in support of BEREC, and BEREC's recent and forthcoming international activities. The BoR was also informed about the development of the BEREC Work Programme 2023. Furthermore, the BoR was briefed on the regulatory exchange concerning the 5GZORRO project implemented in Malta, "Towards a dynamic marketplace for 5G resources with 5GZORRO - a regulator's perspective", and the project "Liechtenstein goes satellite" and on the roll-out of fibre optic in Liechtenstein. The European Commission was invited to provide information on important recent developments and activities under its remit that have an impact on the digital sector.

### 6. Next Meeting

The next Ordinary Plenary Meeting of the BoR will take place on **8-9 December 2022** in the **Czech Republic**.

#### **Introduction and participation**

The BEREC Board of Regulators held its 52<sup>nd</sup> Ordinary Plenary Meeting in hybrid format on 6-7 October 2022.

The Meeting was attended by the Heads and/or high-level Representatives of the National Regulatory Authorities (NRAs) from each EU Member State that have primary responsibility for overseeing the day-to-day operation of the markets for electronic communications networks and services. The European Commission also took part in the Meeting. Heads and high-level Representatives of the NRAs with whom BEREC has concluded working arrangements were also present.

### List of documents

The list of final documents approved by the meeting for publication, in compliance with the BEREC Regulation and the BoR transparency rules, is presented in the Annex to the Conclusions.

#### Items discussed

A short overview of the information presented under each agenda item, a summary record of the proceedings and a record of the conclusions reached by the BoR are presented below.

### 1 Opening of the Meeting and adoption of the Agenda

Document(s)	BoR (22) 127 Draft BEREC BoR Agenda
Introduction by	BEREC Chair (ACM)
Information presented	The BEREC Chair welcomed the Meeting participants and provided practical information on the logistics of the Meeting.
	The BEREC Chair welcomed the new BoR members.
	The BEREC Chair opened the Meeting and presented the Draft Agenda for approval by the BoR. The BoR was invited to suggest any additional issues to be raised or presented under "Any Other Business" (AOB).
Conclusion	The BoR adopted the Agenda without changes.

### 2 Election of the BEREC Chair 2024 and Vice-Chairs 2023

Document(s)	No document
Introduction by	BEREC Chair (ACM)
Information presented	Based on Article 10(1) of the BEREC Regulation, the Board of Regulators shall appoint, acting by a two-thirds majority of its members, a Chair and at least two Vice-Chairs from among its members.
	The elections took place under the BoR, as indicated in the BEREC Regulation (Articles 10(1) and 17(1)), following the procedure outlined in Article 2 of the BoR RoP (Rules of Procedure) - BoR (19) 58 to the extent possible under current circumstances.
	The following persons had submitted valid nominations to the BEREC Office to participate in the election process:

	- Mr Tonko Obuljen – Chairman of the Council of the Croatian Regulatory Authority for Network Industries (HAKOM), Croatia – for the post of BEREC Chair 2024;
	- Ms Hana Továrková – Chairperson of the Czech Telecommunication Office Council (CTU), Czech Republic – for the post of BEREC Vice-Chair 2023;
	- Mr Robert Mourik – Chairperson of Commission for Communications Regulation (ComReg), Ireland – for the post of BEREC Vice-Chair 2023;
	- Mr Branko Kovijanić – President of the Council of the Agency for Electronic Communications and Postal Services (EKIP), Montenegro – for the post of Representative of the participants without voting rights to the Mini-board 2023.
	According to the BoR RoP, if the BEREC Office receives only one candidacy for the position of BEREC Chair, this candidate shall be elected provided that she/he receives the support of a 2/3 majority of all members (18 positive votes). Should the candidate not receive that support in the first round, the vote shall be repeated once. Should the candidate not receive that support in the second round, a new invitation for candidacies shall be opened, to be submitted on the same day of the Meeting, with each candidate supported by at least 4 members, evidenced in writing. The new vote shall take place as soon as practicable, following the procedure outlined in Article 2(4) of the BoR RoP.
	In addition to the support provided to the Chair by the two Vice-Chairs (the Incoming and Outgoing BEREC Chairs), the Board of Regulators may decide to elect other members as additional Vice-Chairs for 1 year. The election shall take place in accordance with the voting rules applicable to the election of the BEREC Chair. This procedure shall also apply to the election of a representative of the participants without voting rights to the Mini-Board, as foreseen in Article 3(3) of the BoR RoP.
Conclusion	The BoR members agreed on the election process, on the number of Vice-Chairs for 2023 and on the organisation of a joint vote for the positions of BEREC Chair 2024, BEREC Vice-Chairs 2023 and representative of the participants without voting rights to the Mini-Board 2023.

### 3 List of 'A' items

Document(s)	Approval for publication:
	BoR (22) 128 BEREC Report on the implementation of the Open Internet Regulation
	BoR (22) 129 Summary Report on the Heads' Workshop on the Digital Divide
	BoR (22) 130 3 <sup>rd</sup> Intra-EU communications Benchmark Report
	BoR (22) 131 Annex I – BEREC Benchmark Intra-EU communication
	BoR (22) 132 Draft BEREC Western Balkan Roaming Benchmark Data Report
Introduction by	BEREC Chair (ACM)
Information presented	The BEREC Chair presented the list of 'A' items, as set out above. The list of 'A' items was drawn up based on the conclusions of the Contact Network

	(CN), according to which the BoR's approval of the documents should be possible without further discussion.
	The BEREC Chair firstly requested the consent of the BoR members to include all the items in the list and, secondly, asked the BoR to approve the documents in the list of 'A' items.
Conclusion	The BoR approved the documents included in the 'A' item list.

## 4 Information from the BEREC Chair

Document(s)	No document
Introduction by	BEREC Chair (ACM)
Information presented	The BEREC Chair briefed the BoR about recent developments and important meetings she participated in. She noted that detailed information will be provided in the monthly update. The first meetings after the summer break were held in Brussels, where discussions were lively between the co-legislators, and BEREC's work in relation to those discussions is welcome and highly valued. During the second week of September, the Mini-board was on a study trip to the US, during which the Memorandum of Understanding (MoU) with Federal Communications Commission (FCC) was renewed. She noted that more information on the study trip will be provided within item 15 of the Agenda.
	In addition, she summarised the discussion held during the Workshop (WS) on BEREC 2030. A wide variety of NRAs were present at the Workshop, with a variety of topics and challenges that they face for BEREC 2030. However, she noted that there was a lot of similarities and common understanding on the nature of the challenges faced.
	At the Workshop, it was requested that the Heads formulate their input on the strategic orientation that BEREC needs, in order to face and overcome the upcoming challenges.
	She suggested to the BoR that a task force be appointed to deliver the Action Plan for BEREC 2030 for P4, including these strategic points. The Action Plan should also specify which Working Group should be responsible for specific actions in 2023 (in alliance with WP23) and beyond. The task force should be conceived from (at least) PFT and RF Co-Chairs.
Conclusion	The BoR took note of the information.

# 5 Information from the BEREC Office

Document(s)	BoR (22) 133 Contact lists pack BoR (22) 134 Information on the electronic voting procedures since the last plenary meeting
	BoR (22) 135 Information on planned electronic voting procedures between P3 and P4
	BoR (22) 136 Work Programme 2022 status update
Introduction by	BEREC Office Representative
Information presented	The BEREC Office submitted to the BoR, for information, the updated contact lists for the BEREC Heads, CN members and the BEREC Office,

	the details of recent and planned electronic voting procedures and reported on the implementation status of the 2022 BEREC Work Programme.
	The BEREC Office Representative updated the BoR on the main projects and studies run by the BEREC Office in support of BEREC, namely:
	- WP 2022;
	- Phase-II cases;
	- WG meetings;
	- BEREC Office survey on the quality of support to WGs (Working Groups) (Q2);
	- Internal Audit Services audit on the support to WGs;
	- Studies conducted by BEREC: NRA's independence, Business Services; Wholesale mobile access connectivity.
Conclusion	The BoR took note of the information.

# 6 Information from the European Commission (EC)

Document(s)	No document
Introduction by	European Commission Representative
Information presented	The EC Representative informed the BoR that the European Commission's main activities and latest developments in the area of electronic communications were detailed in the information paper submitted before the Meeting. In addition, she updated the BoR members on the following topics:
	- Armed conflict in Ukraine: Ukrainians continue to send requests for technical equipment and donations to private companies, and new needs are becoming important, like equipment for education purposes. She informed the BoR members that if their national telco operators want to contribute, this is still possible. Tech for Ukraine has many videos to show how this works. (More videos are available on our Futurium Tech4UA platform.) With the support of the Commission and the European Parliament, the EU and Ukrainian operators had signed a Joint Statement on their coordinated efforts to secure and stabilise affordable or free roaming and international calls between the EU and Ukraine. The Commission has recently published information about the positive impact of the prolongation of the Joint Statement. Although it is voluntary, it is very important that this work be continued.
	- State of the Union address In her State of the Union address on 14 September, the President of the Commission notably addressed the war in Ukraine and expressed, inter alia, the wish to 'bring Ukraine into our European free roaming area'. This looks possible, taking into account specific circumstances and an exceptional association agreement that makes this possible.  The EC Representative also mentioned that the accompanying letter of intent to Parliament and Council listing upcoming key initiatives for 2023 notably includes a European critical raw materials Act, as well as an initiative on virtual worlds, such as the metaverse.

	<ul> <li>Development in the connectivity package and discussions of fair share.</li> <li>The Commissioner has an intention to organise a consultation at the end of this year or beginning of next year, which will most probably be much</li> </ul>
	broader than the issue of 'fair share".  The Draft Access recommendation should be presented to BEREC in Q4 this year, as well as the proposal for the reviewed Broadband Cost Reduction Directive (BCRD).
	- Digital Decade Policy Programme  The formal adoption of the Digital Decade Policy Programme happened in mid-July, which was a very important milestone. The Commission has already started preliminary implementation work, in particular the preparation of the Implementing Act setting KPIs and Guidance and Trajectories towards the Digital Decade targets. This first step will allow Member States to develop their strategic national roadmaps, but also allow them to asses where they are compared to other Member States.  In addition, the goal is to create the Digital Decade Board with high-level representatives of Member States, which could assist and advise the Commission on how to put the Digital Decade programme into practice.
Conclusion	The BoR took note of the information.

# 7 Announcement of the election results for BEREC Chair 2024 and Vice Chairs 2023

Document(s)	No document
Introduction by	BEREC Chair (ACM)
Information presented	The Incoming BEREC Chair welcomed the newly elected members. The BEREC Chair communicated the outcomes of the election of BEREC Chair 2024 and Vice Chairs 2023:  - Mr Tonko Obuljen – Chairman of the Council of the Croatian Regulatory Authority for Network Industries (HAKOM), Croatia – for the post of BEREC Chair 2024 (24 yes, 1 no, 1 abstention);  - Ms Hana Továrková – Chairperson of the Czech Telecommunication Office Council (CTU), Czech Republic – for the post of BEREC Vice-Chair 2023 (25 yes, 1 abstention);  - Mr Robert Mourik – Chairperson of Commission for Communications Regulation (ComReg), Ireland – for the post of BEREC Vice-Chair 2023 (26 yes);  - Mr Branko Kovijanić – President of the Council of the Agency for Electronic Communications and Postal Services (EKIP), Montenegro – for the post of Representative of the participants without voting rights to the Miniboard 2023 (23 yes).
Conclusion	To inform the European Parliament and the Council of the outcome of the elections.

# 8 Open Internet (OI)

# 8.1 BEREC preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs

Document(s)	BoR (22) 137 BEREC preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs
	BoR (22) 155 Communication on BEREC work on IP interconnection: A preliminary assessment of the underlying assumptions of payments from large CAPs to ISPs
Introduction by	OI WG Co-Chairs (TRAFICOM/ILR)
Information presented	The Co-Chairs presented a paper on the Sending Party Network Pays principle (SPNP), adopting a holistic approach and considering that users buy and pay for Internet access services from their ISPs and use/subscribe to content and applications provided by CAPs. This paper runs a preliminary assessment in relation to the discussion on the mechanism for "direct compensation". BEREC remains available to provide further and broader analysis to the European Institutions.
	The Co-Chairs illustrated the milestones of the IP interconnection (IP-IC) workstream as well as the workshops. Then, they explained how internet traffic has grown steadily over the years with current traffic volumes notably higher than those analysed in 2012. Although there is no evidence of a fundamental change in the general growth tendency, it was observed that most internet traffic is now carried via content delivery networks (CDNs) and the role of the biggest CAPs has increased. Furthermore, the Co-Chairs said that the internet has proven its ability to self-adapt to changing conditions, such as increasing traffic volume and changing demand patterns.
	The Working Group concluded that fixed access networks costs exhibit a very low traffic sensitivity, mobile access networks experience some degree of traffic sensitivity, IP interconnection disagreements are typically about increasing IP interconnection link capacity, and the costs of network upgrades necessary to handle increased IP traffic volume are very low compared to the total network costs.
	The following findings are described in the paper: 1) The internet has proven its ability to self-adapt to changing conditions, such as increasing traffic volume and changing demand patterns. 2) There needs to be an adequate justification for any measure intervening in the market. 3) The Sending Party Network Pays model would provide ISPs with the ability to exploit the termination monopoly and it is conceivable that such a significant change could be of significant harm to the internet ecosystem. 4) Therefore, SPNP would require regulatory oversight and could require regulatory intervention. 5) Traffic is requested and thus "caused" by ISPs' customers. 6) CAPs are also able to optimise the data efficiency of the content and applications they provide. 7) Fixed access network costs exhibit a very low traffic sensitivity, while mobile networks experience some degree of traffic sensitivity. 8) IP-interconnection disagreements are typically about increasing the capacity of the IP interconnection link. 9) The cost of network upgrades that are necessary to handle an increased IP traffic volume are very low when compared to the total network costs. 10) CAPs and ISPs are mutually dependent on each other. 11) The demand from ISPs' customers for content drives demand for broadband access. 12) Availability of broadband access drives demand for content. 13) There is no evidence of free-riding. 14) Costs for internet connectivity are typically

	covered and paid for by ISPs' customers. 15) A further and broader analysis could be carried out on other approaches related to the debate.
Conclusion	The BoR approved the publication of the amended version of the document submitted to the BoR on 6 October 2022.

# 8.2 Oral update on zero-rating coordination, sanctions on Russia and OIR Opinion

Document(s)	No document
Introduction by	OI WG Co-Chairs (TRAFICOM/ILR)
Information presented	Firstly, the Co-Chairs illustrated the OIR Opinion, taking into account the following elements: background, NRAs' expertise and experiences, ECJ rulings and zero-rating; 5G and the SPNP debate. In light of these considerations, it was observed that the Open Internet Regulation is fit for purpose and its adoption for publication is envisaged at P4/2022. Secondly, the Co-Chairs updated the BoR members on NRA supervision and enforcement actions. In particular, 6 Member States (MS) have no zero-rating anymore; 14 MS ended marketing and selling of new zero-rating subscriptions by 1st September 2022; 8 MS still have the possibility to conclude new contracts with zero-rating; 6 MS will terminate existing contracts and will migrate customers to new offers by the end of 2022; 5 NRAs have made formal requests for information/dialogue with ISPs; lastly, 7 NRAs are having ongoing internal discussions or pending decisions.
	Thirdly, in terms of media sanctions on Russia, the Co-Chairs reported that 5 NRAs shared information about the implementation of new sanctions based on Regulation (EU) 2022/994. Moreover, regarding the ECJ Judgement in RT France v. Council T-125/22 of 25 July 2022 (concerning Regulation (EU) 2022/350), the following was observed: RT France's application of annulment of the sanctions dismissed, the Court confirmation of the validity of the sanctions and the competence of the Council to adopt such measures.
Conclusion	The BoR took note of the information.

# 9 Wireless Network Evolution (WNE)

Document(s)	BoR (22) 138 Report on the Workshop on Open RAN (including any possible Next Steps)
Introduction by	WNE WG Co-Chairs (PTS/ComReg)
Information presented	The Co-Chairs updated the BoR members on the external Workshop on Open RAN, which was held on 24 May 2022 by BEREC. The purpose was to develop an understanding of the concept of mobile infrastructure deployment and development using Open RAN. Specifically, the Workshop consisted of 233 registrations, 4 panels, 5.5 hours of content and 16 expert speakers. Four key observations resulted from the Workshop: 1) Industry is busy addressing interoperability and integration challenges and opportunities; 2) Open RAN can be a game changer for private networks, if the environment is right; 3) Open RAN can align with strategic autonomy of operators; 4) a technology sovereignty dimension cannot be ignored.

The Co-Chairs emphasised that collaboration is crucial for the success of Open RAN, due to the need for interoperability between different hardware and software vendors and the various configurations required. With Open RAN, testing activities will also increase, not only isolated tests on disaggregated components, but also system integration tests. The idea that Open RAN could be a game changer, especially for private networks, emerged during the discussions, but for the Co-Chairs it is also important to emphasise that the Open RAN is still at an early stage of its development and cannot be considered completely material. Co-Chairs reported that other stakeholders already have concrete use cases tested in private networks. In summary, Open RAN has been made available to the strategic autonomy of operators, which means more choice for all those interested in having it, and Open RAN can be reconfigured with the possibility of mixing and matching various components, which seems to benefit the development of customisable solutions and, above all, adapted to the different needs of the private sector. The Co-Chairs pointed out that during the Workshop discussions, a paradox about the Open RAN concept was formulated, according to which specifications seem to arrive too late to be fully implemented and incorporated into the standard for 5G and at the same time too early to be fully included in the 6G standards as they move along. They added that work needs to be completed to advance Open RAN specifications and, as was mentioned earlier, particularly on the issue of security. More specifically, although no specific regulatory bottlenecks per se have been recognised, Open RAN refers to many concepts that usually require specific regulatory actions. Therefore, BEREC must remain interested in Open RAN. Finally, BEREC could include some questions in summary form in European operators' reporting requirements to BEREC or, alternatively, it could follow current trends by gathering information from or during policy meetings with industry associations and stakeholders, such as the Mobile World Congress or the BEREC Stakeholder Forum. Conclusion The BoR approved the document for publication.

### 10 End-User (EU)

Document(s)	BoR (22) 139 Draft Report on Comparison Tools and Accreditation
Introduction by	EU WG Co-Chair (AGCOM)
Information presented	The aim of the Report, as presented by the Co-Chair, was to offer insights into the independent comparison tools that enable consumers (and other end-users, if so required by the Member States) to compare and evaluate IAS (Internet Access Services) and publicly available NB-ICS (Number Based Interpersonal Communications Services), as set out in Article 103[2] of the EECC and, where applicable, publicly available NI-ICS (Number-Independent Interpersonal Communications Services). This Report is essentially a fact-finding exercise based on a questionnaire that was sent out to assess the existing situation regarding independent comparison tools. This exercise has never been undertaken by BEREC before. The Report is therefore organised into four main chapters. First, it presents the background and policy principle behind the EECC rules on independent comparison tools. The second chapter describes the main features of these instruments, those that exist and those that each country will implement, but also focuses on the challenges that NRAs face in implementing these instruments and compliance with the EECC

standards. The third chapter assesses the status of the certification processes, reporting on requirements, costs, lessons learnt and compliance with EECC rules. Finally, the fourth chapter highlights the main conclusions of all the information gathered. Thus, although several Member States had already put in place comparison tools and certification processes, it is only with the new rules that NRAs are obliged to ensure that end-users have access to at least one independent comparison tool free of charge. This obligation is enshrined in Article 103. The tool must enable end-users to compare and evaluate different IASs and publicly available NB-ICSs, and, where applicable, publicly available NI-ICSs, with regard to prices and tariffs of services and QoS performance. The fulfilment of the requirements set out in Art. 103 of the EECC is a necessary condition to obtain the certification by the NRA. The Co-Chair reported that an independent comparison tool is available in 15 countries. In 8 of them, the tool is fully compliant with the provisions of Article 103 of the EECC, and in 5 of them, the tool is developed (in-house) by the NRA. In 6 MS, the development of the tool has been commissioned to a third party by the NRA, while one country has certified a tool that is developed by an independent provider. Moreover, in all the countries where an independent comparison tool is already implemented, the tool is accessible through a website. In two countries, an additional Mobile App is also available. In conclusion, independent comparison tools must be operationally independent from providers, which means equal treatment. They must establish clear and objective criteria for comparison, use plain language, provide accurate and up-to-date information, be open to any provider of publicly available internet access or interpersonal communication services, and include a wide range of offers covering significant parts of the market. These tools must also provide an effective procedure for reporting and correcting information, and finally provide for the possibility of comparing prices, tariffs and quality of service between offers available to consumers and when NRAs intend to extend it to other users. Conclusion The BoR approved the document for public consultation.

### 11 Remedies (REM)

Document(s)	BoR (22) 140 Updated BEREC's internal Guidelines for the elaboration of opinions in Art. 32 and 33 EECC Phase II cases
Introduction by	REM WG Co-Chairs (BNetzA/UKE)
Information presented	In 2022, BEREC conducted an evaluation of the applicability of BEREC's Guidelines (GL) from 2016 for the elaboration of opinions in Phase II cases and considered that an update is necessary. The update is needed for 4 reasons:
	(1) Alignment with the legal framework, i.e. the EECC and the Procedural Recommendation ((EU) 2021/554);
	(2) Practical problems (e.g. not enough experts or rapporteurs, documents not made available fast enough to the expert team);
	(3) Recent experiences (e.g. leakage of confidential information or new information/evidence made available only very late);

	(4) Strategic point (based on input received from CN and REM WG in the meeting on 23 Sept 2022):
	• The Co-Chair asked the BoR to discuss the consolidated version based on the input from the CN and the REM WG, as well as from the Commission (focussing on the strategic point) and approve it for internal use. The Annexes to the document will be finalised once the main text is finalised. The BoR Rules of Procedure should be updated in order to include the provisions of the internal GL.
Conclusion	The BoR approved the document for internal use.

# 12 Regulatory Framework (RF)

# 12.1 Draft Opinion on a harmonised Europe-wide helpline number (116 016) for victims of violence against women

Document(s)	BoR (22) 141 Draft Opinion on a harmonised Europe-wide helpline number (116 016) for victims of violence against women
Introduction by	RF WG Co-Chairs (AGCOM/NMHH)
Information presented	During Plenary 2 2022, the EC mentioned an upcoming request for a BEREC Opinion on a new harmonised EU number for victims of violence against women — the first case of application of Art. 93(8) EECC, introducing a BEREC Opinion to the EC on implementing acts harmonising specific numbers or numbering ranges.
	On 10 August, a formal EC request under Art. 93(8) EECC was submitted – MS shall support the harmonisation of specific numbers or numbering ranges within the Union and the EC shall accordingly, taking utmost account of the Opinion of BEREC, adopt harmonising implementing acts via comitology. The EECC envisages a BEREC Opinion to the EC, so the EC requested BEREC's Opinion by 14 October 2022.
	The initiative was launched by the German Presidency and submitted to CoCom in February 2021. The MS provided a signed declaration of commitment and a declaration by a helpline service provider to show that the provision of the service in the MS would be feasible. Declarations were provided by 15 Member States. 14 MS also provided a declaration by a helpline service provider.
	Given the political support already expressed by MS and considering BEREC's remit, the Co-Chairs presented the proposal to adopt a lean and clear BEREC Opinion supporting the EC act, taking note of the political support expressed by MS for introducing a new 116 harmonised number and giving account of the absence of numbering issues at stake.
Conclusion	The BoR agreed to publish the Opinion on the BEREC website and submit it to the EC, without the accompanying letter.

# 12.2 Oral update on the work done on the External Study on NRAs' institutional features and relevant BEREC evaluations (Independence Study)

Document(s)	No document
Introduction by	Ecorys (contractor)
Information presented	The Representative of the contractor updated the BoR members on the Study's progress and the work completed so far. The survey of NRAs started on 15 July and ended on 15 September. She provided the first

	insights from the literature review: the definition of independence and which independence indicators have been distinguished in the Report.
	In addition, she updated the BoR about the next steps, and informed the members about the results of the expert-level workshop that was held on 28 September in Brussels.
	The Study conclusions will be submitted at CN4 for discussion. Approval and publication of the Study is envisaged for Plenary 4 2022.
Conclusion	The BoR took note of the information.

# 12.3 Oral update on the work done on the BEREC VAS Database and the emergency services database

Document(s)	No document
Introduction by	RF WG Co-Chairs (AGCOM/NMHH)
Information presented	The RF WG Co-Chairs updated the BoR members on the work done on the BEREC VAS Database and the emergency services database.
	The Co-Chairs presented the project timeline and explained that pursuant to the Roaming Regulation, these databases shall be established by 31 December 2022.
	Lastly, the Co-Chairs informed the BoR that the test version of these databases is available. The databases will be located on the BEREC website and will be in machine-readable format. They invited NRAs and competent authorities (CAs) to volunteer for testing, and to provide the required information to the BEREC Office by 28 October 2022.
Conclusion	The BoR took note of the information.

# 12.4 The draft Opinion on EC's Delegated Regulation with measures to ensure effective access to emergency services through emergency communications to the single European emergency number '112'

Document(s)	BoR (22) 142 draft BEREC Opinion on EC's Delegated Regulation with measures to ensure effective access to emergency services through emergency communications to the single European emergency number '112'
Introduction by	RF WG Co-Chairs (AGCOM/NMHH)
Information presented	According to Article 109(8) of the EECC, in order to ensure effective access to emergency services through emergency communications to the single European emergency number '112' in the Member States, the Commission shall, after consulting BEREC, adopt delegated acts in accordance with Article 117 supplementing paragraphs 2, 5 and 6 of this Article on the measures necessary to ensure the compatibility, interoperability, quality, reliability and continuity of emergency communications in the Union with regard to caller location information solutions, access for end-users with disabilities and routing to the most appropriate public-safety answering point (PSAP). The first such delegated act shall be adopted by 21 December 2022.  BEREC was asked on 5 August 2022 to provide an Opinion on the draft Commission delegated regulation, setting the deadline for finalising BEREC's official Opinion by 14 October 2022.

	The Co-Chairs presented the main conclusions of the draft Opinion to the BoR. Since the draft document was not discussed during the CN, they informed the BoR that the document will be submitted for adoption via an urgent electronic clearance procedure on 10 October 2022, so the Opinion could be submitted to the Commission within the requested deadline.
Conclusion	The BoR agreed to: - launch the urgent e-voting procedure on the draft Opinion; - publish the approved BEREC Opinion and submit it to the EC.

# 13. Planning and Future Trends (PFT)

## 13.1 Draft Work Programme 2023

Document(s)	BoR (22) 143 Draft BEREC Work Programme 2023
Introduction by	The Incoming BEREC Chair (EETT)
Information presented	The Incoming Chair illustrated the BEREC Work Programme 2023, which sets out the priorities that the Board of Regulators has identified for 2023. The objectives of the Work Programme are based on the BEREC Strategy 2021-2025, with a close focus on three priorities: promoting full connectivity, supporting sustainable and open digital markets, and empowering end-users. It also draws on the Medium-Term Strategy for relations with other agencies. Finally, the Work Programme aims to be aligned with the priorities of the European Commission for the 2020-2024 legislative cycle, as well as the vision, targets and avenues for Europe's digital transformation by 2030, set out in the Digital Compass and the Policy Programme "Path to the Digital Decade". The text includes 49 topics in total: 17 mandatory, 10 carry-overs, 8 customary and 14 new ideas, including the Chair study.
	Regarding the Working Groups' structure, the Incoming Chair proposed to merge Remedies (REM) and Statistics and Indicators (SAI) and to split Market and Economic Analysis (MEA) into two separate Working Groups. Another argument that emerges from the fact that BEREC has been approached to participate in issues not only related to 5G Cybersecurity, but to network security and resilience in general, is to remove 5G from the name of the group 5G Cybersecurity.  In terms of BEREC's institutional relations, the Incoming Chair pointed out that they do see the need for a team in which all Co-Chairs from all WGs
	participate. And the idea is to have a team leader for this group who will somehow organise and make sure that the information is adequately conveyed to the Co-Chairs.
	In conclusion, he illustrated the next steps to be followed: a WG Co-Chair call for interest with a selection procedure to be completed by P4 2022; the nomination of a Team Leader for Institutional set-up, for the first time considering assigning someone from the Chair's team; and the set-up of an Advisory Group for the Chair study, if of interest to the NRAs.
Conclusion	The Board approved the document for public consultation and agreed on the proposed changes in the structure of the Working Groups.

## 13.2 Draft Report on the 5G Ecosystem

Document(s)	BoR (22) 144 Draft Report on the 5G Ecosystem
-------------	---

Introduction by	PFT WG Co-Chair (CNMC)
Information presented	In this Report, the Co-Chair addressed the 5G ecosystem with a twofold objective: analysing some fundamental elements of the 5G provision and identifying the potential impact on the Regulation of the 5G ecosystem. Namely, BEREC has focused its analysis on three fundamental elements: the main players in the 5G ecosystem, the 5G value propositions, and the cost structures and revenue streams. Finally, the market players' views on the diverse regulatory implications of the 5G ecosystem have been gathered, taking into account the policymaking considerations received from the stakeholders.  For the preparation of this Report, BEREC issued three calls for input:
	·
	<ul> <li>A general one, addressed to all players in the 5G ecosystem;</li> <li>One addressed to NRAs, to gather information on their regulatory experience related to 5G;</li> </ul>
	• A specific questionnaire for new players (verticals, system integrators/ managed service providers (MSPs) and cloud providers).
	The Co-Chair recognised the increasing complexity of the ecosystem with the emergence of new players and the relevance of partnerships. Then, they paid attention to the potential development of new competition dynamics where traditional telcos might not necessarily be the main players for the provision of the services. What is more, the Co-Chairs highlighted that 5G provides numerous technical advantages that would enable new revenues sources by means of enhanced IAS and customised solutions for verticals (new products).
	In terms of revenues, the Co-Chair noted that there may be some uncertainties that could slow down investment in 5G networks. On the one hand, there is the uncertainty regarding the role of new players that will take the lead in providing services. Secondly, there is the uncertainty of the verticals' willingness to pay.
	Finally, BEREC took note of the policy considerations raised by the stakeholders: some are beyond BEREC's scope (e.g. spectrum policies); some are under BEREC's scrutiny (e.g. fair share) or have been in the past (e.g. level playing field); some will be considered in BEREC's future work (e.g. cloud provider switching).
Conclusion	The BoR approved the document for publication.

## 14. 5G Cybersecurity WG

# 14.1 Update on the draft Report on the participation of NRAs in different cybersecurity fora at EU level

Document(s)	BoR (22) 145 draft Report on the participation of NRAs in different cybersecurity fora at EU level
Introduction by	5G Cybersecurity WG Co-Chairs (AKOS/BIPT)
Information presented	The NRAs are participating in different Cybersecurity fora or Working Groups at EU level. BEREC conducted a survey to map this participation: the Co-Chairs received answers from 27 NRAs, and invited them to provide answers by 22 September, so the additional input was included in the draft Report. The Co-Chairs added some background information and made further verifications. Moreover, they reported that during next week's

	Working Group meeting, they will prepare the public Report to present as an 'A item' for P4.
	The Co-Chairs provided an overview of which NRAs participate in the different fora, outlining that the biggest number of NRAs are participating in the ENISA ECASEC Expert Group (former Article 13a EG), the NIS Cooperation Group Work Stream on 5G, and the ENISA AHWG on 5G Cybersecurity Certification.
	Lastly, they informed the BoR about the Workshop with ENISA & ECASEC, which will take place on 12 October 2022.
Conclusion	The BoR took note of the information.

# 14.2 Oral update on the future WG activities related to the Recommendations of the ECA in the Special Report. 5G roll-out in the EU: delays in deployment of networks with security issues remaining unresolved

Document(s)	No document
Introduction by	5G Cybersecurity WG Co-Chairs (AKOS/BIPT)
Information presented	The Co-Chairs updated the BoR on the future WG activities related to the Recommendations of the ECA in the Special Report "5G roll-out in the EU: delays in the deployment of networks with security issues remaining unresolved" and the ECA recommendations formulated in the audit conclusions. The objective of this Report is to provide guidance and recommendations for the timely deployment of secure 5G networks across the EU. It focuses on the Commission, but also examines the role of national administrations and other actors.
	The Co-Chairs analysed the recommendations to identify where BEREC could offer its valuable resources and expertise to help the Commission with implementation. So far, they have identified some possible actions for the implementation of the second recommendation, which is to promote a concerted approach to 5G security among Member States. And the free recommendation, which involves monitoring Member States' approach to 5G security and assessing the impact of divergences on the effective functioning of the single market. The Co-Chairs illustrated the Report on the ECA Audit recommendation for 5G Cybersecurity in close cooperation with the EC and NIS CG 5G WS and presented the timeline of the workflow.
Conclusion	The BoR took note of the information.

### 15 BEREC International Cooperation

Document(s)	No document
Introduction by	BEREC Vice-Chair responsible for international activities (BIPT)
Information presented	Firstly, the BEREC Vice-Chair responsible for international activities updated the BoR on the results of the BEREC Mini-board Study trip (12-16 September) in the US and reported on the main lessons learned during the 17 meetings that the Mini-board had in Washington DC and Boston.
	Along the lines of BEREC's priorities for 2022, the meetings were focussed around digital economy, 5G, access to broadband and affordability and sustainability. The BEREC Vice-Chair summarised the key points from the information paper submitted to the BoR.

	The full Report of the Study trip should be submitted for Plenary 4.
	Secondly, The Representative of the BEREC Vice-Chair responsible for international activities presented to the BoR BEREC's main international engagements.
	Firstly, he informed them about cooperation with regional networks:  - BEREC - EaPeReg event will take place in Riga on 10 (high level) and 11 November (expert level). EaPeReg plenary back-to-back with Plenary 4 in Prague (10 <sup>th</sup> anniversary);
	<ul> <li>EMERG Workshop on BB connectivity targets will take place in Milan on 11 November 2022;</li> </ul>
	- BEREC-REGULATEL Summit was held in virtual format in June 2022. 4laterlal summit will take place at Plenary 3 2023 (Portugal).
	In addition, he informed the BoR on the activities with other International Organisations and bilateral activities:
	<ul> <li>On the cooperation with ITU, he informed the BoR about the Plenipotentiary Conference (PP), 26 September - 14 October 2022 (Bucharest). Informal BEREC meeting was held on 28 September 2022.</li> </ul>
	<ul> <li>The MoU with FCC was signed during the BEREC Mini-board study visit on 12 September 2022 in USA.</li> </ul>
	Lastly, he updated the BoR on the International activities in the WG, and informed meeting participants that the call for input to the Co-Chairs is needed, since international cooperation is included in the PRDs.
Conclusion	The BoR took note of the information.

# 16 Exchange of Regulatory experience

Document(s)	No documents
Introduction by	BEREC Chair (ACM), Representative of the NRAs (MCA, AK)
Information presented	The Representative of the NRA (MCA) presented the 5GZORRO project implemented in Malta: "Towards a dynamic marketplace for 5G resources with 5GZORRO - a regulator's perspective". The representative outlined that the goal of the project is developing envisaged solutions for zero-touch service, network and security management in multi-stakeholder environments, making use of Smart Contracts based on Distributed Ledger Technology to implement required business agility. This project will ensure long-term vision for pervasive computing, connectivity, and corresponding services in 5G. The consortium is formed by 12 partners from 6 European countries and funded by the European Commission under the 5GPPP Phase3, Part4: 5G Long Term Evolution programme.  The Representative presented the main research and innovation pillars considered by 5GZORRO, and informed the BoR about the current state of play of 5G networks and the geographically limited spectrum trading use case. Lastly, he informed them that the 5GZORRO final event will be held on 27 October 2022.

	Moreover, the Representative of another NRA (AK) presented a satellite project in Lichtenstein: "Liechtenstein goes satellite". The representative presented the technology that is being used for low, medium and geostationary earth orbit. Furthermore, he outlined the structure of the main national and international Space laws and signed treaties. Lastly, he presented Rivada's technical system, including the deployment plan, key features, data rates and required secure network, as well as Rivada's commercial model.  In addition, he provided a short update to the BoR on the fibre optic roll-
	out in Lichtenstein.
Discussion	No discussion was held.
Conclusion	The BoR took note of the information.

## 17 AOB

# 17.1 Information on the $53^{\rm rd}$ BoR Ordinary Meeting (8-9 December, Czech Republic)

Document(s)	No document
Introduction by	BEREC Chair (ACM), Representative of the host NRA (CTU)
Information presented	The Representative of the host NRA provided information on the next BoR Meeting.
Conclusion	The BoR took note of the information.