Public debriefing plan

First part

- BEREC Report on Sustainability Indicators for Electronic Communications Networks and Services
- Update of criterion 4 of the BEREC Guidelines on Very High Capacity Networks
- BEREC Opinion on the Review of the Intra-EU Communications Regulation

Q&A session

Second part

- BEREC Report on Comparison Tools and Accreditation
- BEREC WP outline 2024, early call for inputs & 11th BEREC Stakeholder Forum
- BEREC updates

Q&A session

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Objectives and presentation

EC digital strategy "Shaping Europe's Digital Future" *'Data centres and telecommunications will need to become more energy efficient, reuse waste energy, and use more renewable energy sources. They can and should become climate neutral by 2030. [Implementation of] transparency measures for telecoms operators on their environmental footprint'*

BEREC Work Programme 2022/23 and PRD on Sustainability Indicators

The draft report includes :

- ✓ **A review of existing regulations and relevant work on the topic of environmental transparency;**

- ✓ **A summary of 2022 stakeholders technical workshops with academics, other public bodies, industry and civil society associations.**

- ✓ **A snapshot of current NRAs' experiences on environmental data collection on ECN/ECS;**

- ✓ **An analysis of level of adoption and support of a set of 21 sustainability indicators by the industry;**

- ✓ **A first assessment of key challenges regarding environmental transparency in ECN/ECS.**

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NATIONAL AUTHORITIES CURRENT APPROACH

Main take-aways:

- Currently, **no specific legal mandate to collect environmental information on ICTs**, aside from some exceptions. Some **market data** might be useful for an environmental perspective.

- **Four NRAs** collected information on the environmental footprint of electronic communications or ICT companies, namely Traficom, BIPT, Arcep and CNMC.

- The sustainability indicators collected by these NRAs mentioned above mostly relate to energy and electricity consumption, **energy efficiency and GHG emissions, water consumption and the share of recycled/reused/refurbished products distributed**.

- Agreement on the relevance to have harmonised methodologies and common definitions of indicators to assess of the environmental footprint of ICT.

FEEDBACK FROM INDUSTRY PLAYERS

Main results:

- Based on stakeholders' feedback, The <u>most used indicators</u> are the ones related to **energy** (energy consumption, energy efficiency, renewables rate) followed by **GHG emissions** (Scopes 1,2,3). **Water consumption, e-waste production and circular economy** performance indicators are also widely spread. Less used: toxicity, eutrophication.

- <u>Most relevant</u> (very relevant or somewhat relevant): indicators related to **energy, GHG emissions, distribution of recycled products and other circular economy performance**, e-waste, water consumption.

- Remaining **technical challenges and loopholes for certain indicators** and strong call for harmonised methodologies.
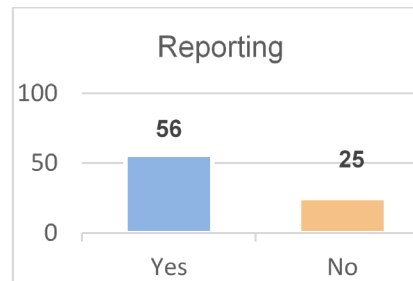
Graph 1 – Responses on whether data on environmental impacts are reported
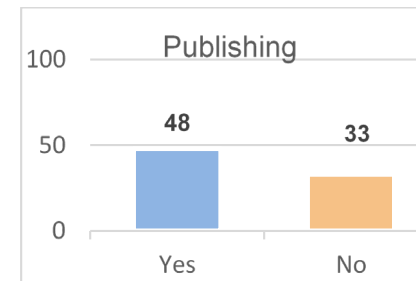
Graph 2 – Responses on whether data on environmental impacts are published
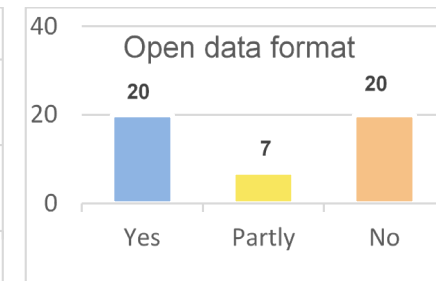
Graph 3 – Responses on whether published data on environmental impacts are in an open data format

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BEREC Preliminary assessment on sustainability indicators

1 **Investing in the environmental transparency in electronic communications**

- **Importance of comparable and standardised data on ECN/ECSs environmental footprint** to support public decision-makers' work, encourage efforts from the industry and enlighten end-users' decisions.
- Need of more **multi-criteria assessments and more data available** on environmental impacts from ICT based on the **Product/organisation environmental footprint methodologies**.

2 **State-of-play in the industry**

- Significant **existing efforts and initiatives** to improve environmental transparency.
- **Need to encourage publication of open data and foster harmonisation of standards** by using the opportunity that represent the new environmental reporting regulations and by addressing remaining technical challenges.

3 **Potential role for NRAs**

- Agreement on the necessity to work towards **harmonised methodologies and indicators' definition**.
- While EECC does not prevent environmental data collection, a **clearer mandate** could be a favourable development to examine.

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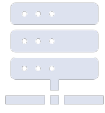
Pilot classification of indicators based on NRAs and companies practices

- BEREC compiled a **preliminary classification of sustainability indicators** reviewed to assess environmental footprint and performance of ECN/ECS

  Toolbox of 21 sustainability indicators with necessary information on current use of indicators across BEREC members and first feedbacks from economic players as a basis for further reflections on this topic.

- Contributions of NRAs and industrial players have enabled BEREC to identify <u>three categories of indicators</u>.

  - ➥ *Tier 1: Indicators **already collected by at least one NRA in BEREC and which benefit from a significant support from the industry** (high or medium) such as energy consumption, carbon emissions, recycled/reused products or water consumption.*

  - ➥ *Tier 2: Indicators not **collected by any NRA but with medium support** from the industry as recyclability, repairability, heat recovery, land use.*

  - ➥ *Tier 3: Indicators **not collected by NRAs with low support and adoption from the industry,** i.e. ecological and human toxicity and eutrophication.*

Background and objectives

- BEREC published the first version of the Guidelines on very high capacity networks (**VHCN**) in October 2020, according to Article 82 of the EECC
  - They define **four criteria** and any network that meets at least one of them is considered to be a VHCN

- The first version of the BEREC Guidelines on VHCN already states:
  - *'since **it was not yet possible to take 5G fully into account** for the release of these Guidelines, […] **BEREC intends to update criterion 4 as soon as possible and not later than 2023**.'*

- The **objective** of this project is to **update criterion 4** based on data collected from mobile network operators on **5G**. The other criteria (criteria 1 to 3) remain unchanged

Determination of criterion 4 (i)

- Criterion 4 has been determined exactly as in the first version of the BEREC Guidelines
  - The **only difference** is that the data collected from the mobile network operators is based on **5G instead of LTE Advanced (4G)**

- The questionnaire used for the data collection was updated from LTE Advanced (4G) to 5G
  - In addition, due to the new version of the BEREC Guidelines on the Implementation of the Open Internet Regulation, it was necessary to slightly adapt the definition of the data rate

- Data was collected from 5G mobile network operators from May to June 2022

- 44 mobile network operators filled in the questionnaire

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Determination of criterion 4 (ii)

- 19 completed questionnaires were taken into account.

- The other questionnaires were not taken into account because the mobile network operators answered that they
  - Do not yet deploy a 5G mobile network (6 operators) or
  - Do not have the data requested by BEREC (4 operators) or
  - The data they provided does not fulfill the conditions of the questionnaire (8 operators) or they did not confirm this (7 operators).

- The 5G networks are new and may not yet have been fully used at the time of data collection

- Therefore, an expected decrease (or increase) of the data rate in the next two years was also taken into account, based on information from the 5G mobile network operators

Update of criterion 4

- **Criterion 4** has been updated based on the median of the data received as follows

- "Any network providing a wireless connection which is capable of delivering, under usual peak-time conditions, services to end-users with the following quality of service (performance thresholds 2)" qualifies as VHCN

- The thresholds values refer to outdoor locations only and to the average value within the coverage area considered

Quality of Service Parameter	Threshold "old" (LTE-A/4G)	Threshold "new" (5G)
Downlink data rate	≥ 150 Mbps	≥ 350 Mbps
Uplink data rate	≥ 50 Mbps	≥ 50 Mbps
IP packet error ratio	≤ 0.01%	≤ 0.01%
IP packet loss ratio	≤ 0.005%	≤ 0.01%
Round-trip IP packet delay	≤ 25 ms	≤ 18 ms
IP packet delay variation	≤ 6 ms	≤ 5 ms
IP service availability	≥ 99.81% per year	≥ 99.9% per year

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Background

- The current regulation <u>expires on 14 May 2024</u>

- EC, with the support of BEREC, assesses the existing measures and determines <u>whether and to what extent</u> there is an ongoing <u>need to reduce the caps</u>

- This opinion is based on: (a) data collected by BEREC, (b) short call for input, (c) other available data

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Main conclusions

- The regulation supported price decrease but no significant impact on the consumption

- OTT applications broadly used for cross-border communications. Some limitation for users above 55 years old

- Difference between roaming and intra-EU pricing might not be easily understandable for consumers

- The current price caps are significantly higher than a rough estimate of the costs required to offer intra-EEA calls. Issues might arise from SMS termination and transit.

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Roaming

International roaming benchmark data and monitoring Report incl Annex WB BMK Report

- Publication of Report before end of March 2023, including
  - Information about new indicators (QoS, non-terrestrial networks, M2M,…)
  - Annex: WB Roaming Report

BEREC Opinion on the CIR on the FUP and the sustainability mechanism

- Publication of Report before end of March 2023

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Background - Article 103(2) of EECC

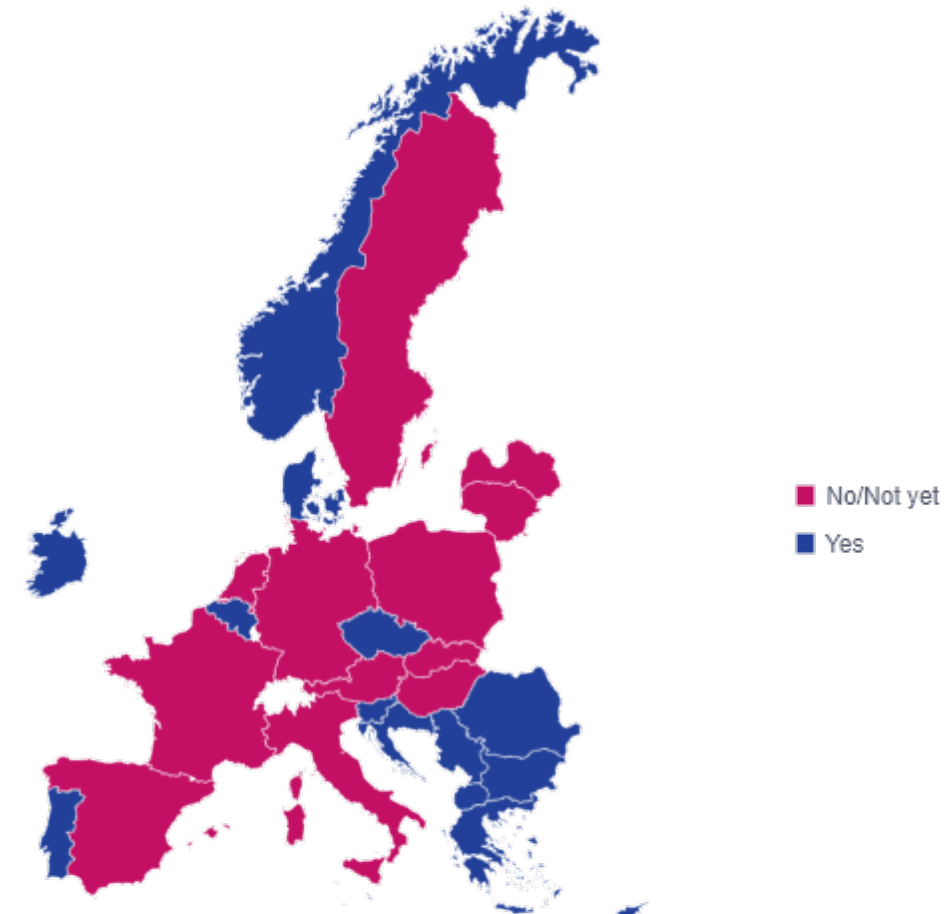Regulatory authorities shall ensure that end-users have access free of charge to at least one independent comparison tool.

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 the quality-of-service performance.

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Price comparison tool

- 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.

- In 5 of them the tool is developed (in house) by the NRA

- In 6 countries the development of the tool has been commissioned to a third party by the NRA

- 1 country has certified a tool who is developed by an independent provider

- The tool is accessible through a website. In two countries is also available an additional Mobile APP.

No/Not yet
Yes

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Certification process for PCS

- Only 5 out of 28 countries have answered that a certification process already exists

- 4 countries declared no plans to introduce a certification regime, mostly because the NRA already operates its own comparison tool

No/Not yet

Yes

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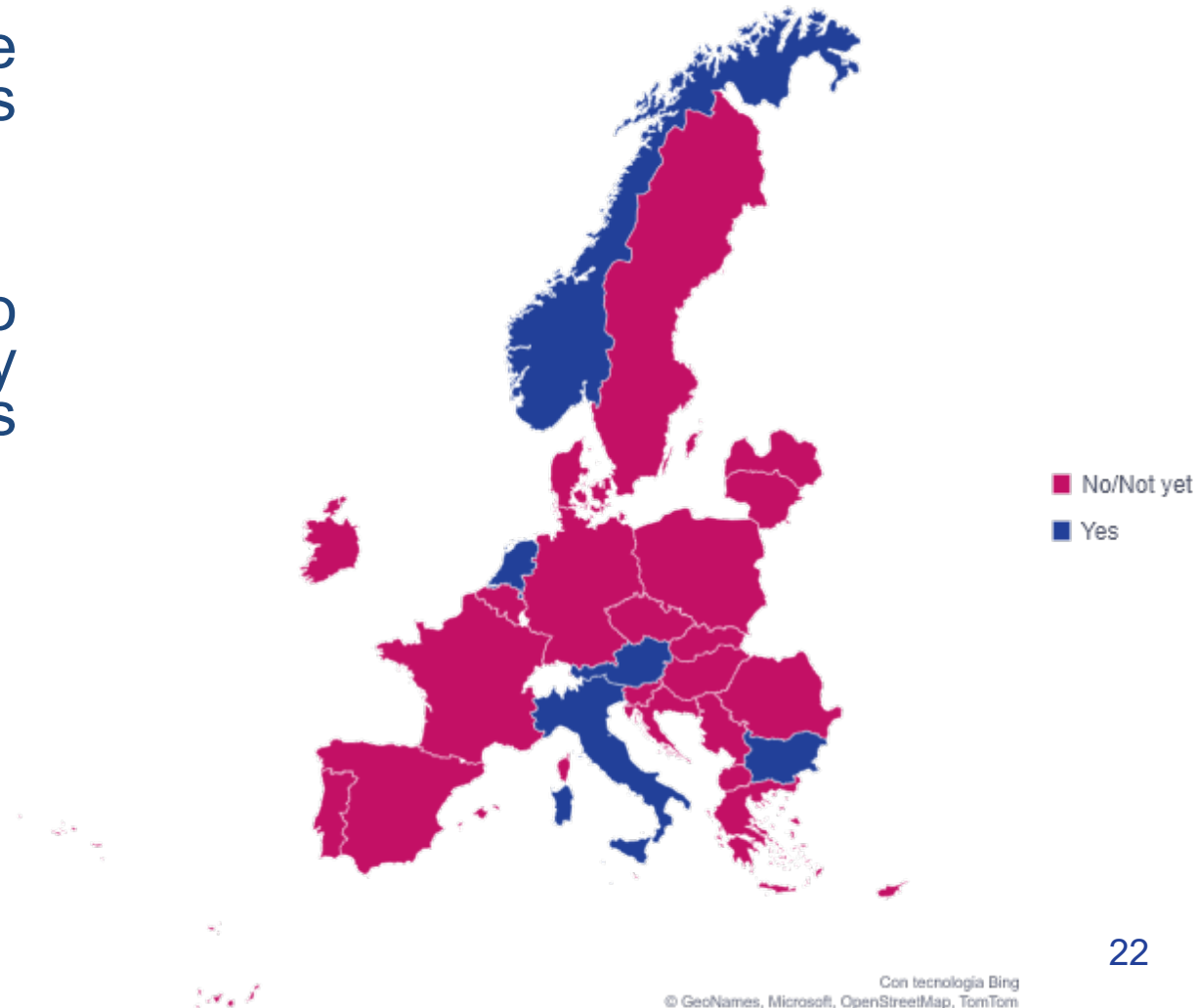
Main findings

- Comparison tools are implemented in different ways. Some NRAs choose to develop a comparison tool themselves; others use a third party to develop a tool for the NRA

- Countries provided information on different types of prices or tariffs such as recurring charges, consumption-based charges, the price of activating the service, the price of equipment, and so on

- The main challenges faced by countries in the development and implementation of the comparison tool are (1) the data collection, especially bundles (2) the design and testing of the algorithm used to order the offers, (3) the definition of the requirements of the tool, and (4) its update and maintenance

- **Stakeholder feedback:**
  - Welcome BEREC initiative to elaborate the report
  - Some comments on the substance, major risks of implementing the tools and methodology

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BEREC Work Programme 2024

Four objectives of the EECC the foundation of the assignments set out in BEREC's annual work programmes:

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

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Work Programe 2024 - Timeline of the main activities

Publication of Outline WP2024	24/01/2023
Call for input	15/03/2023
Stakeholder Forum	30/03/2023
Deadline for input	14/04/2023
Adoption of the draft WP for PC	06/10/2023
Adoption of the final WP	08/12/2023

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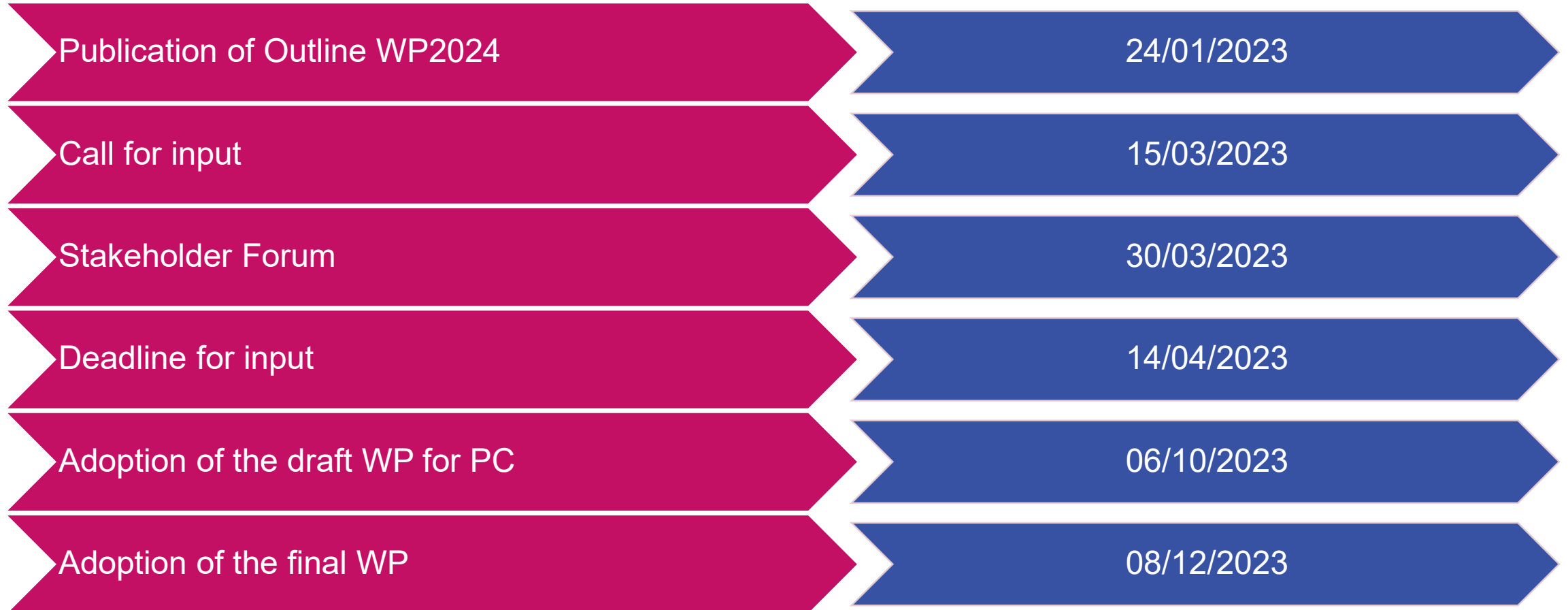
Call for input from Stakeholders

- **Forward looking perspective, vision, innovations, challenges….**

BEREC-WP-2024@berec.europa.eu

Deadline: April 14, 2023 CoB

Name of the organization with contact details

The title of the proposal

Description of the proposal

How does the proposal relate to BEREC strategic priorities (BEREC 2021-2025 Strategy)

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Register and join us

30 March 2023,
hotel Le Plaza, Brussels

Meet&Greet
WG Co-chairs in the morning

Conference
in the afternoon

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11TH
STAKEHOLDER
FORUM

30 March 2023

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09:00 – 13:00 Meet & Greet

14:00 – 14:35 Opening & Stakeholder Engagement

14:35 – 15:15 Panel I - Accessible Future for End Users with Disabilities

15:15 – 15: 45 Presentation of the Europe`s Data Act

16:05 – 17:05 Panel II - Future of Regulation in Digital Era

17:05 – 17:10 Closing Remarks

17:10 – 19:00 Networking Reception

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BEREC updates

BEREC Chair 2023
Kostas Masselos (EETT)

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BEREC vision for 2030

5 strategic orientations that will determine BEREC's future

1. Fostering national and international connectivity

2. Facilitating an open and sustainable internet ecosystem

3. Providing for the security and resilience of the networks and services

4. Contributing to the achievement of environmental sustainability goals

5. Strengthening agility, independence, inclusiveness and efficiency

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Other adopted public documents

Revision of Procedures for the BEREC Databases of numbering ranges for value-added services and means of access to emergency services for roaming users

BEREC Summary Report on the Workshop on the application of rights of end-users in the EECC

BEREC Indicative calendar of international events for 2023

BEREC input on the draft EC implementing decision on key performance indicators for the Digital Decade Policy Programme 2030

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Public consultations

Document title	Deadline
Draft BEREC Report on Sustainability Indicators for Electronic Communications Networks and Services	12 April 2023
Early call for input on the BEREC Work Programme 2024	14 April 2023
Draft BEREC Guidelines on Very High Capacity Networks	28 April 2023

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See you soon

- 11th BEREC Stakeholder Forum on 30 March 2023 in Brussels

- Next BEREC public debriefing on 14 June 2023 in Brussels

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