Public debriefing
42nd BEREC Plenary meeting

Dan Sjöblom, BEREC Chair 2020

Brussels, 10 March 2020

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Approval for publication:

- BoR (20) 31 24th BEREC International Roaming Benchmark Data Report
- BoR (20) 31a Data Report on Western Balkan
- BoR (20) 32 Report outcome of PC on Feasibility Study 5G
- BoR (20) 33 Feasibility Study 5G

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Dates for Public Consultations

WG	Project	Launch date of PC	Closing date of PC	Duration
PFT	Draft BEREC Strategy 2021	10 March, 2020	13 April, 2020	34 days
FNE	Guidelines on very high capacity networks	10 March, 2020	24 April , 2020	45 days
IR	BEREC Guidelines on intra-EU communications	10 March, 2020	10 April, 2020	31 days

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Guidelines adopted:

- BEREC Guidelines on common approaches to the identification of the network termination point in different network topologies;
- BEREC Guidelines detailing quality of service parameters of Internet Access Services (IAS) and publicly available ICS and the publication of information;
- BEREC Guidelines on common criteria for the assessment of the ability of undertakings other than ECN or ECS to manage numbering resources;
- BEREC Guidelines to assist NRAs on the consistent application of geographical surveys of networks deployment, Phase I;

Draft BEREC Guidelines on VHCN (1)

Wilhelm Schramm, RTR (Austria)
Björn Jonassen, BnetzA (Germany)

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Draft BEREC Guidelines on VHCN (1)

- According to Art. 82 of the EECC*), BEREC shall issue Guidelines on very high capacity networks (**VHCNs**)

Criteria for the definition of VHCNs

- The Guidelines define that any network which fulfils **one** (or more) of the following 4 criteria is a VHCN

- **Criterion 1**: Any network providing a **fixed-line** connection with a fibre roll out at least up to the **multi-dwelling building**

- **Criterion 2**: Any network providing a **wireless** connection with a fibre roll out up to the **base station**

*) European Electronic Communications Code

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Draft BEREC Guidelines on VHCN (2)

- **Criterion 3**:
  Any network providing a **fixed-line** connection which is capable of delivering, under usual peak-time conditions, services to end-users with a certain quality of service (see table below)

- **Criterion 4**:
  Any network providing a **wireless** connection which is capable of delivering, under usual peak-time conditions, services to end-users with a certain quality of service (see table below)

QoS Prameter	Fixed (criterion 3)	Wireless (criterion 4)
Downlink data rate	≥ 1000 Mbps	≥ 150 Mbps
Uplink data rate	≥ 200 Mbps	≥ 50 Mbps
IP packet error ratio	≤ 0.05%	≤ 0.01%
IP packet loss ratio	≤ 0.0025%	≤ 0.005%
Round-trip IP packet delay	≤ 10 ms	≤ 25 ms
IP packet delay variation	≤ 2 ms	≤ 6 ms
IP service availability	≥ 99.9% per year	≥ 99.81% per year

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Draft BEREC Guidelines on VHCN (3)

- The criteria are defined in accordance with the EECC and based on data collected from network operators
- The Guidelines also inform on how the criteria need to be applied
- In the annex, the Guidelines describe how BEREC determined the QoS thresholds of criterion 3 and criterion 4
- BEREC intends to update criterion 4 as soon as 5G has reached mature deployment and significant penetration (not later than 2023)

BEREC Guidelines on the topic ‘NTP’ Outcome of the Public Consultation (1)

Wilhelm Schramm, RTR (Austria)
Björn Jonassen, BnetzA (Germany)

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BEREC Guidelines on the topic 'NTP' Outcome of the Public Consultation (1)

- In total, BEREC received 68 responses to the public consultation which ran from 7 October until 21 November 2019

Main result

- Stakeholders expressed divergent and also opposite views and provided comments on many different aspects

Topics

- NTP is located at point A
  - Opposite views whether the Guidelines shall or shall not define that the fixed NTP is located at point A

- Legal provisions
  - Different and opposite views on the legal provisions on which the definition of the location of the NTP shall be based on

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BEREC Guidelines on the topic 'NTP' Outcome of the Public Consultation (2)

- **Impact on telecommunications terminal equipment market**
  - Several stakeholders agree and in the view of other stakeholders the positive effects are overstated
- **Implementation of the modem functionality**
  - Opposite views whether only stand alone modems or also integrated access devices (IADs) shall be allowed
- **Wholesale level and open access**
  - Several stakeholders pointed out that wholesale access services and open access models may have an impact on the definition of the NTP location

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BEREC Guidelines on the topic 'NTP' Outcome of the Public Consultation (3)

- **Shared media**
  - Several stakeholders expressed the view that in case of shared media active equipment needs to be part of the public network
- **Only certain networks / services**
  - Stakeholders suggested that the Guidelines shall consider only networks of the future / only broadband networks / not business services
- **Many other topics**
  - The stakeholders' contributions address many other topics

BEREC Guidelines detailing quality of service parameters of Internet Access Services (IAS) and publicly available ICS and the publication of information;

Therese Hourigan, ComReg (Ireland)
Paolo Lupi, AGCOM (Italy)

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QoS Guidelines

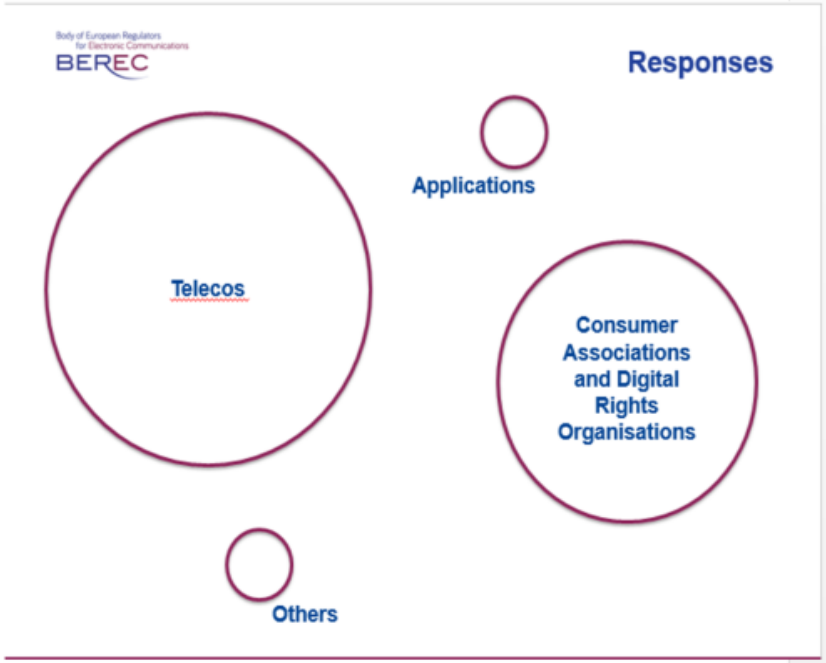
New Legislation EECC (the code) article 104

(1) National regulatory . . may require providers . . . to publish . . . information for end-users on QoS

(2) National regulatory authorities . . shall specify, **taking utmost account of BEREC guidelines**, the QoS parameters to be measured, the applicable measurement methods, and the content, form and manner of the information to be published, including possible quality certification mechanisms

Public consultation from Oct 10th 2019 to Dec 5th 2019
5 main sections:

- Policy principle and scope
- QoS parameters and measurement methods ICS
- QoS parameters and measurement methods ICS for end users with disabilities
- Publication of information
- Quality certification mechanism



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QoS Guidelines

Table 1 – ICS

- Supply time for initial connection
- Fault rate per access line
- Bill correctness complaints
- Call signalling delays
- Call setup time
- Voice connection quality
- Dropped call ratio
- Fault repair time
- Unsuccessful call ratio
- Call set up failure

Table 1A IAS

Term	Definition	Measurement
Latency (Delay)	Round-trip Delay: IETF RFC 2681,	Ref. BoR (17) 178 Sec 3.2
Delay Variation (Jitter)	IETF RFC 3393	Ref. BoR (17) 178 Sec 3.2
Packet Loss Ratio	Ref. ITU TY 2617	Ref. BoR (17) 178 Sec 3.3

Table 2

Additional QoS Parameters (not in Annex X)	Definition
Response time for operator services (Customer Care Services – Help Desk)	ETSI ES 202 057-1 (clause 5.6.1)
Customer complaints resolution time	ETSI ES 202 057-1 (clause 5.10.1)

Table 3 – QoS Parameters relevant for end-users with disabilities

Service	QoS Parameters	Definition
Voice communication	Audio bandwidth for speech	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.1)
Real-Time Text (RTT)	Distinguishable display	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.2.2)
	Programmat-ically determinable send and receive direction	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.2.2.)
	Interoperability	ETS/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.2.3)
	RTT Responsive-ness	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.2.4)
Video communication	Resolution	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.5.2)
	Frame Rate	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.5.3)
	Synchroniz-ation between audio and video	ETSI/CEN/CENELEC EN 301 549 v3.1.1 (clause 6.5.4)

Publication of Information

- NRAs should be able to require publication of information described in Art. 104(1) EECC, where it is demonstrated that such information is not effectively available to the public.
- Information should be comprehensive, comparable, reliable, user-friendly and up-to-date.

Quality Certification Mechanisms

- Proposed quality monitoring requirements include accuracy, comparability, openness, safety, future proof-ness and accessibility.

Review of Guidelines

- To commence 2 years from the adoption and publication of current Guidelines

BEREC Guidelines on Geographical surveys of network deployments

Rita Vala, ANACOM (Portugal)
Begoña Garcia-Mariñoso, CNMC (Spain)

Co-Chairs of Statistics and Indicators WG

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Background

- According to Article 22 of the EECC, NRAs and/or other competent authorities shall **conduct a geographical survey of the reach of electronic communications networks capable of delivering broadband** ("broadband networks") by 21 December 2023 and **shall update it at least every 3 years**.

- As agreed in Plenary 2, the Guidelines concentrate on the QoS-1 information to characterize network reach and performance (**phase 1**).

- In 2019, three workshops were organized and the draft BEREC Guidelines were in public consultation from the 10 October to the 21 November. **There were 27 responses** including those of operators, operators' associations, public authorities and citizens.

- The guidelines provide a substantive step forward with respect to the current situation in the harmonization of:

  – High level of resolution
  – Common definitions
  – GIS implementation

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Content of the Guidelines

- **Resolution:** For fixed networks the level of resolution should be the address and for mobile networks, the resolution should be (at least) a 100m x100m grid (or equivalent polygon).

- **Common definitions on**: mobile and fixed broadband reach, premises and addresses passed, broadband access, among others.

- **The guidelines provide a list** of specific indicators to collect for fixed and mobile broadband (current network reach):

  - For fixed: technologies, VHCN, download and upload speed classes and optionally an NGA indicator

  - For mobile: technologies, VHCN and optionally maximum speed information

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Content of the Guidelines

- Information on planned network deployments (forecasts) is required to identify designated areas (Art 22) and for State Aid purposes. The Guidelines specify the information to be delivered at address or small grid (100 m) resolution, in so far the information is available and can be provided with reasonable effort.

- The Guidelines also deliver on methods to publish information, address the issue of confidentiality and provide indications on how to aggregate data at the grid level in order to achieve a comparability of results.

- The Guidelines strongly recommend the usage of a Geographic Information System in order to carry out the Geographical Surveys in a professional and efficient manner.

- In the future BEREC will work upon an implementation report, in anticipation of the revision of the Guidelines.

BEREC Strategy 2021-2025

Michel Van Bellinghen

Brussels, 10 March 2020

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New mission statement

"BEREC aims at fostering the independent, consistent and high-quality regulation of digital markets for the benefit of Europe and its citizens"

5 years strategy

Multi-annual WP

EU priorities

•Flexible updates

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Market, technological and policy developments

Networks

•Digital Services

Digital divide

•Big data and AI

•Cyber security

•Sustainability

•Climate Change

•Taking into account new EC priorities

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3 High level Strategic priorities

Promoting full connectivity

Supporting sustainable and open digital markets

Empowering End-users

Horizontal principles: implementation of the EECC and focus on sustainability

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Areas of improvement

Institutional/International cooperation priorities

Sustainability

Developing the right tools

Stakeholder engagement

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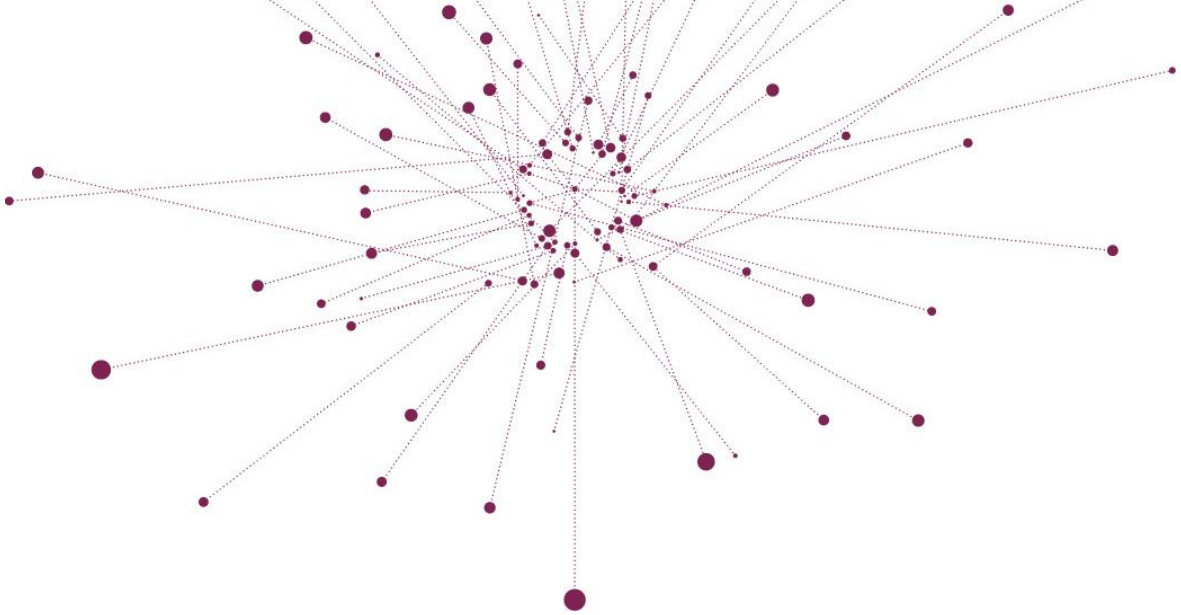

Thank you!

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BEREC Guidelines on common criteria for the assessment of the ability of undertakings other than ECN or ECS to manage numbering resources;

Ervin Kajzinger, NMHH (Hungary)
Antonello De Tommaso, AGCOM (Italy)
Drafting leader: Francesco Bernabei, AGCOM

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Background

- Art. 93.2 EECC : NRAs/OCAs **may** also grant rights of use for numbers for the provision of specific services to **undertakings other than providers of ECN/ECS**, provided that adequate numbering resources are made available to satisfy current and foreseeable future demand.

- Such undertakings shall demonstrate their **ability to manage** the numbering resources and to comply with any relevant requirements

- NRAs/OCAs enabled to suspend the further granting of rights of use for numbers to such undertakings if there is a **risk of exhaustion** of numbering resources".

- **By 21 June 2020**, **BEREC to adopt guidelines on common criteria for the assessment of the ability to manage numbering resources and of the risk of exhaustion of numbering resources**

Scope of the draft guidelines

- Guidelines to focus on providing common criteria for the assignment of numbering resources to non-ECN/ECS entities.

- Guidelines not to apply to the provision of ECN/ECS and to primary assignment of numbering resources to ECN/ECS providers or to the secondary assignment to end users for the provision of ECS. This implies also that non-ECN/ECS entities can only use the assigned numbers for their own purpose.

- NRAs/CAs may grant rights of use for numbering resources from the national numbering plans for the provision of specific services to non-ECN/ECS entities on a non-discriminatory basis pursuant to Art. 93(2) of the EECC.

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Criteria for the assessment for non-ECN/ECS entities

Criteria for the assessment of the ability to manage numbering resources

A. Basic information that a non-ECN/ECS entity should provide

1. Identification and contact information
2. Description of service
3. Technical implementation details
4. Information on the requested numbering resources
5. Usage projection
6. Declarations

B. Criteria to be evaluated by the NRA/CA during the evaluation period

1. The application demonstrates an appropriate use of the numbering resources
2. The applicant complies with the legal provisions for any previous numbering resources assignments
3. The thresholds of minimal usage over time for the assignment of numbering resources is respected for previous numbering resources assignments of the same type
4. There is no risk of exhaustion of numbering resources

C. Criteria used by the NRA/CA after the assignments

1. NRA/CA should check whether the assigned numbering resources are activated and used by the assignee within a specified period of time

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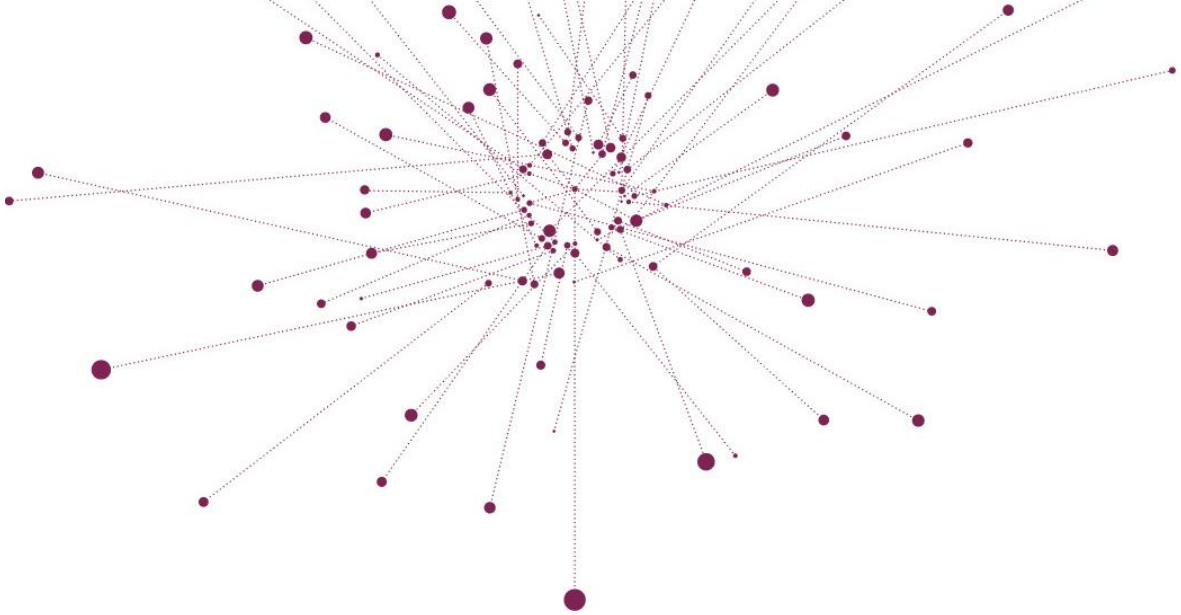
Criteria for the assessment of the risk of exhaustion of numbering resources

- Comparison of the **estimated usage of the numbering resources** with thresholds of utilisation and/or **expected time remaining** until this threshold will be reached.

- The criterion may include the assessment of the degree of assignment (**share of total numbering resources that have been assigned**), the extent of actual use of assigned numbers or a combination of both.

Review Clause

– Following a monitoring, based on the experience gained, including on the evolution in the assignments of numbering resources to non-ECN/ECS entities, BEREC will review the present guidelines by no later than 2023.



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