## Public debriefing 37<sup>th</sup> BEREC Plenary Meeting

Johannes Gungl, BEREC Chair 2018 Jeremy Godfrey, BEREC Chair 2019

Brussels, 12th December 2018

Body of European Regulators for Electronic Communications





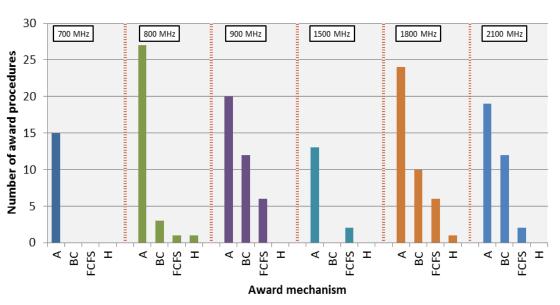
## **5G**

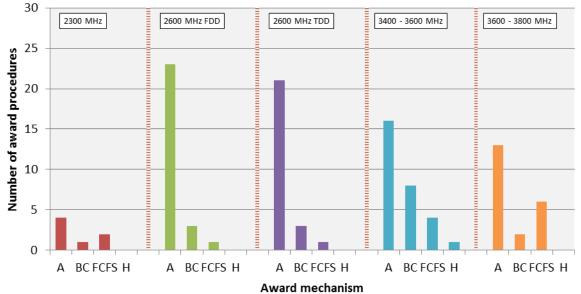


- BEREC Report on practices on spectrum authorization, award procedures and coverage obligations with a view to considering their suitability to 5G
- Common position on mobile network infrastructure sharing
- Common position on information to consumers on mobile coverage

#### **Authorisation regimes**

- Auctions
- Beauty contents
- First come first serve
- Hybrid form







#### What are the design objectives of award procedures

Competition

Efficency

Coverage

Innovation

Other objectives



#### Competition factors considered in award procedures

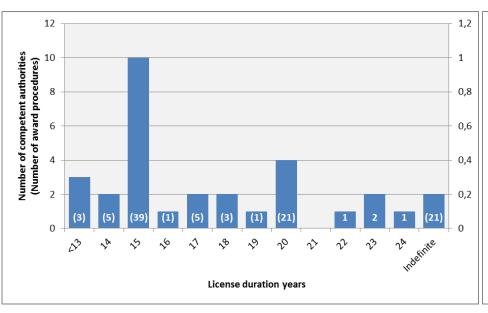
- Competition concerns were mentioned by most respondents to be considered when designing award procedures
- Concerns relate to extremely asymmetric spectrum holdings, foreclosure strategies, tacit collusion,...
- Measures to safeguard competition
  - Spectrum Caps
  - Reserved spectrum for certain bidders or group of bidders (e.g. new entrants), happens only in a few cases
  - Wholesale access obligations: half of respondents do not consider any wholesale access obligations
  - band-bundling to facilitate market entry (access to an appropriate set of bands)

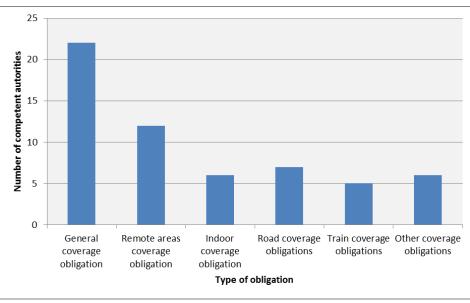


#### Factors to consider in designing the award

#### **Licence durations**

#### **Coverage Obligations**







#### Awards and coverage obligations for 5G

## Spectrum Authorisation for 5G

- Mix of bands used:
  - 700 MHz (coverage)
  - 3.4-3.8 GHz (capacity and FWA)
  - 26 GHz (high capacity and very low latency)
- Different bands will require different authorisation regimes
- Innovative ways of authorising spectrum may be necessary

#### Too early for concrete conclusions!

- Focus on road and railway seem to increase
- Remote area obligations
- Specific locations obligations
- Area coverage
- Enhanced mobile broadband
- Specific quality of service requirements

Coverage obligations and targets for 5G



- BEREC Report on practices on spectrum authorization, award procedures and coverage obligations with a view to considering their suitability to 5G
- Common position on mobile network infrastructure sharing
- Common position on information to consumers on mobile coverage



#### CP1: typology of infrastructure sharing types

For the purposes of promoting common understanding between NRAs on sharing, BEREC is of the common position that NRAs should use the following definitions

#### passive sharing

 co-location, site sharing, mast sharing

#### active sharing

RAN sharing,
 MORAN, MOCN,
 frequency (or
 spectrum)
 sharing,
 national/local
 roaming

## other sharing types

- core network sharing
- backhaul sharing



## CP2: main objectives to be pursued when considering network sharing agreement

When NRAs are to assess sharing agreements (i.e. spectrum awards, third party request, dispute settlement), BEREC is of the common position that NRAs should aim at achieving/maintaining at least the following regulatory objectives

## **Effective competition**

- Infrastructure-based competition
  - Service-based competition

#### **Better connectivity**

- Service improvements
- Allow the development of IoT, M2M, network slicing,...
  - Reduction of cost of deployment for passive infrastructure

## Efficient use of spectrum

Body of European Regulators

## CP3: parameters to consider when assessing network sharing agreements

BEREC is of the common position that, inter alia, the following parameters are to be considered when assessing network sharing agreements in order to achieve/maintain the objectives

Competitive market forces evolution Feasible level of competition	Type of sharing	Shared information	Reversibility and contractual implementation
---	-----------------	-----------------------	--



- BEREC Report on practices on spectrum authorization, award procedures and coverage obligations with a view to considering their suitability to 5G
- Common position on mobile network infrastructure sharing
- Common position on information to consumers on mobile coverage
  - Thanks for the contributions to the consultations!



# Opinion for the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines



#### Objectives and general conclusions of the evaluation

#### Scope

the Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines

#### Approach

- collect input from stakeholders at an early stage on the application of the Guidelines (March/April 2018)
- collect input from NRAs on experiences with the application of the Guidelines

#### General conclusions

- the NN rules work well and fulfil the aim of protecting end-users' rights and internet innovation
- no review of the Regulation desired by BEREC
- nevertheless, Guidelines could be clarified in certain instances in order to strive for consistency in the application of the Regulation
- the Regulation seems to leave considerable room for implementation of 5G technologies



#### Specific conclusions regarding 5G / NN Guidelines

#### New technologies (e.g. 5G)

- the Regulation seems to leave considerable room for implementation of 5G technologies (e.g. network slicing, 5G QoS class identifier (5QI) and Mobile Edge Computing)
- to date, BEREC has no knowledge of any concrete example given by stakeholders where the implementation of 5G technology would be impeded by the Regulation

#### BEREC will consider further clarifications on

- commercial practices: e.g. a step-by-step methodology for zero-rating, or by addressing new variants of zero-rating
- traffic management: e.g. on differentiating QoS for IAS, data compression, blocking of content, legitimate security issues, the duration of traffic management measures
- specialized services: e.g. on the definition of SpS, the relationship between SpS and IAS, the impact of SpS on the general quality of IAS
- transparency: e.g. on the scope of transparency requirements, mobile IAS speed, hybrid IAS, the process of certification



#### Specific conclusions on Internet value chain / next steps

#### Internet value chain

- BEREC notes that the open access to, and provision of, services and applications that the Regulation seeks to maintain could potentially be affected in practice by developments further up or along the internet value chain to which the Regulation does not apply.
- BEREC therefore concludes that this subject should be kept under scrutiny at European level for further consideration in ongoing and future regulatory developments.

#### Next steps starting 2019

- BEREC has concluded that no substantial changes are needed, but further clarifications could be provided the Guidelines
- BEREC will next year start the activity "Update to the Guidelines"
- BEREC will involve stakeholders via a written consultation of the updated draft Guidelines in October 2019



# Terminating Contracts and Switching Provider for public consultation



#### Terminating Contracts & Switching Provider - Goals

- Strategic Priority 5 Exploring new ways to boost consumer empowerment
- This work is essential to safeguard competition through increasing consumer choice
- The goal of the Report is to better inform both consumers and NRAs on how they might maintain and enhance consumer awareness of their ability to exercise choice
- The analysis is carried out for different types of ECS services including fixed and mobile voice services, fixed and mobile broadband services, OTT services, broadcast,...



#### Terminating Contracts & Switching Provider - Findings

## Processes to facilitate switching and provide safeguards to consumers

- Information provision, validation and authorisation
- consumers required to contact the RP to initiate the process
- Less rules in place for the other services
- Generally, bundles follow the rules defined by the NB ECS in their componence
- The length of the overall porting / switching process
- Fixed and Mobile NB-ICS less than 1 working day

#### Legislative and Regulatory Framework

- Switching and the validation process
- Contract matters and termination
- Charges & fees
- Customer retention practices;
- Technical issues
- Compensation initiatives

#### Obstacles to switching provider

- Fixed NB-ICS: contractual obstacles
- Mobile NB-ICS: actions taken by the TP to hinder/burden the switching decision by the consumer
- Fixed IAS: offer/technology availability
- Mobile IAS Contractual obstacles
- Pay TV contractual obstacles
- Defined bundles
   Contractual obstacles,
   actions by the TP, lack of
   consumer information
- Undefined bundles the availability of offers and technologies

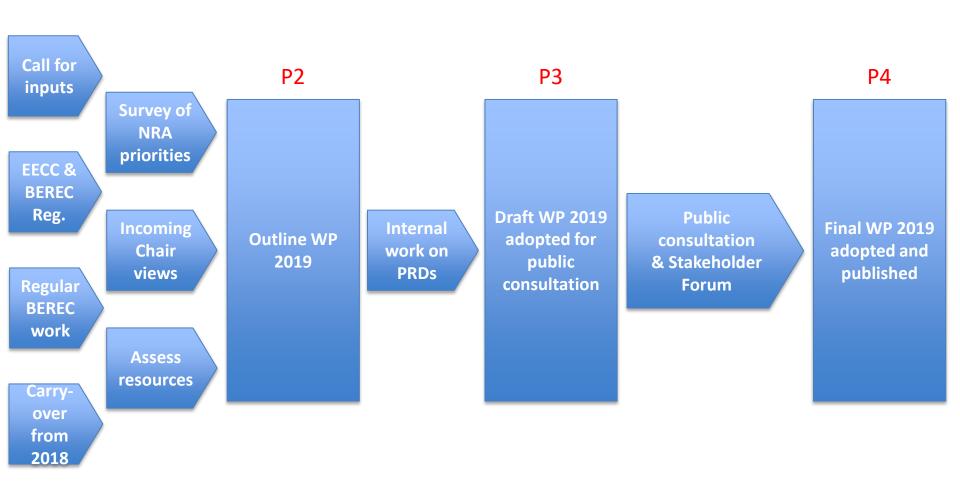


# BEREC Work Programme 2019



- Outline process for developing WP 2019
- Summary of WP 2019 public consultation
- Key updates to WP 2019 post-public consultation
- BEREC vision
- Next steps

#### Outline process for developing WP 2019





#### Summary of WP 2019 public consultation

- 18 responses generally supportive
- Stakeholders very keen to engage further with BEREC across:
  - Public consultations
  - Early calls for input
  - Technical workshops
- Additional workstreams proposed by stakeholders BEREC will consider such proposals when work on WP 2020 is initiated
- BoR (18) 241: BEREC report on the outcome of the public consultation also published



#### Key updates to WP 2019 post-public consultation

- Early input from stakeholders on BEREC Guidelines
- Feasibility study on provision of consistent information on pan-European 5G coverage and capability
  - Extra deliverable which will also input to Report on the impact of 5G on regulation and the role of regulation in enabling the 5G ecosystem
- Broader scope of Guidelines on intra-EU communications
  - Project includes stakeholder workshop in January 2019 to discuss with operators and other interested parties the provisions on intra-EU communications

#### **BEREC vision**

## Harmonising Implementation

UPDATE TO GUIDELINES ON NET NEUTRALITY GUIDELINES RELATED TO SYMMETRIC ACCESS

12 BEREC GUIDELINES

GUIDELINES RELATED TO INTRA-EU CALLS AND SMS

GUIDELINES RELATED TO CO-INVESTMENT

#### **BEREC vision**



## Collaborating with Stakeholders

- Supporting stakeholders in the EU including the Commission, RSPG, other EU institutions and bodies
- Dialogue with international colleagues, especially in the Western Balkans





- Publish WP 2019
- Draft outline of WP 2020 to be adopted by 31 January 2019 (as per new BEREC Regulation) – includes:
  - Workstreams in WP 2019 to be finally delivered in 2020
  - Multiannual workstreams
  - BEREC Strategy beyond 2020
- Call for inputs to WP 2020 indicatively April 2019



### Other outcomes





**End User** 

Fixed Network Evolution

Market and Economic Analysis

Mobile Network Evolution

Open Internet

Planning and Future Trends

Regulatory Framework

Remedies

Roaming

Statistics and Indicators



#### BEREC Chair and Vice Chairs 2019



Johannes Gungl, RTR

• BEREC Chair 2018



• BEREC Vice-Chair 2019





Jeremy Godfrey, Comreg

• BEREC Chair 2019

Constantinos Masselos, EETT

• BEREC Vice-Chair 2019





Dan Sjöblom, PTS

• BEREC Chair 2020

#### Marcin Cichy, UKE

• BEREC Vice-Chair 2019



#### **Overview Public Consultations**

BEREC
Common
Position on
Infrastructure
sharing

on access to physical infrastructure in market analyses

on termination of contracts and switching of provider on a set of indicators to measure the Internet of Things (IoT)

Open until 18 January 2019, 17:00 CET

Open until 23 January 2019, 17:00 CET

Participate on: consultations.berec.europa.eu



#### Summary of all documents published

- BEREC Report on geographical market definition
- BEREC Report on technical and economic replicability assessment in the context of symmetric access
- BEREC Report on contractual simplification
- BEREC Report on the outcome of the public consultation on the draft BEREC Report on contractual simplification
- BEREC Common Position on information for consumers on mobile coverage
- BEREC Report on the outcome of the public consultation on the draft BEREC Common Position on monitoring mobile coverage
- BEREC Report on Regulatory Accounting in practice 2018
- BEREC Report on Termination Rates at the European level
- BEREC Report on transparency and comparability of international roaming tariffs
- BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines
- BEREC Report on the outcome of the public consultation on the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines
- BEREC Report on practices on spectrum authorization and award procedures and on coverage obligations with a view to considering their suitability to 5G
- BEREC Work Programme 2019
- BEREC Report on the outcome of the public consultation on the draft BEREC Work Programme 2019
- Summary of the 6<sup>th</sup> BEREC Stakeholder Forum meeting
- Decision of the Board of Regulators on the Co-Chairs of the BEREC Expert Working Groups 2019-2020



### **BEREC 2018**

## A year of accomplishment

#### BEREC Work 2018



Proactively tackling the 5G challenges

Harmonisation: promoting the single market



Enhanced engagement with stakeholders





## What's next?



- Workshop on Intra-EU Communications: 29 January 2019
  - Information on BEREC Website
  - Including a link for registration and an e-mail address to provide input in advance of the Workshop
- Next Plenary: **7-8 March 2019 in Budapest**
- Next Public Debriefing: 13 March 2019
- Save the date: Joint BEREC-IIC-Event, 25 and 26 June 2019 in Riga

"Competing Continents: The pursuit of excellence in electronic communications"





- Contact for Press and Media
  - press(at)berec.europa.eu
- Social networks
  - Official <u>Twitter</u> account



Official <u>LinkedIn</u> corporate page



Official <u>YouTube</u> account



- Information Sharing Portal
  - https://isportal.berec.europa.eu/



Body of European Regulators for Electronic Communications

