



Draft

BEREC Strategy 2018-2020

Introduction

BEREC, the Body of European Regulators of Electronic Communications) was established by Regulation (EC) 1211/2009. BEREC's membership comprises the 28 independent NRAs of EU Member States. The European Commission, EEA countries and EU accession countries also participate in BEREC work as observers. BEREC is supported by the BEREC Office in Riga.

BEREC, as stated in its mission, aims to ensure the independent, consistent and high quality application of the European regulatory framework for electronic communications markets for the benefit of Europe and its citizens.

Based on BEREC's almost seven years of experience, it can be stated that the two-tier approach, involving the Board of Regulators and the BEREC Office^{1,} has worked well. BEREC has successfully produced professional and high quality deliverables in accordance with its annual work programmes based on its triannual strategy and also in response to various adhoc requests of the European Commission, the European Parliament and the European Council. Further to this it has become a platform for regulators exchanging experiences and developing best regulatory practices ("Common Positions") in order to apply the regulatory framework consistently across the EU thus developing the internal market for electronic communications further.

In 2014 BEREC adopted its Medium Term Strategy 2015 – 2017 and laid down three overarching objectives on which annual work programmes are based:

- Promoting competition and investment;
- Promoting the internal market;
- Empowering and protecting end users.

These three fundamental objectives continue to be relevant to guide the work of BEREC for the coming three years, though, inevitably, the strategy for 2018-2020 will need to be updated to reflect the fast changing technological and market development expected for the period.

In this context, the objective of this document is to update BEREC's strategy for the period 2018-2020, by identifying specific strategic priorities, that takes these market and technological developments into account.

BEREC acknowledges the ongoing legislative process on the review of the electronic communications framework, and in particular the discussions in the debate around the objective of promoting fixed and mobile connectivity. BEREC considers that this political priority is already underlying in the current framework and should be acknowledged.

¹ The two-tier approach refers to the structure of BEREC consisting of the Board of Regulators taking all regulatory decisions which has no legal personality and the BEREC Office which is an EU agency supervised by the Management Committee made up of the 28 EU-NRAs and the European Commission.

Market and technological developments²

The market for electronic communication (or the wider "digital market") is changing rapidly in ways that pose new challenges and questions for regulators in areas such as the end user experience, competition, investment as well as in how the digital dividend is distributed among consumers and the different players in the digital ecosystem.

The continuing transition to next generation fixed and mobile broadband access and the increasing trend among consumers towards internet enabled services (as opposed to traditional telecom services) are underpinned both by technological developments in networks and terminal equipment and by a greater willingness by end-users to buy and use services in new ways. High speed broadband connectivity is increasing as operators respond to end-user demand for fast, seamless and reliable connectivity.

Very high-capacity networks have become vital for end-users to realise the full potential of the digital ecosystem and access to these networks has become essential for competition to continue to benefit consumers and businesses. The deployment of these high-capacity networks in Europe does not follow a single path when it comes to when, how and by whom these networks are being built³. In some Member States FTTH networks have already replaced large parts of the legacy copper access network, in other Member States existing infrastructure such as cable networks is being upgraded and in yet other Member States the transition to next generation networks is still waiting to gain momentum. This variance in the deployment of high-capacity networks has led to heterogeneous market conditions across Europe and in some Member States concerns have been expressed over the emergence of oligopolistic market structures or sub-national local fixed access monopolies.

The considerable investment needs of high-speed communications networks and the increasing demand for spectrum has led to an increased level of cooperation between ECS operators in several Member States. While **network sharing** may be an efficient way to reduce cost, such arrangements might also limit the level of infrastructure competition unless competition law principles are respected. As spectrum becomes an even more important resource to manage due to several competing needs of wireless technologies, such as 5G or **fixed wireless access**, spectrum sharing is another area in which cooperation between ECS operators might increasingly be explored.

The wider access to-, higher quality and more resilient internet based services has played an important role in accelerating the transition to digital services and the wider **digital ecosystem**, be it for banking, social, entertainment or communication purposes. The digitalization of services has greatly increased the number and variety of different services and service providers competing at retail level. While this separation of service distribution from the network layer has done much to improve competition and innovation at a service level, there is the potential that **new bottlenecks** may emerge in the service distribution chain. Device manufacturers, on-line platforms and content providers can have positions in new

² In March 2017 BEREC launched a stakeholder consultation, seeking answers to a number of questions relating to developments affecting the end-user experience, the evolution of networks and the competitive dynamics in the digital ecosystem. BoR (17)38

³ BoR(16)171 – Challenges and drivers of NGA rollout and infrastructure competition

emerging value chains that enables them to adversely affect the competitive dynamics on digital markets.

The relationship between traditional telecom operators and OTT providers has also changed much during the last number of years as data-driven business models for telecom operators have replaced the old models based on voice and SMS. Traditional network access providers, facing the risk of disintermediation, have entered into different forms of partnerships or cooperation with OTT providers that aim to increase brand exposure, provide higher value to end-users and promote more data consumption that can also deliver indirect cross-benefits to other interlinked partners of platforms. There are also examples where the interaction between the network and service level is taking the form of cross-sector mergers. Bundles are no longer limited to a number of vertically integrated telecom and audio-visual services but are increasingly being designed to provide better access to popular internet-based content and services, usually through promotional prices or through so called "zero-rated" access. While consumers may benefit from the efficiency of one-stop shops, this might also make them more dependent on their providers and the increasing complexity and heterogeneity of bundles could make it more difficult for them to properly compare propositions and exercise informed choice. With an increasing value of data, for both the providers and the end-users, there is also a risk that the inability to transfer personal data from one provider to another could become a barrier to switching. This could create new barriers to switching and dampen some of the benefits of competition.

As more players have become involved in the distribution of digital services, it has become more difficult for end-users to understand the factors influencing their experience of using digital services. The download speed, once of paramount importance for understanding what quality to be expected, is now just one of many several aspects determining the quality of experience for end-users. Service providers and regulatory agencies have been providing data on the characteristics of service provision using supply side indicators that measure network speed, jitter, latency and reliability. As the digital ecosystem becomes more complex, there will be an increasing need to ascertain the drivers of consumer engagement with digital services from a demand side perspective, to complement data on supply side aspects. Better and more granular information for people and businesses on the availability, speed, quality and pricing of services and indicators as experienced in the end-user environment when using internet based services will play a greater part in their ability to engage with the market and switch providers. The protection and empowerment of consumers, for example around issues such as billing, affordability and switching, is essential to the effective functioning of a digital society. In this context, the availability of choice and the ability to exercise that choice freely among service offers, principles that were recently reaffirmed with the adoption of the EU rules on Net Neutrality, needs to be safeguarded through effective monitoring and implementation by national regulators.

The shifts in technology and usage patterns, while leading to an increased consumption of digital services, might also increase the risks of digital exclusion as the digital ecosystem evolves from being primarily about value added services to becoming an essential utility. The development and benefits of the digital society requires that all citizens are connected so that they can experience the benefits of digital innovations and the digital market. Digital exclusion can manifest itself in new and different ways and its consequences will be greater as more

and more services are only enabled by high capacity networks and as IoT becomes more prevalent in day to day life.

At the same time, the open nature of such a fast evolving and complex ecosystem means issues like data protection, privacy and network security are becoming more important aspects of the end-user experience and with improved means of data analysis and more data available as more users or "things" are connected, the use and the value of data is steadily increasing.

Technologies that are still at their formative stage, like 5G, Network Function Virtualization (NFV) and Software Defined Networking (SDN), have the potential to bring further benefits such as lower cost for building and operating networks and to enhance the possibility to design more flexible network topologies that can accommodate different services or specific QoS requirements at different moments in time. Although it is possible to make some early observations on how these technologies will affect the end-user experience and change competitive dynamics (e.g. 5G may lead to a further development of IoT, that spectrum resources need to be available to advance 5G and that it may be important to look at this from a broader perspective) the role of regulators will be to balance the need to foster an open and competitive environment with the need to enhance network integrity and security and protect consumer interests.

BEREC Strategic Priorities 2018-2020

In 2014 BEREC adopted its Medium Term Strategy 2015 – 2017 and laid down three overarching objectives on which the annual work programmes are based:

Promoting competition and investment;

This strategic objective outlines BERECs role in promoting effective competition, and in so doing promoting efficient investment and innovation in new and enhanced infrastructures and services. Central to this approach is the understanding that *effective* and *sustainable* competition is what drives *efficient* investment and choice for end-users.

Promoting the internal market;

This strategic objective outlines BERECs role in developing consistent regulatory practices and address cross-border issues to enable EU citizens and businesses to enjoy a (high) minimum level of services and benefit from pan-European services wherever they are.

Empowering and protecting end users

This strategic objective outlines BERECs role in promoting the interests of EU citizens and the protection of the interests of vulnerable end-user groups. It includes a role for BEREC to study demand side aspects of the market, to monitor market evolutions and, to the extent possible, respond to ensure end-users' continued ability to use the services of their choice, at appropriate levels of price and quality.

BEREC will continue to plan its annual work around these three strategic objectives for the period 2018-2020 and in doing so, take special consideration to the 5 strategic priorities listed below. The strategic priorities are based on the market developments outlined in the

previous section and point to particular areas of interest that BEREC should cover under one or several of the strategic objectives in the medium-term. The strategic priorities will not define the full scope of BEREC work for 2018-2020, but will be recurring topics in the work programmes for the coming three years. The order in which the priorities are listed does not imply a ranking.

Strategic Priority 1: Responding to connectivity challenges and to new conditions for access to high-capacity networks

Roll out of fibre networks and migration from legacy networks, as well as market consolidation, can lead to new forms of competition problems which need to be tackled by national regulators with the appropriate tools Very high-capacity networks have become central for end-users to enable them to enjoy the full potential of the digital ecosystem and access to some nonreplicable elements is important to promote and protect competition, but the variance in the deployment of high-capacity networks has led to different market conditions across Europe. BEREC will make it a strategic priority to continue its work on identifying competition problems that arise in different member-states as high-capacity networks are being developed and legacy networks phased out or where markets have become mature - with the intention to increase awareness on how incentives to invest change with changing market conditions and how competition is affected. The experience national regulators have with applying the SMPframework and/or symmetric remedies will be a key aspect of this work. There will also be an important role for BEREC to look at access to high-capacity networks in more general terms (both fixed and wireless), such as how access to fixed high-capacity networks influence wireless network coverage and how the relationship may impact on the ultimate goal of increased connectivity.

Strategic Priority 2: Monitoring potential bottlenecks in the distribution of digital services

Against a back-drop where the internet continues to change the ways in which digital services are delivered and consumed, where more actors are becoming involved in the digital value-chain and where interaction between service and network providers is changing, BEREC will make it a strategic priority to evaluate/analyse how the various digital markets evolve in the coming three years – looking particularly at how market power is distributed, the existence of potential bottlenecks to competition and how these can be best addressed.

Strategic Priority 3: Enabling 5G and promoting innovation in network technologies

The next generation mobile networks (5G) will likely not be operational in Europe until 2020, but there is already a lot of activity going on in various groups and committees. The challenges that need to be addressed range from work on standards, interoperability, new business models, network sharing, coverage and security. BEREC will make 5G a strategic priority in the coming three years with the aim to enable European-scale solutions that may help reap the benefits of early and coherent implementation in terms of innovation, productivity and growth in the internal market. BEREC will within the scope of its competence actively and

closely follow the development of 5G and will, where relevant, work in cooperation with other EU bodies (in particular RSPG) to identify potential hurdles to a smooth and quick implementation in the Member States.

BEREC will also need to follow innovation in other network technologies, both fixed and wireless, to find common regulatory perspectives of how these technologies influence markets and should be treated by regulators. The network technologies and developments that have the potential to directly change the way services are used and delivered, such as IoT, NFV/SDN, as well as the technologies that may play a part in enabling such changes, eg. small cell deployment, will be of particular importance for BEREC to follow in the coming three years.

Strategic priority 4: Fostering a consistent approach of the net neutrality principles

BEREC has a long history of working on Net Neutrality issues and has recently received new responsibilities with the adoption of the TSM regulation (Regulation 2015/2120). With the growing trend among consumers towards internet enabled services expected to continue, the measures on open internet access will become ever more important and BEREC will need to work actively to support national regulators in applying the Regulation in a consistent way throughout Europe. To that end, BEREC will make it a strategic priority to continue its work looking at how net neutrality is affected by changes in markets and new technologies and to encourage national regulators to share experience on the practical implementation of the Regulation and the BEREC guidelines.

Strategic priority 5: Exploring new ways to boost consumer empowerment

The focus of increasing consumer empowerment and engagement is to ensure consumers have the information and tools to make informed choices and engage effectively with the market. In the past, BEREC has focused on 'market shaping' activities that encourage investment and which promote competition and connectivity. BEREC should complement this work by prioritizing a more active role in the coming three years with assessing and promoting consumer empowerment and consumer protection.

This means more transparency to enable consumers to assess and compare the performance of products and services (e.g. better and more targeted information for people and businesses on the availability, speed, quality and price of services) and seamless and user-friendly switching processes. Qualitative methods of gauging end user satisfaction and a more rounded set of performance metrics that lend themselves to better capture the quality of experience (QoE) for consumers may lead to greater consumer engagement. This will entail deploying the data, either directly in the form of accessible and informative consumer information, or through open data that enables the market to respond to consumer needs.

At the same time, BEREC will need to be mindful about the emergence of new switching barriers such as data portability as well as switching barriers like restrictive contractual terms and new types of bundled packages which are being addressed in the draft European Electronic Communications Code still under discussion. NRAs will also need to enhance consumer trust in new services by working with manufacturers and network operators to

ensure that the security and integrity of networks is paramount in their consideration and by building in privacy-by-design practices in digital services.

NRAs will also need to complement consumer empowerment initiatives with consumer protection measures that safeguard the interests of all citizens and especially those of the digitally disengaged.

BEREC Work

BEREC has continued to mature as an organization and is actively adapting its work to the most recent market developments. More recently, BEREC has been entrusted by the European co-legislators with new tasks, namely developing guidelines on the implementation of the net neutrality and roaming rules in the TSM Regulation. These responsibilities, as well as BEREC's ongoing work on Article 7/7a cases, requires an organisation whose outputs are timely, qualitative and consistently of a high quality.

Going forward, BEREC will continue to improve its work and adapt to new challenges, and is ready to take on board new responsibilities.

Output and efficiency

BEREC remains committed to the consistent implementation of regulatory principles across Europe by developing Guidelines, Common Positions, Recommendations and any other guidance documents that NRAs must take utmost account of.

In doing so, BEREC and its members will continue to pursue the most efficient and least intrusive regulatory approaches. Moreover, BEREC will work to reduce regulatory uncertainty, taking timely and proportionate decisions grounded in evidence on relevant regulatory matters.

BEREC believes that effective regulation is based on high-quality professional standards applied by independent national regulators and will continue to be committed to these principles. As such, BEREC will update its working methods and will promote a broad and active participation of all NRAs.

BEREC will work to improve the consistent implementation of regulatory principles by:

- Striving to deliver more best practices and, when needed, common positions;
- Aiming to give timely advice to all NRAs by providing guidelines on the implementation of the EU regulatory framework (including net neutrality and roaming);
- Assessing the regulatory and market impact of emerging technological developments and trying to find common regulatory perspectives of how they should be treated.
- Continuing its important monitoring and benchmarking work, to give BEREC, the NRAs
 and the European Commission necessary, accurate and robust evidence to make
 informed decisions. This will include work to help with standardizing and harmonizing
 methodologies and performance indicators throughout Europe to facilitate
 comparisons and common approaches.

BEREC will continue to further **improve its working methods** by:

- Assessing periodically the results of its working methods, which may include monitoring how BEREC outputs have been reflected in NRAs decisions and practices;
- Ensuring transparency through regular updates to the market and to the European institutions about the current BEREC activities at all working levels.

Stakeholder engagement

BEREC will continue to engage with stakeholders, with the goal of focusing BEREC work on issues that are relevant to the stakeholders. By engaging stakeholders, BEREC will be better positioned to promote its work, guarantee a consistent application of the electronic communications framework and give proper information to decision-makers.

BEREC will continue to **engage cooperatively and effectively with stakeholders** in a wide variety of ways, and will in particular strive to:

- Become better at informing stakeholders about the annual thematic workshops;
- Where relevant, implement more two stage public consultations on important topics, allowing stakeholders to comment at all stages of the consultation process;
- Work with industry forums;
- Make available more information at all levels of work and in particular for important topics that impact consumers (net neutrality, roaming); through public debriefings, newsletters, press releases and information on its web page, Twitter and YouTube channels.
- Organize the annual BEREC Stakeholder Forum in a consultative manner that increases the level of stakeholder engagement;
- Strengthening the cooperation with other European institutions with the aim of delivering a more joined-up and coherent regulatory framework for stakeholders.

BEREC will also strive to enhance its cooperation with the EU institutions and international fora, through:

- Strengthening the relationship with the co-legislators (European Council and European Parliament) and commit to an early engagement with any Commission initiative on legislative and non-legislative measures;
- Ensuring coordination of BEREC activities with the plans and initiatives by the European Commission and strengthening the coordination with other European institutions in overlapping topics (RSPG, ENISA, competition authorities, data protection authorities), to maximize synergies;
- Cooperating in relevant international fora and with regulatory bodies of other regions on the basis of an international strategy.