Body of European Regulators for Electronic Communications



BoR (13) 127

Draft

Work Programme 2014

BEREC Board of Regulators

1. Introduction

The BEREC Work Programme 2014 as set out below aims to build on the achievements of previous years so as to respond to the important regulatory challenges ahead, as they stem both from the market developments as well as from the important policy objectives, set out in the Digital Agenda 2020.

Like last year's Work Programme, the present one is based on the published strategy document, which BEREC adopted in February 2012, following a public consultation. A revised strategy document is now being consulted ().

The BEREC Work Programme 2014 was discussed and agreed at the xxx BEREC Board of Regulators meeting in xxxxxx on xxxxxx. In accordance with the practice of previous years and in accordance with Article 5 of the BEREC Regulation, the BEREC Work Programme is subject to consultation. The public consultation ran from 1 October to xx xxxx 2013 with an oral hearing on xx October. The role of public consultation is to increase transparency and to provide BEREC with valuable feedback from stakeholders.

[Summary of inputs]

The BEREC Work Programme 2014 is set for adoption at the meeting of the Board of Regulators to be held on xxxxxx 2013 in xxxxx.

Dr. Leonidas Kanellos, EETT

Göran Marby, PTS

Chair 2013

Chair 2014

2. Background

One of BEREC's key tasks is to promote the consistent application of the European Regulatory Framework and thereby contribute to the development of the internal market for electronic communications. In doing so, BEREC plays its part in the promotion of competition and thus in fostering growth and innovation in the EU. BEREC can also provide considerable technical expertise and advice to the European institutions on policy initiatives and related debates in the electronic communications sector.

The development and implementation of medium term strategic goals in BERC Medium Term Strategy has helped to further enhance its effectiveness, providing its activities with overall strategic context and clear direction. Having adopted its first formal Medium Term Strategy in February 2012 BEREC is now amended it and is currently consulting on it.

In its revised strategy, BEREC continues to underline its role to promote the consistent application of the European Regulatory Framework (the Framework) and thereby contribute to the development of the internal market for electronic communications. It is committed to support the Digital Agenda 2020 objectives, in light of the regulatory objectives enshrined in the Framework Directive, which are also the foundation of its work programme. At the same time, BEREC is ready to provide its expertise and professional advice to the European institutions on any policy initiatives and related debates in the electronic communications sector. In this respect, BEREC notes the European Commission's recent single market initiative, in respect of which it hopes to contribute its substantial regulatory expertise in order to help ensure an outcome of most benefit to the sector.

In addition to the specific work streams set out in the Work Programme, BEREC anticipates continuous involvement in Article 7/7a Phase II cases, which need to be addressed, delivering relevant opinions, at highest priority and within strict deadlines. It also anticipates that the European Commission, the European Council and/or the European Parliament may make ad hoc requests for advice, pursuant to the provisions of the BEREC Regulation. In all these cases BEREC not only is committed to respond but is determined to live up to expectations, in terms of both timeliness and quality.

Given the different tasks, and the significant amount of resource expected to be deployed on the European Commission's single market initiative, BEREC may need to reassess its work priorities. BEREC needs to remain flexible to be able to respond to all issues, many of them yet not known, and to prepare for possible implementation. In addition to the single market initiative, the institutional changes, which will result in a new Parliament and a new Commission in 2014, will present new challenges. BEREC intends to revisit its work programme mid-way through 2014, in order to ensure that projects remain appropriately prioritised and resourced and that new issues are properly anticipated and addressed.

Fundamental to the success of the BEREC Work Programme is the contribution of the BEREC Office, which has been appropriately staffed and operating as a fully autonomous Community body, since October 2011. Under the guidance of the Administrative Manager, the BEREC Office has gradually become capable of supporting BEREC and its Expert Working Groups (EWGs), progressively taking over an increasing volume of work, thus enhancing the efficient use of its resources. This practice will continue in 2014, seeking to

further augment the engagement of the Office in the BEREC Work Programme, as is also reflected in the BEREC Office Work Programme 2014.

3. BEREC work in 2014 - key areas

BEREC continuously analyses the development of the internal market and tries to identify regulatory challenges and changes needed to the Regulatory Framework. It is of great importance that BEREC takes a pro-active role in improving the internal market. The founding principles of the European Regulatory Framework, in place since 2002 – economic market analysis, technological neutrality, alignment of regulation with competition law – provide a robust framework for such analysis. They have enabled NRAs individually and as a group to adapt regulation as necessary to the sector's rapid evolution. As the EU institutions consider the implementation of the current Framework and begin to reflect on how it might evolve going forward, BEREC is ready to participate in these discussions and continue its work both on the framework as such and on its interaction with broader drivers of Europe's digital economic growth. BEREC has recently provided its views to Catherine Trautmann MEP, in the context of her report on the implementation of the current Framework, and will continue to take an active role in regulatory developments using its broad knowledge of the sector.

As the European Commission in September 2013 tabled a concrete legislative proposal which will seek to amend certain elements of the Framework, which it hopes will be adopted by the European Parliament and Council by April 2014, BEREC will contribute to the development of these proposals. BEREC will in the event of adoption of these proposals be prepared to work on any implementation. BEREC will closely monitor the progress of the legislative process and make any adjustments to the work programme as may become necessary.

Regardless of the outcome of this process BEREC will continue the analysis of the issues identified in its response to Trautmann, such as the work on oligopolies and the institutional aspects. These issues are important for the development of BERECs competence and strategic thinking.

The work plan has, as always, considered the full scope of the EC's Digital Agenda when defining prioritized work areas for BEREC. In its revised medium-term strategy and in line with the European Commission's Digital Agenda for Europe, BEREC identified three main themes for work, respectively focusing on infrastructure (boosting the roll-out of next generation networks), consumers (boosting empowerment and protection) and services (boosting the internal market). Of course BEREC will also work towards fulfilling its role, as stipulated in the Regulatory Framework, seeking to achieve the highest possible quality of results, while promoting regulatory consistency, supporting the EU Institutions and assisting NRAs on regulatory issues. This dictates a fourth theme of work, addressing horizontal and quality issues. The Digital Single Market is added as a separate theme of work, but this work incorporates the four first themes and should rather be seen as an umbrella to the other themes rather than a standalone theme.

The separate themes represent focus areas of BEREC, identifying work needed to fulfil its tasks¹. Some areas of work are essential for the success of BEREC in the short and medium term, most noticeably BEREC work on Article 7/7a. Other areas of work add to the strategic long term thinking of BEREC and some areas relate more to technical analysis.

Theme A: Infrastructure: boosting the roll-out of next generation networks

As set out in its medium term strategy, BEREC will promote both sustainable and efficient investment and competition in high speed broadband infrastructure and services.

In this direction, the BEREC Work Programme 2014 will focus in promoting regulatory approaches and practices, which enhance competition and provide the right incentives for investment in new (fixed and mobile) high-speed networks. It will also focus in developing a coherent view on the impact that Next Generation Networks have on regulatory approaches and in addressing issues related to new business models in a convergent IP environment.

Theme B: Consumers: boosting empowerment and protection

It focuses on the consumer, recognising the increased emphasis of the regulatory framework on the protection of consumers and acknowledging that the promotion of competition in itself cannot always ensure that end users profit optimally from all possibilities.

In this direction, the 2014 Work Programme will continue contributing to the policy debate on net neutrality, while closely monitoring relevant developments and addressing issues such as transparency and quality of service. It will also focus in reinforcing consumer protection provisions, particularly concerning users with disabilities.

Theme C: Services: boosting the internal market

BEREC will continue to make a strong contribution to the internal market, by further work on international roaming.

Theme D: Horizontal and Quality aspects

In fulfilling its role, as stipulated in the Regulatory Framework, BEREC strives to ensure that the results of its work are effective, timely and of the highest possible quality, so as to meet the level of regulatory predictability and consistency that BEREC is expected to deliver.

In this direction priority is given to the delivery of meaningful and valuable opinions on Article 7/ 7a cases, as well as to the provision of timely advice and opinions to the EU Institutions, particularly with respect to draft decisions, recommendations and guidelines of the European Commission. Equally important are activities, seeking to raise the quality and consistency of individual NRAs decisions, e.g. through Common Positions Guidelines and the sharing of Best Practices, or seeking to provide, upon request, assistance to NRAs on regulatory issues. BEREC will continue its monitoring, benchmarking and reporting activities, addressing in general the electronic communication sector, to provide NRAs and policymakers with sound factual input for their decision making. Finally, the exchanges with third parties, particularly regulatory authorities and networks outside the EU and other International bodies will also continue.

¹ See Annex

4. Digital Single Market

4.1 Legislative proposals

The current Framework was adopted in late 2009, and (particularly given the pace of change in our sector) attention is naturally turning to its eventual review. At the same time, the European Commission in September tabled a concrete legislative proposal which will seek to amend certain elements of the Framework, which it hopes will be adopted by the European Parliament and Council by April 2014.

While it is impossible to predict the outcome of the legislative process (including the eventual content of the legislation, as well as the timeframe within which it might be adopted), BEREC will nonetheless continue its own thinking on the policy issues raised by the European Commission's proposals, which are very much similar to policy issues identified by BEREC, and intends to commit a substantial amount of resource to this. BEREC will participate fully in the debate on the proposals and provide advices to the institutions and will also publish it own initiative analysis and commentary as appropriate.

Of course, should any new legislation be adopted during 2014, BEREC will need to be prepared to work on any implementation. While it is too early to define work streams for this, BEREC will closely monitor the progress of the legislative process and make any adjustments to the work programme as may become necessary.

Deliverables

BEREC position papers and Opinions

Adoption in

No public consultation

4.2 Recommendation on Relevant Markets

As the European Commission has announced, a revised recommendation on Relevant Markets is under preparation. Specifically, it is anticipated that a draft will be published in autumn 2013 and its adoption is expected during 2014. BEREC will closely follow the process, cooperate with the European Commission Services and provide an opinion under Article 16 of the Framework Directive. Several evolutions on the electronic communications market can be observed such as development of bundled offers, fixed mobile substitution, NGA roll-out and the internet based application and services. These evolutions could potentially impact the recommendation on relevant markets. Also, BEREC will have to assess the impact of convergence and the relationship between the Internet Service Providers and the OTT.

Deliverables

BEREC Opinion on the European Commission draft revised Recommendation on relevant markets

Adoption in P1/2014

No public consultation

5. Boosting the roll out of Next Generation Networks

5.1 Common Positions on wholesale products - Monitor implementation of the BEREC revised Common Positions

In 2012 BEREC reviewed and amendment its Common Positions on WLA, WBA and WLL². An important goal of this work was to ensure that the relevant remedies take into account significant developments in the sector, including those introduced by the emergence of Next Generation Access (NGA) networks. In this respect the revised Common Positions aspire to promote regulatory practices that encourage investments in new infrastructures, while safeguarding competition.

The next, important step in the process, concerns monitoring the implementation of the recommended best practices included in the revised Common Positions by NRAs. Following the adoption of the revised Common Positions in December 2012, in 2013 BEREC developed a methodology to monitor their implementation. Given that market analysis is performed on a bi-annual basis, BEREC will run its first monitoring exercise in 2014 (and annually thereafter in 2015 and 2016), so as to ensure that as many NRAs as possible had the opportunity to take on board the relevant recommendations. The results of this exercise will also be shared with the task force working on monitoring the implementation of the Recommendation on non-discrimination and costing methodologies (see 5.2b).

Deliverables

BEREC monitoring report on implementation of the BEREC revised Common PositionsAdoption in P3/ 2014No public consultation

5.2 Implementation of the Recommendation on non-discrimination and costing methodologies

In 2013 the European Commission adopted the Recommendation on non-discrimination obligations and costing methodologies. BEREC will work in providing guidelines to its members in its implementation.

a. Understanding the challenges in implementing Equivalence of Input (EOI) - what has been done so far, what has worked and what else could be done?

BEREC recognises the potential effectiveness of EOI as a non-discrimination remedy in ensuring a level playing field between SMP operators and alternative (competing) operators. However, to date there has been very little practical experience amongst NRAs in designing regulatory obligations dealing with the implementation of EOI. The purpose of this workstream is to shed some light to this issue by considering some key questions. Firstly, BEREC will attempt to understand what is meant by EOI, especially from a technical

² [BEREC web site]

(implementation) view point. Secondly, we will assess the potential advantages and disadvantages associated with implementing EOI. Finally, we will try to determine the practical challenges associated with implementing EOI and how these could be mitigated. We will look at these questions both from a theoretical standpoint and also from a practical point, by using the experience of those NRAs who have had the opportunity to view firsthand the implementation of the obligation of EOI by the incumbents they regulate. In the first instance, BEREC will undertake this work through workshops on expert and Heads level in 2014.

Deliverables

BEREC Heads workshop	
Adoption in P3/ 2014	No public consultation

b. Monitoring of the impact of the Recommendation

Consistent with recitals 51 and 69 and Art. 55, the Recommendation on non-discrimination and costing methodologies³ (on which BEREC provided a formal Opinion to the European Commission in 2013) foresees a monitoring process to be carried out jointly between NRA experts and the European Commission The key objectives of this exercise are to monitor the evolution of both the investment environment for NGA broadband and competitive conditions, as well as to provide guidance to NRAs if appropriate. BEREC needs to discuss the appropriate form of the monitoring exercise and the type of deliverable. With regards to monitoring the implementation of costing methodologies, this will be done in the Regulatory Accounting in Practice report produced by BEREC annually. BEREC will also be mindful of the interaction between this exercise and the monitoring of its revised CPs (see 5.1).

Deliverables

BEREC interim report	
Adoption in P4 2014	No public consultation

5.3 Emerging challenges in Next Generation Networks

In the light of the Digital Agenda and national NGA-rollout plan, the effective regulation of NGA-networks remains one of the key challenges of regulators.

In 2013 an internal EWG workshop informed by country case studies was held and led up to a Workshop at Heads level on fundamental issues coming to the following hypotheses and conclusions:

• The Ladder of investment can still be used in a NGA environment, however NGA makes stepping up more difficult. In some cases a kind of VULA/Bitstream product

³ Draft Recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment.

might turn out to be the highest rung. This evidence is likely to differ between and within countries.

- There seems to be evidence that activity of municipalities positively correlates with FTTH rollout. Upfront commitments/Payments seem to encourage fibre deployment.
- After a rather long period characterized by a large gap between penetration and takeup, in most MS recently some MS experience an increased take-up rate of highbandwidth access lines.

The picture continues to be diverse within and between MS. This applies both with regard to demand side factors such as take up rate, willingness to pay etc. as well as supply side factors such as the number of competitors (depending on whether cable and/or municipalities/utilities play a role), technology mix (FTTB/H and/or VDSL with or without vectoring)

BEREC remains convinced that following the fundamental principles of the regulatory framework, namely promoting effective competition and regulatory predictability to incentivize efficient investment for the benefit of the European citizens, is the best way to facilitate the transition towards NGA. Given however that competition is the best driver for efficient investment, BEREC needs to reflect how this can best be achieved in an environment with NGA economics.

In view of the perceived coverage vs. competition trade-off there remains vital discussion on how to maintain the level of competition in view of the migration to NGA networks. Platform competition between cable and incumbent infrastructure is seen as the outcome of consolidation processes in some MS, whereas experience has taught regulators that the hypotheses that "2 is not enough for competition" continues to hold. This implies that in many cases fixed infrastructure will continue to require regulation.

Another important issue discussed was how far to go with symmetric regulation. Consistency between SMP regulation, symmetric regulation and access obligation resulting from State Aid obligations remain a continuous challenge.

Also regarding more specific issues a workshops at both EWG and Heads level respectively was held on the first set of vectoring decisions. The discussion about whether vectoring is a sensible intermediate step or FTTH roll-out should take place directly remained vital. A short paper on the main issues relevant for such decisions is intended for the end of 2013. The topic will remain on the Agenda for 2014.

Another relevant topic are the features and conditions of Bitstream/VULA products, not least because they are considered as the most relevant wholesale product in case vectoring technology is used. They are also relevant in the context of business grade wholesale products. It will be addressed in a separate workshop at EWG level.

Challenges of NGA roll-out will need a continued in depth discussion process, which will take place both at the Expert Working Group level and, at a subsequent stage, at the level of the Board of Regulators, following the example from 2013. Also passive remedies may need to

be discussed. In addition a report will be drafted with the lessons learned by NRAs who have already implemented VULA.

Deliverables

BEREC stakeholder workshop on business grade wholesale virtual access/bitstream, internal report and Heads workshop
BEREC stakeholder workshop in Q3 2014 No public consultation
BEREC internal report and BEREC Heads No public consultation workshop in P3/ 2014

5.4 IP-Interconnection

ERG/BEREC has continuously worked on IP interconnection and charging mechanisms in the context of transition from PSTN towards NGN⁴ since it published its first report on the topic in 2007. As described in the more recent 2012 BEREC's report, '*An assessment of IP interconnection in the context of net neutrality*', the Internet ecosystem has managed to adapt IP interconnection arrangements to reflect (among other things) technological developments, changes in the (relative) market power of players, changes in demand patterns and the developments of new business models all without the need for regulatory intervention. In its report BEREC sought to better understand the nature of these commercial relationships and how they have developed over time.

As described in BEREC's comments to specific proposals for the ITU/WCIT published ahead of the Dubai conference in 2012 we found that, while over the Internet guaranteed end-toend quality of service levels are neither commercially nor technically realistic in practice, the Internet community has nonetheless developed alternative mechanisms for providing higher quality of experience in best effort network that have proven to be more efficient and cost effective. Interconnection on the Internet has operated on the basis of commercially negotiated transit/peering arrangements at the higher network/backbone level, and a 'bill and keep' approach at the access level. It is in all our interests to protect the continued development of the open, dynamic and global platform that the Internet provides, which has evolved over time (without regulatory intervention), and helped enable so much innovation at the network endpoints.

Regulators have continued to follow the evolution of the market for IP interconnection. However considering that the market currently seems to function well without any significant regulatory intervention, any measure could potentially be harmful, and so should be carefully considered.

An internal workshop to follow up on this evolution of the market was held in 2013.

⁴ ERG (07) 09, ERG (08) 26 ERG Report on IP interconnection, ERG Common Statement IP-IC NGN Core.

The debate on new business models in a convergent IP environment encompasses ongoing debates between stakeholders on charging mechanisms used for IP-interconnection and the distribution of revenues across the value chain between Telcos and OTT. These evolutions in the value chain are more generally important inputs in the NN debate, having implications both at the wholesale and at the retail level.

The debate on ongoing developments at the wholesale level in a convergent IP environment will be served through an internal exchange of views, both at the Expert Working Group as well as at the level of the Board of Regulators. BEREC took a strong position ahead of the ITU/WCIT process and will continue to provide its expertise and remain active in this area. If needed short internal topic papers may be written to facilitate ongoing discussion processes. Furthermore the successful cooperation of BEREC with the OECD will be continued: The 3rd BEREC/OECD expert workshop is scheduled for 2014 discussing relevant post Dubai issues

Deliverables

3 rd BEREC/OECD expert workshop, short internal topic papers	
Workshop in Q2 2014	No public consultation

5.5 Facilitating access to radio spectrum

The effective utilisation of the radio spectrum is of key importance to the development of the broadband market, the functioning of competition (as it enables the deployment of alternative infrastructures) and the achievement of the Digital Agenda 2020 objectives, particularly with respect to broadband coverage. The effective utilisation of the radio spectrum and access to radio spectrum for electronic communications services have a major impact on the functioning of competition and could have repercussions to a wide range of issues addressed by BEREC. It is important that BEREC identify and take on the regulatory challenges that falls out of the remit of other organisations, such as CEPT, ECC and RSPG.

An important part of BERECs work on radio spectrum is the ongoing cooperation between BEREC and RSPG. This cooperation will continue during 2014. The particular areas for cooperation will be discussed between BEREC and RSPG but could include issues such as how recommendations and best practices for auction design and licensing can be developed and tools and methods to promote effective competition in spectrum auctions, including how benchmark and analysis from regulatory and competition law aspects can be utilized.

BEREC will prepare a public workshop on expert level during 2014. Such activity is not expected to lead to a report but this might be reconsidered.

Deliverables

BEREC workshop on facilitating access to radio spectrum		
Workshop in Q3/ 2014	No public consultation	

5.6 Common position on Geographic markets

Geographic segmentation becomes more important as markets and infrastructures develop in an increasingly fragmented fashion, through an increasingly active role of local players, the changing business models and incentives that may give rise to the utilisation of different technologies. This is particularly interlinked with the emergence of NGN networks.

A revision of the Common Position from 2008 which mainly addressed the geographical segmentation of relevant markets in Market 5 for copper networks⁵ is needed since the European Commission has developed further the criteria to analyse this issue, interlinking it to the possibility of differentiating markets with the inclusion of indirect constraints. As geographical segmentation is very much related to the inclusion of indirect constraints in the relevant market, the Common Position would be in line with the documents already produced on this topic and the discussions that will rise in the context of the Recommendation on relevant markets.

Deliverables

BEREC revised Common Position on geographic aspects of market analysisAdoption in P1/2014Public consultation after P4/2013

6. Consumer empowerment and protection

6.1 Net Neutrality

Since 2010 BEREC has addressed a number of issues relating to Net Neutrality and has during this time gained substantial experience about net neutrality. During this time BEREC has expressed its opinion in a number of guidelines, reports and opinions on various issues such as quality of service, IP-Interconnection and transparency.

BEREC's conclusions on the issue of net neutrality include the following:

- Competition is expected to discipline operators, and ensure the best offers for consumers, but this critically relies on effective transparency and the ability of end- users to easily switch service providers.
- Both NRAs and end users should be able to monitor the performance of the Internet access service, and of the applications used via that Internet access service.
- Where competition and transparency are inadequate or insufficient to address concerns, existing regulatory tools (including quality of service requirements) should enable NRAs to address net neutrality related concerns for the time being (though not all of these tools have been fully tested yet). NRAs are ready to act without hesitation if necessary.

BEREC is committed to the open Internet and will continue to closely monitor the evolution of the market and seek to ensure that NRAs are able to respond swiftly and effectively to any

⁵ ERG(08)20 Common Position on Geographic Aspects of Market Analysis

future net neutrality related developments. To this extent, work on Net Neutrality during 2014 is sought to span the following directions:

a. Monitoring quality of service in the context of net neutrality

The BEREC Framework and Guidelines on Quality of Service in the scope of Net Neutrality stated that monitoring of Internet access services is needed for transparency purposes and in order to perform a detailed assessment of degradation of service. In this context, NRA experts are eager to share their experiences in the current measurements of quality of IP-based electronic communications services and improve their respective analysis of the different options for Internet quality measurements. Such exchange of experiences would help build a common knowledge and appreciation of QoS monitoring. In addition, BEREC will also examine the possibility and the pros and cons of establishing a common opt-in platform, whereby NRAs could coordinate, compare or complement national measurements, addressing among others pros and cons, technical constraints and cost elements.

Deliverables

BEREC report on monitoring quality of service in the context of net neutralityAdoption in P4/ 2014Public consultation after P1/ 2014

b. Ecodem – Ecosystem dynamics and demand side forces in net neutrality developments from an end-user perspective

BEREC has previously conducted work on net neutrality identifying, on the one hand, potential market failures and, on the other, establishing a common understanding of the regulatory tools within the regulatory framework. The "Report on differentiation practices and related competition issues in the scope of net neutrality" provided a theoretical framework to understand the incentives, and assess the potential impact, of operators' measures. This report also identified conditions under which market forces could deter operators from adopting discriminatory practices that could potentially harm consumers, either in the short or long term.

At the same time, the Traffic Management Investigation gathered information on ISPs' practices in Europe. According to the data gathered, the situation differed greatly from one Member State to another. However, no precise information is available regarding the reasons for such diverse policies or how they are perceived by users.

In 2013, BEREC therefore began a workstream to look at Ecosystem Dynamics and Demand Side Forces in Net Neutrality: developments from a consumer perspective. The objective of this work is to provide NRAs with a more evidence-based understanding of the extent to which the dynamics between consumers, ISPs and Content and Application Providers (CAPs) impact Net Neutrality policy developments in Europe.

In 2014, BEREC will continue to gather information and empirical data in order to improve our understanding of:

• the various traffic management and strategic responses of ISPs to technical, legal and market constraints

how consumer expectations and market dynamics are reflected in practice in retail offers

The report is expected to inform BEREC's general approach and support future analysis of NRAs of their national markets, while also contributing to the continuing public debate on net neutrality issues.

Deliverables

BEREC report on Ecosystem dynamics and demand side forces in Net Neutrality developments from an end-user perspective

Adoption in P4/ 2014

No public consultation

c. TMI-2 – second round of the Traffic Management Investigation

In 2012, BEREC (jointly with the European Commission) carried out an extended investigation on the traffic management practices employed by fixed and mobile operators. The investigation was based on a questionnaire which was addressed to European operators and BEREC received more than 400 responses.

This was the first analysis of its kind and BEREC sees substantial value in repeating it, thereby getting some overview of how markets are evolving. Depending on further developments on net neutrality at the European level (including the European Commission's proposed Regulation), an appropriate timing for this may be mid-2014. In this context, BEREC will undertake preparations on how to set up the relevant questionnaires, leveraging the experience gained from the 2012 exercise.

Deliverables

 BEREC report on TMI-2 – Second round of the Traffic Management Investigation

 Adoption in [depending on European
 No public consultation

 Commission plans]

6.2 Supporting end users with disabilities

BEREC believes that appropriate actions should be considered in order to support end-users with disabilities and ensure equivalence of access and choice.

In this context, BEREC has published in February 2011, its Report on "Electronic communications services: Ensuring equivalence in access and choice for disabled endusers" (BoR(10) 47 Rev1). The report was developed with a view, essentially, to providing enhanced information for NRAs with respect to the considerations regarding the implementation of Article 23a. Following its transposition, it was envisaged NRAs would assume responsibility for and to present the preliminary views of the NRAs on that subject, taking advantage also of information gathered extensively with resort to the NRAs, to the stakeholders (via public consultations) and a literature review. In addition, BEREC will be hosting an international conference dedicated to the accessibility of end-users with disabilities to the electronic communications services, on the 15th of October 2013, in Brussels, with the participation of high representatives of BEREC and of the EC, high officials of European regulatory authorities, top executives of transnational telecom groups and equipment manufacturers and representatives of consumer associations.

Considering the expected market developments regarding disability issues, it is the right moment for updating BEREC's Report on equivalent access and choice for disabled end-users.

Deliverables

Update of the BEREC report on equivalent access and choice for disabled end-users		
Adoption in P2/ 2015	Public consultation after P4/ 2014	

6.3 Best practice to enable choice in the Internet Consumer Market

The importance of securing consumer choice as a driving force for the development of the market for electronic communication is receiving renewed attention within the EU in relation to several areas of consumer regulation. Consumer awareness through transparency and the ability to exercise choice through accessibility and switching are cornerstones on which large parts of the EU regulation on consumer protection are built upon. BEREC has previously considered these issues in its 2010 report on *Best Practices to Facilitate Switching* and its 2011 *Guidelines on Transparency in the Scope of Net Neutrality*.

The provision of internet services is one area where the necessity of active consumers has become evident. In its "Internet Service Provision from a Consumer Perspective" (with the assistance of an external consultant), the EC's DG SANCO conducted a large review of the challenges faced by European consumers, and provided some recommendations on how these issues may be handled. The European Commission published this study in July 2013, accompanied by a Staff Working Document with its main findings and action points. NRAs were among the stakeholders which provided input to this study.

The study covers a number of important areas of consumer policy, including consumer information, comparability, switching and complaints. It makes recommendations directed towards NRAs, governments, consumer associations and service providers. It is therefore appropriate for BEREC to study these findings and examine recent developments in this field. BEREC will then adopt an internal report assessing whether, and in which areas of consumer protection and empowerment, BEREC could add value by producing its own external report and recommendations. This report will also take into account implications for NRAs of any consumer provisions which are adopted by the European Union in the context of the proposed EU Telecoms Single Market Regulation.

Deliverables

BEREC internal progress report on consumer protection and empowerment in the Internet market

Adoption in P4/2014

No public consultation

7. Boosting the internal market for Services

7.1 International Roaming

BEREC has worked along 2013 on completing the set of guidelines regarding the application of the Regulation (EU) No 531/2012 as well as producing reports on evolution of volumes and prices, compliance with the regulation and transparency and comparability of International Roaming Tariffs. The work plan for 2014 is focused on supporting NRAs in the process of the application of the regulation, especially on those issues related to the provisions on the separate sale of roaming that will enter into force in 1st July 2014, as well as producing two new benchmark reports on the evolution of volumes and prices at the retail and wholesale levels. In 2014 BEREC will also produce its second report on transparency and comparability of tariffs, collecting information from NRAs and operators on tariffs and information and tools available to consumers in order to be able to compare and select different international roaming tariffs.

a. Support for NRAs on the application of Roaming Regulation III ((EU) 531/2012)

Considering the experience with questions received from NRAs along 2012 and 2013 on the application of the regulation regarding wholesale access, (EU) No 531/2012, BEREC expects that questions from NRAs on the application of the regulation will continue to arise during 2014. Those questions are expected to relate mostly to the implementation of the separate sale of roaming services that will enter into force by 1 July 2014. In light of this, BEREC will provide to the NRAs support and advice on request related to the application of Regulation (EU) No 531/2012, especially on those issues related to the separate sale of roaming services. With this aim, BEREC will define a procedure to provide quick advice upon request to the NRAs concerning the application of BEREC Guidelines on this issue. This procedure will be submitted for approval in the 1st plenary. Information on questions received and BEREC advice on the application of the guidelines will be available for all NRAs.

Deliverables

Procedure to solve questions and share information among NRAs on the application of Regulation (EU) No 531/2012

Adoption in P1/ 2014

No public consultation

b. Roaming benchmark reports

As inherited from the first international roaming regulation, BEREC will continue to coordinate NRA activities in monitoring the functioning of the Regulation and compliance by providers. In accordance with article 19 of the Roaming Regulation BEREC shall regularly

collect data from national regulatory authorities on the development of retail and wholesale charges for voice, SMS and data roaming services. Those data shall be notified to the European Commission at least twice a year. In this line, the work plan includes the delivery of two new benchmark reports covering the periods October 2013-March 2014 (13th benchmark report) and April 2014-September 2014 (14th benchmark report). These reports, as usual, will cover evolution in prices and volumes at the retail and wholesale levels.

Deliverables

13 th and 14 th Benchmark Reports, in view of Roaming Regulation	
Adoption in P2/ 2014 & P4/ 2014	No public consultation

c. Report on Transparency and Comparability of Tariffs

In compliance with article 19 in the Regulation (EU) No 531/2012, BEREC will produce its second report on transparency and comparability of tariffs based on information to be collected from NRAs and operators. This report is aimed to obtain conclusions on potential problems and issues to be considered on consumer empowerment to take informed decisions about the tariffs and modalities of international roaming services to be used according to their needs and consumption patterns.

Deliverables

BEREC Report on transparency and comparability of International Roaming tariffsAdoption in P4/ 2014No public consultation

7.2 M2M

Machine-to-Machine (M2M) is a very rapidly developing market. Conservative predictions raise the number of M2M devices to more than 1 billion by 2020. M2M services are already under consideration by ETSI and CEPT. The Electronic Communications Committee (ECC) of CEPT, in its report Numbering and Addressing in Machine to Machine Communications recognised the high potential number of M2M applications, their impact on national numbering plans and the potential role that IPv6 addressing might play in a long term.

BEREC will look at this market, mainly to examine if there are any regulatory barriers or other bottlenecks (e.g. with respect to authorisation, numbering etc.) which could potentially hinder its development and analyse competition issues linked to the switching of provider for M2M applications, such as electricity telemetry, which raise technical questions (regarding for instance the remote programming of SIM cards). BEREC will also seek to assess the opportunities which may arise, as well as complementarities with other segments, e.g. Internet applications and the use of the IPv6. This work stream is currently intended to focus on expert workshops, with the participation of external stakeholders.

BEREC workshop on M2M Workshop in Q4/ 2014

No public consultation

7.3 Initiatives to increase the fluidity of non-residential markets

In 2011, BEREC investigated the specific case of business markets to address the request of stakeholders with its report on the existing restrictions concerning the provision of business services. BEREC dealt with several other theoretical aspects of business service regulation over the recent years (relevant market definition, cross-border services, etc.). Electronic communication services are indeed critical for the day-to-day running of administration and companies. A service breakdown or impairment, even short, can be a serious issue for business end users. Moreover, competition development in non-residential markets relies on a larger number of varied conditions such as: consistent, simple and robust switching processes; banning of unfair retail contractual provisions; thorough and flexible wholesale offers; etc. As a result, non-residential markets are structurally less fluid than residential ones. BEREC has a role to play to foster the dynamic of business markets by organising workshops for NRAs to share their experiences in increasing the fluidity of non-residential markets.

Deliverables

BEREC workshop on concrete initiatives taken by NRAs across Europe to increase the fluidity of non-residential markets.

Workshop in Q1/2015

No public consultation

8. Horizontal and Regulatory Quality aspects

8.1 Quality and consistency of regulatory decisions

BEREC will continue working to promote the quality and consistency of regulatory decisions. In 2013 such work will mainly focus in monitoring compliance with the Common Positions on LLU, WBA and WLL, which is classified under Theme A (Boosting the roll-out of Next Generation Networks – see section 4.1).

8.2 Benchmarks

a. Benchmarking on MTR, FTR, SMS.

In 2014, BEREC will continue producing benchmarks on mobile and fixed termination rates as well as on SMS. Such benchmarks have reached a sufficient level of maturity and have proved invaluable for monitoring harmonisation but also in the regulatory process. BEREC will cooperate closely with the European Commission and international organisations, seeking on one hand to achieve the widest possible utilisation of such benchmarks and on the other hand to examine the prospect for extending such exercise to cover additional topics.

Deliverables

FTR, MTR, SMS Snapshot	
Adoption in P2/ 2014 & P4/ 2014	No Public Consultation

b. Implementation of the Termination Rates Recommendation

Since the beginning of 2013, the European Commission Recommendation on Termination Rates became fully applicable, for fixed and mobile termination rates to reach symmetry and cost orientation, in line with the recommended pure LRIC methodology. BEREC will continue reviewing the approaches followed by the different NRAs vis-à-vis the application of the recommended methodology or the use of benchmarks. An issue identified in a BEREC opinion in a Phase II case⁶ guidance on the modeling of certain cost elements is needed, in particular the treatment of wholesale commercial costs in the LRIC model.

Furthermore, the situation as regards cross-border termination rates and their impact on fair competition between operators, on offers for calls between Member States, on offers of mobile roaming services, and as a result on the completion of the internal market, will be assessed.

Deliverables

BEREC internal workshop

Adoption in P4/ 2014

No Public Consultation

c. Regulatory Accounting in practice report

BEREC will repeat this annual exercise, which is consistently repeated over the past years. Its intention is to assess the level of consistency on regulatory accounting across the EU and to identify differences among Member States, which may arise from different implementations of the same regulatory accounting approach. In 2014 emphasis will continue to be paid to consistency in regulatory accounting for key access products. BEREC will continue to broaden the scope of the report, with the inclusion of additional services or technologies (e.g. fibre) but will also seek to increase the detail and the in-depth analysis of the methods covered.

Deliverables

BEREC regulatory Accounting in Practice Report	
Adoption in P3/2014	No Public Consultation

d. Ex-ante margin squeeze tests

BEREC will look into the development of an ex-ante margin squeeze test methodology in the light of economic replicability. It will look into the advantages and disadvantages of different methods in order to provide guidance to NRAs.

⁶ CZ-2012/1392-1393

Deliverables

BEREC public report on margin squeeze test	
Adoption in P3/2014	No Public Consultation

e. Report on oligopoly analysis and regulation

BEREC has pointed out the importance of a proper economic analysis of oligopoly market structures; the impact on consumers and the most appropriate manner to deal with them when they are not delivering the best deal for consumers. Until now BEREC has been referring to the analysis undertaken by other NRAs or members of the Academia. It is time to undertake our own analysis as well as to insist to the European Commission on the review of the market analysis Guidelines to update its position in this field.

Deliverables

BEREC report on oligopoly analysis and regulation	
Adoption in P2/2015	No Public Consultation

8.3 Engagement with the EU Institutions

In 2014 BEREC will continue working closely with the European Commission, the Council and the European Parliament, to provide advice and opinions on draft decisions, recommendations and guidelines of the European Commission, as well as on any matter regarding electronic communications within its competence.

In the course of the year, several issues may arise in this framework but the most important issue is the legislative proposal which will seek to amend certain elements of the Framework and the revised Recommendation on Relevant Markets (see Chapter 4).

The USD calls on the European Commission to review the scope of universal service every three years in the light of social, economic and technological developments. The European Commission will start working on the next review in 2014. "BEREC will continue to work closely with the European Commission on Universal Service, in particular in relation to the upcoming review.

There is a strong political pressure to improve the current situation of 112 caller location in the EU. CEPT is working on technical recommendation but it is important that competent authorities in the EU Member States (mostly NRAs) lay down effective criteria for the accuracy and reliability of caller location. BEREC will discuss with the European Commission how BEREC could contribute to improved guidance where the work of CEPT is incorporated.

Discuss the possible need for a more explicit data strategy on sharing data among the European Commission, BEREC and NRAs. The strategy aims at making available to all NRAs a whole richness of data being collected by all institutions, select data which may be open to the public and accomplish a harmonization trend of data, definitions and measures being collected all across the EU. BEREC should engage with the European Commission on

definitions and data collection methodologies with the aim to improve data comparability and accuracy help define the data strategy to be followed, its stages and procedures for harmonizing data from all participants at the project, examining also the appropriateness of establishing such a system including also the benefits and costs.

8.4 Framework implementation – institutional aspects

As the transposition of the current framework is practically complete, BEREC will organise an internal dialogue for the exchange of experiences and views on the institutional aspects in such transposition. The main conclusions of such exchange will be compiled in a brief, internal report (update).

In addition BEREC will carry out an analysis of Article 7 cases. Given the considerable experience on the application of Article 7 it will be useful to do a study on the cases that have been dealt with so far, an in depth analysis of the arguments, the conclusions and recommendations etc.

Deliverables

BEREC report on institutional aspects in the transposition of the current framework.

Adoption in P3/2014

No Public Consultation

8.5 BEREC Evaluation

In 2012, the European Commission initiated an evaluation on the performance of BEREC and the Office, as required under Article 25 of the BEREC Regulation. A study by external consultants was published by the European Commission in early 2013. The European Parliament has now appointed a rapporteur to prepare its own report on the BEREC evaluation, which is expected to be adopted by the Parliament in late 2013. BEREC has supported the evaluation process from the start and will continue to cooperate with the EU institutions as they complete this process, and will be prepared to address any final recommendations that come out of it.

8.6 BEREC Stakeholder Forum

BEREC will continue its broad strategic dialogue with its stakeholders. The purpose of the stakeholder dialogue are to inform the relevant stakeholders on BEREC activities and positions, to receive feedback and information from stakeholders regarding issues BEREC is currently working on and to provide a platform to hold a strategic dialogue, which all BEREC members and key stakeholder organisations can attend, thus increasing transparency of the dialogue

Such dialogue will supplement the feedback received from written input under public consultations. Additionally, it will bring added value to the current smaller dialogues that have been used by BEREC (e.g. to collect industry views).

BEREC also need to increase and better coordinate its engagement with legislators. The expectations on BEREC to have a dialogue with legislators are very high and we need to accommodate for this.

8.7 International co-operation

Whereas BEREC needs to focus its work in the European market, it is becomes increasingly necessary to pursue an active dialogue with regulatory authorities and networks as well as with Policy makers and international institutions dealing with communications matters. Such need emanates from two main reasons:

- Technological and business models in the electronic communications sector are increasingly driven by global developments. At the same time the increasing volume of electronic communications business flowing out of or into the EU implies that policies, legislation and regulations create strong interdependencies. Thus, BEREC needs to remain aware of global developments, so as to be able to respond to emerging challenges, and even influence such developments.
- There is growing interest from non-EU regions in the European regulatory approach, the promotion of which can contribute to build harmonised regulatory frameworks and policies that will further promote competition, investment and social welfare. For several years many NRAs have participated in international cooperation activities. Programmes have been established by the European Commission to foster cooperation and market development in foreign countries. Twinning and Taiex are common tools to finance cooperation between Member States and beneficiary countries. Whereas groups like the Eastern Partnership (EaP) for beneficiary countries in the Eastern Europe and Caucasus or EMERG for the Mediterranean countries were formed in Europe, Regulatel covers the Latin American countries. During 2011, both individual NRAs and BEREC have participated in several events and programmes.

In 2014 BEREC will continue to pursue its contacts with Regulatory Authorities (such as FCC, KCC etc.), with regional regulatory networks (such as EMERG, Regulatel etc.) and with other international institutions dealing with communications matters (such as OECD and ITU). BEREC will also actively support initiatives such as Twinning and Taiex and will continue providing support, upon request, to the European Commission in its dialogue with foreign counterparts.

Annex - outputs

Digital Single Market

- 1. BEREC position papers and Opinions on legislative proposals
- 2. BEREC Opinion on the European Commission draft revised Recommendation on Relevant Markets

Theme A: Infrastructure: boosting the roll-out of next generation networks

- 3. BEREC monitoring report on the implementation of the BEREC revised Common Positions
- 4. BEREC Heads workshop on understanding the challenges in implementing Equivalence of Input EOI
- 5. BEREC interim report on the monitoring of the impact of the Recommendation
- 6. BEREC stakeholder workshop, BEREC internal report
- 7. BEREC Heads workshop on emerging challenges in Next Generation Networks
- 3rd BEREC/OECD Expert Workshop, and short internal topic papers, on IP-Interconnection
- 9. BEREC workshop on facilitating access to radio spectrum
- 10. Revised BEREC Common Position on Geographic Aspects of Market Analysis

Theme B: Consumers: boosting empowerment and protection

- 11. Net Neutrality
 - a) BEREC report on Monitoring Quality of Service in the context of net neutrality
 - b) BEREC report on Ecosystem dynamics and demand side forces in Net Neutrality developments from an end-user perspective
 - c) BEREC report on second round of the Traffic Management Investigation
- 12. Update of the BEREC report on equivalent access and choice for disabled end-users
- 13. BEREC internal progress report on best practice to enable choice in the Internet Consumer Market

Theme C: Services: boosting the internal market

- 14. International Roaming
 - a) Procedure to solve questions and share information among NRAs on the application
 - of Regulation (EU) No 531/2012
 - b) 13th and 14th Benchmark Reports, in view of Roaming Regulation
 - c) BEREC report on transparency and comparability of International Roaming tariffs
- 15. BEREC workshop on M2M
- 16. BEREC workshop on concrete initiatives taken by NRAs across Europe to increase the fluidity of non-residential markets.

Theme D: Horizontal and Quality aspects

- 17. Benchmarking
 - a) MTR, FTR and SMS snapshot
 - c) BEREC regulatory accounting in practice report

- d) BEREC report on ex-ante margin squeeze tests
- e) BEREC report on oligopoly analysis and regulation
- 18. Engagement with EU institutions
- 19. Framework implementation institutional aspects, Report on institutional aspects in the transposition of the current framework.

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