



# Comments on the BEREC 2015 Work Programme

by VON Europe, October 2014

The Voice on the Net Coalition ('VON') Europe welcomes the opportunity to comment on the BEREC 2015 Work Programme (hereafter 'the Work Programme').

#### **DETAILED COMMENTS**

## Section 3.1 – Strategic Priority 1: Promoting Competition and Investment

The Work Programme refers to the "need for network investment as a result of increasing demand for bandwidth, especially from Over-The-Top players (OTT),".

VON Europe would like to point out that:

- 1) it is the range and diversity of content, applications and services made accessible over the Internet, often at no or little cost, that is the main, if not the only, driver for consumers increasing demand for bandwidth;
- 2) demand for bandwidth is thus driven by **consumers** accessing content, applications and services, not by the providers themselves.

Importantly, without this increase in consumer demand for (mobile) Internet access, network operators would see their market and revenues shrink. This statement made by the BEREC should hence be amended, the 'especially from Over-The-Top players (OTT)' end of sentence making an inaccurate statement. It would also be helpful to add that demand is a 'good' thing, a reality that does not jump at one's face when reading this section.

From a terminology point of view, the new trend to use 'OTT' as an expression to cover content, application and services providers is slightly disturbing. For reference, the term **over the top** is used when something is done in excessive amounts or beyond reasonable limits. The term was first coined during the Great War when the troops became engaged in trench warfare. When the troops were sent over the trench wall, the order given would usually be *over the top lads and best of luck*. We honestly believe that the terminology adopted by the BEREC in its Report on differentiation practices and related competition issues in the scope of net neutrality, namely CAPs (content and application providers), gives a less biased and negatively coined image of these market players and would encourage the BEREC to refrain from adopting this expression.



Analysys Mason concludes, in a recent Report, that content, application and service providers make a significant and on-going contribution to the 'physical fabric of the Internet', as they invest in hosting, transport and delivery. Significant investments are made in, for example, content delivery networks (CDNs), through which approximately 60% of the Internet traffic travels with the aim of optimising the efficiency of the transport and delivery networks.<sup>1</sup>

The Analysys Mason Report also rightfully points out that content, application and service providers "main business is the provision of attractive content and applications to end users".<sup>2</sup> VON Europe believes that this needs to be put in perspective with the core business of network operators, namely the provision of Internet access and investments in network assets.

The Report also remarks that "in order to be successful, a Content and Application Provider must be able to both create a demand for its services and be able to supply these services to end users". We considers that the efforts from content, application and service providers to create a demand for their services are to the benefit of networks operators, who in turn are able to extract revenues from consumers requiring data connections or upgrading their existing connections to access these services.

It should also be noted that content, application and service providers "invest significant amounts of money to produce, maintain, market and distribute content and applications, both in technical and creative activities", and take great financial risks in doing so to deliver attractive content, applications and services to consumers. If one replicates the so-called logic displayed by some, one could easily say that network operators 'free-ride' on these efforts to recoup their infrastructure investments, while enjoying their oligopoly positions. But then, one would join the cue of people projecting a skewed image of how markets work.

# Section 3.1.1 – Challenges and drivers of NGA roll-out and infrastructure competition

The Work Programme notes that "with increasing demand for broadband, regulators need to consider options which foster investment in high-speed broadband infrastructure while **preserving a competitive environment and a level playing field**" – emphasis added.

<sup>&</sup>lt;sup>1</sup> See, Analysys Mason. (2014, September). Investment in Network, Facilities, and Equipment by Content and Application Providers. p. 3. Retrieved at, <a href="http://www.analysysmason.com/Research/Content/Reports/Content-application-provider-Internet-infrastructure-Sept2014/Report/">http://www.analysysmason.com/Research/Content/Reports/Content-application-provider-Internet-infrastructure-Sept2014/Report/</a>.

<sup>&</sup>lt;sup>2</sup> See, Analysys Mason. (2014, September). *Ibid.* p. 7-8.

<sup>&</sup>lt;sup>3</sup> See, Analysys Mason. (2014, September). *Ibid.* p. 12.

<sup>&</sup>lt;sup>4</sup> See, Analysys Mason. (2014, September). *Ibid.* p. 37.



The funny thing about the level playing field image is that it seems to appear in all sorts of contexts, yet no one ever bothers to define the field they are talking about.

Incumbent telecoms operators have been very effective at using the 'level playing field' rhetoric to:

- 1) imply that players such as Skype, Google, etc. are escaping regulation which should in fact apply to them in areas such as privacy and data protection, switching and data portability, audiovisual rules, taxes, and identification and safety-related measures; and,
- 2) try to obtain at the same time that telecoms operators be relieved from some of the burden of regulation, by having services such as Skype and others considered as substitutes to traditional voice telephony.

We would like to point out that with the recent adoption of the European Commission's Recommendation on relevant markets,<sup>5</sup> the retail market for access to fixed telephony has been deregulated. The European Commission decided to 'liberate' the fixed telecoms markets because:<sup>6</sup>

"There has been a decrease in volume of fixed calls as customers have turned to alternative solutions, such as voice-over-IP (VoIP) and mobile calls, but also to alternative providers, like over-the-top (OTT) players."

This decision should alleviate at least in part the claims by network operators that the substitutability of VoIP diluted their voice market share, as the European Commission seems to have placed fixed telephony and VoIP on the same 'level playing field' for the purpose of its market analysis.

VON Europe is not convinced by this outcome and, more generally, we do not agree with this 'level playing field' rhetoric. In our view the playing field can only be levelled between actors that are on the same field. This is not the case for networks and services. These are two distinct fields in the Open System Interconnect (OSI) model, the network operates at layer 1-2, while the services, such as content, application and service providers, operate at layer 3-4. These various layers interact together in the Internet ecosystem. The different levels are populated with different companies and different type of investments are made at the different levels – see Figure 1 and Figure 2 below.

<sup>&</sup>lt;sup>5</sup> See, European Commission. (2014, 9 October). Telecoms: Commission to Cut Number of Regulated Markets in Europe [IP/14/1112]. Retrieved at, <a href="http://europa.eu/rapid/press-release">http://europa.eu/rapid/press-release</a> IP-14-1112 en.htm.

<sup>&</sup>lt;sup>6</sup> See, European Commission. (2014, 9 October). *Ibid.* 



	Type of companies	Examples	
Content Application Provider (CAP)	Companies that provide end users with Internet content and applications	Google, Facebook, Yahoo!, Microsoft, Amazon, eBay, Netflix, BCC, Spotify, Dailymotion, Axel Springer	
Service provider (SP)	Companies that help delivering Internet content, including data centre and backbone providers, IXPs, CDNs	Level 3, Cogent, XO Comms, Tata, Equinix, Akamai, CenturyLink, SunGard, Amazon (AWS), AMS-IX, DE-CIX, LINX	
Internet Access provider (IAP)	Companies that provide Internet connectivity for consumers and businesses	NTT, Comcast, AT&T, Deutsche Telekom, Time Warner Cable, Verizon, Orange, KT	

Figure 1: Overview of the categories of companies active in Internet investments <sup>7</sup>

Steps	Content and applications	Store, process, servers (Hosting)	Transport towards customer	Delivery to the IAP	IAP to end consumer
Activities	Provision of video, entertainment, search, news, social networking, e-commerce and other services	Provision of physical infrastructure for the storage of computing capacity and content	Transport of content from the CAPs to the end users	Transfer of traffic across players in the value chain. Content storage or creation of hubs for exchanging traffic	Provision (last-mile) to the end user of the access to the content provided in the network
Investments	Software development and content production	Data centres buildings and related equipment	Submarine and terrestrial cables	Internet Exchanges and related facilities	Last-mile fibre and investment in the backbone

Figure 2: Key activities involved and investments made in networks, facilities, and equipment required at each stage of the Internet value chain<sup>8</sup>

The complaints by telecoms operators regarding the 'lack of level playing field' that exists between them and content, application and service providers could be compared to builders of football stadiums complaining about the fact that they are subject to a raft of regulations when building a stadium (possibly with subsidies) and that their investment takes decades to have a return, while football players that come to kick a ball in their stadiums make millions in a very short time span. Some would say that spectators rarely come to look at empty football stadiums but that they are

<sup>&</sup>lt;sup>7</sup> See, Analysys Mason. (2014, September). *Ibid.* Figure 3.5 – p. 17.

<sup>&</sup>lt;sup>8</sup> Based on Analysys Mason. (2014, September). *Ibid*. Figure 5.2 – p. 32.



attracted by the performance of these shallow football players. Some would also argue that for every successful football players, there are thousands of failed players, with no career or shattered kneecaps. Some would finally say that the claims by the football stadium builders are absurd as it is impossible to compare such diverse 'players'.

VON Europe encourages the BEREC to put an end to some of the sterile discussions taking place in the telecoms world, and to stop using terms such as OTT and level playing field, unless it is prepared to properly define in each case what field they are talking about.

# Section 3.1.4 – Preparing migration to "all IP networks"

VON Europe welcomes the BEREC's intention to "conduct a comprehensive analysis of regulatory implications in the IP eco-system as a whole, building on the work already developed in terms of net neutrality (traffic management), transit/peering agreements and termination rates".

We note that the BEREC 2014 Work Programme remarked that the IP-interconnection market currently seems to function well without any significant regulatory intervention, and pointed out that any measure could potentially be harmful, and therefore be carefully considered. <sup>9</sup> We continue to support this analysis.

We also support the BEREC's intention to continue its cooperation with the OECD through a 3rd joint BEREC/OECD workshop to discuss relevant interconnection issues at the wholesale level in light of the ongoing debates between stakeholders on charging mechanisms used for IP-interconnection like peering and transit.

### Section 3.1.5 – Oligopoly analysis and regulation

VON Europe supports the BEREC's intention to report on market developments post-merger to monitor market developments and ensure end-users can benefit from competitive markets.

It is crucial that the BEREC monitors market developments to ensure that competition is safeguarded on telecommunications networks, especially, if merger and acquisition activity is to be facilitated for the telecoms industry.

<sup>&</sup>lt;sup>9</sup> See, BEREC. (2013, December). BEREC Work Programme 2014 (BoR (13) 196). p. 12. Retrieved at, <a href="http://berec.europa.eu/eng/document\_register/subject\_matter/berec/download/0/3939-berec-work-programme-2014\_0.pdf">http://berec.europa.eu/eng/document\_register/subject\_matter/berec/download/0/3939-berec-work-programme-2014\_0.pdf</a>.



# Section 3.1.6 – Facilitation of access to radio spectrum

VON Europe is supportive of the BEREC's intention to work closely with the Radio Spectrum Policy Group (RSPG) and the recognition that "radio spectrum is essential to the development of the broadband market, the proper functioning of competition and the achievement of the goals set out in the 2020 Digital Agenda".

Therefore, we would encourage the BEREC to put forward three key principles in its work on the Connected Continent Regulation process, for the forthcoming framework review and for the review of the Radio Spectrum Policy Programme (RSPP), namely:

- 1) Prioritise making additional, harmonised bands available for wireless broadband to meet pressing capacity and coverage requirements.
- 2) Recognise that more intensive spectrum sharing will be key to achieving more efficient use of existing allocations, particularly when licence-exempt access is enabled. Sub 1 GHz spectrum is a particular priority for additional licence-exempt capacity, given its potential for coverage enhancement in rural and urban areas.
- 3) Strive toward rough harmonisation of bands both within Europe and internationally, when making spectrum available for licence-exempt access, but should also recognise that spectrum sharing can be extremely effective in making use of fragmented bands.

Europe must provision greater spectrum capacity for the future to accommodate rapid growth in wireless data traffic and a multiplicity of emerging wireless applications. Regulators will need a variety of tools to address this spectrum shortage and should work to make new bands available for wireless broadband.

Harmonizing the bands available for dynamic spectrum access within Europe and internationally will encourage investment in these technologies by providing regulatory certainty and creating a world-wide market for standardised chipsets.

However, the complexity of making harmonised bands available across all member states means that the full benefits of harmonisation for both licensed and license-exempt spectrum might not be achieved for many years.

It is also essential to be clear about the fact that, while VON Europe welcomes harmonisation, we would also like to stress the importance of the principles of technological, network and service neutrality within a common regulatory framework, and the importance to permit new spectrum uses



wherever there is no objective interference-related impediment (to be assessed on a scale which is less than nation-wide).

VON Europe feels that greater attention needs to be paid to ensure that sufficient of the identified capacity will be made available on a licence-exempt basis.

By making such unused spectrum available for sharing, using dynamic spectrum access, we believe that significant economic benefits will be gained. For example, geolocation databases can be used to signpost which spectrum is available in any given location at the time when users need it. This would allow value to be extracted from isolated pockets of non-harmonised spectrum and should incentivise radio manufacturers to build corresponding flexibility into their devices. Geolocation databases are a good fit with such fragmented capacity and access conditions: enabling single market economies of scale in end-user devices.

VON Europe calls upon the BEREC to support efforts in allocating more spectrum for WiFi. Today the majority of Internet data traffic if already delivered to consumers via WiFi. WiFi carries 69% of the total traffic generated by smartphones and tables, and 57% of the total traffic from PCs and laptops. The overall data volume delivered by licence-exempt WiFi exceeds that of cabled connections and licensed mobile networks combined. A recent Report from the European Broadcasting Union (EBU) estimates that "71% of all wireless data to mobile devices in the [EU] was delivered using Wi-Fi". 11

Therefore, VON Europe believes that a balance of licensed and unlicensed wireless access (WiFi) helps promote innovation, competition and supports ubiquitous, high-speed affordable Internet access.

## Section 3.2 – Strategic Priority 2: Promoting the Internal Market

The Work Programme notes that the BEREC "will look into how the penetration of OTT services is evolving and at the impact on the traditional business models of telecom operators". VON Europe would like to emphasise that the so-called 'challenges' brought about by these players are:

1) positive signs of competition taking place; and,

<sup>&</sup>lt;sup>10</sup> See, Thanki, R. (2013, August). The Case for Permissive Rule-Based Dynamic Spectrum Access. Retrieved at, <a href="http://research.microsoft.com/en-us/projects/spectrum/case-for-permissive-rule-based-dynamic-spectrum-access">http://research.microsoft.com/en-us/projects/spectrum/case-for-permissive-rule-based-dynamic-spectrum-access</a> thanki.pdf

See, EBU. (2014, July). Spectrum Factsheet. Retrieved here, <a href="http://www3.ebu.ch/files/live/sites/ebu/files/Knowledge/Publication%20Library/Fact%20sheets/Fact%20sheet%20-%202014-07%20Spectrum.pdf">http://www3.ebu.ch/files/live/sites/ebu/files/Knowledge/Publication%20Library/Fact%20sheets/Fact%20sheet%20-%202014-07%20Spectrum.pdf</a>



2) the indication of a more general phenomenon whereby users switch to an all IP environment characterised by increased data consumption.

Content, application and service providers are innovators that bring benefits to consumers. These innovations motivate continued and renewed consumer demand for (better, faster) broadband and mobile Internet access.

The BEREC needs to recognize that access to content, application and services are key elements for infrastructure demand, as that's what the Internet is about for most, if not all, citizens and businesses. Broadband, fibre to the cabinet, fibre to the premises, fibre to the curb, that's what most of the policy discussions seem to be about. The BEREC should keep in mind that the end goal should be user benefit, not preservation of established players or their business models at all cost.

Operators have to come to grips with reality: it's time to rethink their business model instead of clinging to it to safeguard their golden gooses, such as SMS. Consumer's mobile consumption patterns are shifting to data, so operators need to start embracing the opportunities flowing out of the data consumption triggered by the demand for online content applications and service.

Some operators have already embraced this shift. Swiss telecoms operator Swisscom introduced novel mobile tariffs positioning its offer based on the use of the infrastructure, instead of focussing on the mode of communication. Swisscom's offer is based on 5 download speeds (XS to XL), as it offers tariffs ranging from 200 kilobytes per second to high-speed Internet.<sup>12</sup> Each tariff includes 'unlimited' national voice, SMS, and Internet usage.

VON Europe believes that agreements that differentiate according to data volumes and speeds are the way forward, as long as no discrimination based on the content, application or service themselves, or specific classes thereof, is put in place.

### Section 3.2.5 – Report on OTT services

The BEREC should provide more clarifications on its intentions to define a taxonomy for digital market players and services. We consider that the BEREC has already identified several terms to identify the market players in the internet ecosystem, ranging from CAPs (content and application providers) to IAPs (Internet access providers). We believe that in light of the many workstreams

<sup>&</sup>lt;sup>12</sup> See, Swisscom. NATEL® Infinity. More information available here: http://www.swisscom.ch/en/residential/mobile/subscription-tariffs.html.



already being considered by the BEREC, this action point brings no immediate value if it intends to do what it claims it wants to do.

VON Europe is however concerned that this is an attempt of the BEREC to reconsider the 'electronic communications service' (ECS) definition. This could lead to a general and worrisome extension of telecommunications regulation to Internet content, applications and services, which are very different from traditional telecommunications services. Doing so without making the appropriate considerations or the necessary differentiations, will have negative consequences. We consider that:

- It could stifle innovation; and,
- It runs the risk of being incoherent when looking at the bigger EU picture.

### Stifling innovation

The interpretation and application of the ECS definition determines how broadly telecommunications regulations will be applied to new, innovative services. An unconsidered application risks to stifle innovation, instead of enabling and encouraging it.

VON Europe emphasises the need to keep Internet applications and services with communications features outside the ECS classification. This guarantees that innovation can flourish. Where applicable, the 'information society services' (ISS) classification ensures that the provisions of the E-Commerce and Data Protection Directives provide protections for ISS users.

### The bigger picture

VON Europe would also like to stress that both the 2009 Review of the Regulatory Framework and the ongoing Telecoms Single Market / Connected Continent proposal do not touch the ECS definition. The European Parliament amended the European Commission's proposal for a 'Connected Continent' to safeguard that the next review ensures that "substitutable services are subject to the same rules, taking into consideration the definition of electronic communications services in Article 2(c) of Directive 2002/21/EC, in order to achieve equivalent, coherent and consistent regulation of electronic communications services and services substitutable to them, including with respect to access, all aspects of consumer protection, including portability, as well as privacy and data protection". BEREC has also recently recognised that "[...] in many instances, services and

<sup>&</sup>lt;sup>13</sup> European Parliament. (2014, 3 April). European Parliament legislative resolution of 3 April 2014 on the proposal for a regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC,



applications provided by OTT players are not considered under the Framework to be electronic communications services".<sup>14</sup> The European Commission's explanatory note to the relevant markets Recommendation also acknowledges this, as it notes that "currently OTT services are not yet at a level in which they can be considered actual substitutes to the services provided by infrastructure operators".<sup>15</sup> The explanatory note also indicates that "unmanaged VoIP is still not considered by the great majority of NRAs as a substitute for fixed voice".<sup>16</sup>

The European Parliament also emphasised that the next review should be preceded by a comprehensive evaluation by the European Commission, and be supported by "a full public consultation as well as on ex-post assessments of the impact of the regulatory framework since 2009 and a thorough ex-ante assessment of the expected impact of the options emanating from the review".<sup>17</sup>

In conclusion, VON Europe considers that this action point brings no immediate value if it intends to do what it claims it wants to do.

Seeing the already ambitious Work Programme, we do not see any added value in the BEREC including a work item on OTTs in the dispute resolution procedures and recommend hence deleting this action point.

Section 3.3.1 - Broadband quality of service and net neutrality

a. Feasibility study of QoS Monitoring in the context of NN

2002/22/EC, and Regulations (EC) No 1211/2009 and (EU) No 531/2012 (COM(2013)0627 – C7-0267/2013 – 2013/0309(COD)) (Ordinary legislative procedure: first reading. Amendment 229, Article 39 – paragraph 1. Available at, <a href="http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2014-0281">http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2014-0281</a>. This amendment is obviously still being discussed under the co-decision procedure.

<sup>&</sup>lt;sup>14</sup> See, BEREC. (2014). BEREC Opinion on the Commission Recommendation on Relevant Product and Service Markets Susceptible to ex ante Regulation [BoR (14) 71]. p. 9, Section 3.1.2. Available at, <a href="http://berec.europa.eu/eng/document\_register/subject\_matter/berec/download/0/4438-berec-opinion-on-the-commission\_recomment\_0.pdf">http://berec.europa.eu/eng/document\_register/subject\_matter/berec/download/0/4438-berec-opinion-on-the-commission\_recomment\_0.pdf</a>

commission-recommen 0.pdf.

15 See, European Commission. (2014, 9 October). Explanatory Note Accompanying the Document Commission
Recommendation on Relevant Product and Service Markets within the Electronic Communications Sector Susceptible to Ex
Ante Regulation in Accordance with Directive 2002/21/EC of the European Parliament and of the Council on a Common
Regulatory Framework for Electronic Communications Networks and Services; p. 17. Retrieved at,
<a href="http://ec.europa.eu/digital-agenda/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets">http://ec.europa.eu/digital-agenda/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets</a>.

See, European Commission. (2014, 9 October). Explanatory Note. *Ibid*. p. 24.

<sup>&</sup>lt;sup>17</sup> See, European Parliament. (2014, 3 April). *Ibid.* 



VON Europe supports the fact that the BEREC will conduct a feasibility study on quality monitoring in the context of net neutrality, as follow-up to its 2014 Net Neutrality Quality of Service (QoS) monitoring report.

From a practical point of view, the following elements are critical in determining and monitoring quality of service requirements from both a quantitative and qualitative point of view:

- The support of a body of technical experts, put in place through a multi-stakeholder approach
  that includes relevant industry segments (including content, application and service providers),
  consumer organizations and civil society representatives;
- Regular testing of Internet speeds and quality of service for each access provider (fixed or mobile), both in terms of the speeds available for Internet access and for the various managed services, if any are available, and for each main application type such as streaming, VoIP, P2P, websites, etc. For managed services, service level agreements (SLAs) offered could also prove a useful source of information; and,
- The requirement for network operators to report on a regular basis to regulators about the quality of services effectively achieved in the different layers of their network, both in the last mile and at hand-over points. Regular measurements by regulators or another habilitated body will be required to verify if the announced performances by network operators are met in practice. Most regulators could easily do this as part of their recurring reviews of broadband speeds.

We would also like to stress that measurement tools need to be open and transparent, which requires:

- Well-documented and open-source measurement tools, to help make the data collected more useful and credible;
- Openly available data and analytic methodologies, to support independent analysis and peerreview;
- Openly documented measurement framework. This is true especially when a measurement program is put in place to produce QoS measurements that will be published and used to ensure accountability and network health; and,
- Consistent, consistently-managed, well-documented measurement platform, to help ensure that the data collected are truly robust.



# <u>b. ECODEM – Ecosystems dynamics and demand-side forces in net neutrality developments from an</u> end user perspective

VON Europe welcomes this study and is willing to support it in any possible manner, and we would encourage the BEREC to actively engage the Stakeholder Forum to gather input for the Report.

However, we do consider that such a study should undergo a formal consultation procedure.

## c. Traffic Management Investigation

On the BEREC-Commission joint investigation into traffic management practices (TMI), the Work Programme notes that "BEREC considers that there is substantial value in repeating the exercise, so as to provide updated data and identify evolving practices more accurately".

VON Europe considers the first round of the TMI was a very useful exercise and can only applaud the fact that the BEREC considers repeating it. We do believe however that this exercise should be open for consultation as regards the methodology used on the one hand but also the availability of the questionnaire on the second.

We also considers that the entirety of the answers should not be covered by a blanket confidentiality provision, as was the case in the first round. The data given should be shared where appropriate with external research centres (such as Measurement Lab (M-Lab)), consumer associations and even the general public, to allow the data to be scrutinised much more in-depth. More granularity in general of the results would make them more useful.

### Section 4.1 – Benchmarks

The Work Programme notes that the BEREC wants to improve the compilation of data on OTTs, and identifies two task in doing so, namely to:

- share experiences obtained by several countries in terms of indicators on a variety of OTTs activities; and,
- propose a set of indicators to the EC and to NRAs which will be useful in identifying end-user usage and demand for OTT services; these indicators can then be used for benchmarking purposes.

VON Europe welcomes that that statistics are being collected about content, application and service providers, but would like to emphasise the need to do this with the support of the stakeholders targeted. Therefore, we are disappointed that the BEREC will not consult on its Report on the



development of new indicators for bundles and OTT services. We would call upon the BEREC to put this Report up for consultation, and we would encourage the BEREC to consult with stakeholders at the early stages of the drafting process to get feedback about the methodologies and data sources to be used.

### Section 4.3 - Stakeholders' Forum

VON Europe would like to applaud the BEREC's continued commitment to engage with stakeholders.

### Section 4.5 – Engagement with EU institutions

The Work Programme remarks that the BEREC intends to develop its cooperation with other relevant EU agencies and regulatory bodies, and that it will explore the option to organise workshops with them on topics such as network and information security, net neutrality or OTTs.

VON Europe believes that, while there is room to exchange ideas with other relevant EU agencies, these workshops also need include relevant stakeholders. This would provide all involved agencies access to market players, and allow them to interact with them to gain a deeper understanding on some of the agencies' concerns.

# An item to add to the list: Numbering

VON Europe believes that it is in the interest of European citizens and the European economy as a whole to focus its attention on putting in place the building blocks of a forward looking framework, focusing on delivering choice and innovation to consumers, rather than sticking to obsolete principles, with the ensuing compliance issues.

The Electronic Communications Framework requires a wider availability of numbers but no adequate enforcement mechanism has been put in place so far. The BEREC should make the numbering issue a priority in its efforts to improve regulatory consistency and harmonisation within the EU, and in order to work on the Recommendations identified by the European Conference of Postal and Telecommunications Administrations' (CEPT) Electronic Communications Committee (ECC) Working Group on Numbering and Networks (WG NaN).<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> See, CEPT ECC. (2012, 22 November). *ECC Recommendation (12)04 Numbering for Nomadic Voice Services*. Retrieved at, http://www.erodocdb.dk/Docs/doc98/official/pdf/REC1204.PDF.



The BEREC should ensure and enforce the harmonisation of the often very different eligibility and usage conditions for allocation of numbering resources and should undertake a profound review of the national numbering plans to truly make them technology neutral.

## (a) Various eligibility and usage conditions

In terms of numbering, the current Regulatory Framework sets a *de minimis* rule whereby numbers should be allocated <u>at least</u> to ECS, without precluding the allocation of numbers to non-ECS. This is set out under Article 10 of the Framework Directive (2002/21/EC) which only states that: "1. (...) *Member States shall ensure that adequate numbers and numbering ranges are provided for all publicly available electronic communications services*." Under the reviewed Regulatory Framework, Article 10.4 of the revised Better Regulation Directive stipulates that:

"Member States shall support the harmonisation of specific numbers or numbering ranges within the Community where it promotes both the functioning of the internal market and the development of pan-European services. The Commission may take appropriate technical implementing measures on this matter."

Unfortunately, the current practice shows that eligibility status and conditions vary considerably across the member states with some NRAs requiring service providers to notify as PATS in order to be eligible to apply for numbering resources.

This is especially disappointing in light of the flexibility given to NRAs in terms of allocation criteria, that appears even more clearly when analysing the guidance provided by the European Commission in the Information and Consultation Document of 14 June 2004 on the treatment of VoIP under the EU Regulatory Framework, <sup>19</sup> which states in Section 7.1 that:

"Any undertaking providing <u>or using</u> electronic communication networks or services has the right to use numbers. [...]"

The BEREC should adopt a more flexible and open approach to numbering, in the interest of developing offerings with global reach, and provide appropriate guidance to its members to ensure more harmonization in this field and increased consumer benefit.

<sup>&</sup>lt;sup>19</sup> See European Commission. (2004). *Commission Staff Working Staff Working Document on the treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework. An Information and Consultation Document*. Retrieved at, <a href="http://ec.europa.eu/information-society/policy/ecomm/doc/library/working-docs/406-14-voip-consult-paper-v2-1.pdf">http://ec.europa.eu/information-society/policy/ecomm/doc/library/working-docs/406-14-voip-consult-paper-v2-1.pdf</a>.



## Harmonisation of usage conditions

Today's pan-European service providers face the difficulty to assess and comply with 28 different regulations in order to be allocated and use numbering resources.

Past studies by the ERG also show that the type of numbering range open to IP enabled service providers varies substantially (from the regular national or geographical numbering ranges to specific 'nomadic', toll free and calling card numbering ranges). In addition, the allocation of the same type of numbering range (e.g. a regular geographical numbering range) may be associated with multiple variable usage conditions (varying from no usage conditions to supplementary restrictions to install specific equipment in the territory, require to obtain a local address of the user, or to 'terminate' calls in the geographical zone).

The in-depth analysis of the eligibility and usage conditions for the allocation of numbering ranges is not only a highly time consuming effort (resulting in a late time to market), it also requires substantial financial resources.

VON Europe calls upon the BEREC to strongly encourage NRAs to ensure that numbering ranges can be used in the same forward-looking way throughout the EU.

### (b) Discarding location information in numbering ranges when it comes to termination

VON Europe believes that the usage of numbering resources should be rethought on a EU level. Nomadism has become an integral part of today's way of life. In consequence of that, there is an increasing demand for nomadic applications within a harmonised single digital market in the EU.

We therefore considers that the way forward is discarding location information from any kind of telephone number in Europe.

Location information of geographic numbers is a legacy from the Plain Old Telephony Services (POTS), where habits were not what they are today. In recent years, people have become more flexible, ready to move and travel at any time. Mobile phones have long overtaken fixed phones in Europe and calling your plumber happens more often than not on his mobile phone.

These important changes in the general way of life, and the evolution of technology, have an impact on the features customers are demanding. Both business and residential customers request innovative possibilities including nomadicity. Today, the relevance of geographic numbers is fading,



services are no longer linked to the location information, rather to personal information and service and application features.

This is confirmed in practice by the increasing switch to mobile phones. Mobile Internet devices will only enhance that trend. It also seems in contradiction with the fact that many consumers increasingly want to be connected all the time and everywhere, which usually implies increased mobility.

Moreover, in reality geographic numbers are increasingly not representative of the location of a called party: for example, with call forwarding, a call to a number supposedly located in a specific geographic region, could very well be forwarded to an entirely different place. This link to geographic locations disappears even more when thinking of a next generation network (NGN) environment, characterised by the switch to an all-IP world.

In terms of numbering, it has long been considered that the primary distinguishing feature of geographic numbering is that is has geographic significance. This was linked to the fact that a geographic number was in the past associated to a tariff range, an expected call quality and a specific location of the recipient of the call.

In an all-IP world, many of these features are totally irrelevant. Currently, many providers of VoIP-enabled offerings provide the possibility to call for free or at very low flat fee tariffs that are the same regardless of location. In parallel, people divert their fixed phones, or even abandon them to exclusively use mobile phones.

It is therefore becoming increasingly obvious that consumers are no longer truly concerned with location information, but rather with the cost of calling. Consequently, the reason why geographic numbers are used by residential and business customers is because of the retail price transparency. VON Europe therefore strongly believes that geographic numbers are most suitable to open up VoIP opportunities to the mass market, given that consumers are highly familiar with those types of numbers and end user tariffs are transparent (or at least not less transparent than other types of numbers).

Moreover, from a technical point of view, non-geographic numbers such as specific 'nomadic' numbers are not always reachable from all networks, and are in many cases not reachable or only reachable against higher tariffs for the calling party from another country. Consumers are often



reluctant to use such type of numbers due to a fear of high tariffs, which in practice results in these types of numbers not taking off in the countries where they have been introduced.

Some regulators have already come to the conclusion that only a holistic forward-looking approach could ensure a sustainable policy for numbers.

- The need for such a forward-looking perspective has been acknowledged as early as 2010 by the Swedish regulator PTS in a study on the future organisation of Sweden's numbering plan. In the study's conclusions, PTS stated that substantial changes needed to be made to the approach to numbering and the sooner, the better, as holding off major changes until the need arises to enforce them swiftly can bring along much higher costs than a well-thought out implementation over time.<sup>20</sup>
- The Australian regulator, the ACMA, presented an approach in its 2011 paper<sup>21</sup> on a coherent and inclusive medium to long term vision for numbering that could make Australia a frontrunner in putting in place a well-designed and forward looking numbering plan.

We strongly encourage the BEREC to go down the same path of help its members rethink their approach to numbering and to take an approach that ensures the fullest possible retail price transparency and that removes the link between location information and geographic numbers.

Therefore, VON Europe calls upon the BEREC to tackle these challenges in a specific workstream, to be added to the 2015 Work Programme.

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We thank you in advance for taking consideration of these views. Feel free to contact Herman Rucic, VON Europe, by phone (+32 (0)478 966701) or email (hrucic@voneurope.eu) should you need further information.

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<sup>&</sup>lt;sup>20</sup> See PTS. (2010). *Behov av en framtidsinriktad telefoninummerplan. 6 olika förändringsalternativ. Det fortsatta arbetet* [Need for a Future-Oriented Telephony Numbering Plan. Six Different Change Options. Next Steps] [PTS-ER-2010:20]. Stockholm: PTS. Retrieved at, <a href="http://www.pts.se/upload/Remisser/2010/10-8918-remiss-rapport-100929.pdf">http://www.pts.se/upload/Remisser/2010/10-8918-remiss-rapport-100929.pdf</a>. p. 67.

<sup>&</sup>lt;sup>21</sup> See ACMA. (2011a). *Telephone Numbering: Future Directions Paper*. Retrieved at, http://www.acma.gov.au/webwr/ assets/main/lib100283/numbering-future directions.pdf.



# **About the VON Coalition Europe**

The Voice on the Net (VON) Coalition Europe was launched in December 2007 by leading Internet communications and technology companies, on the cutting edge to create an authoritative voice for the Internet-enabled communications industry. Its current members are Google, Microsoft, Skype, Vonage and Voxbone, and its supporters are Viber.

The VON Coalition Europe notably focuses on educating and informing policymakers in the European Union and abroad in order to promote responsible government policies that enable innovation and the many benefits that Internet voice innovations can deliver.