

Comments on the BEREC Strategy 2015-2017

by VON Europe, October 2014

The Voice on the Net Coalition ('VON') Europe welcomes the opportunity to comment on the BEREC Strategy 2015-2017 (hereafter 'the Strategy').

DETAILED COMMENTS

SECTION 3 – BEREC'S STRATEGIC PILLARS

A. STRATEGIC PILLAR 1 – PROMOTING COMPETITION AND INVESTMENT

The Strategy remarks that "a competitive European telecoms sector (...) contributes to a vibrant European economy".

VON Europe considers that this a narrow view of the Internet ecosystem. We 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 network operators themselves.

Importantly, without this increase in consumer demand for (mobile) Internet access, network operators would see their market and revenues shrink.

We considers that the efforts from content, application and service providers to create a demand for their services are thus to the benefit of networks operators,¹ who in turn are able to extract revenues from consumers requiring data connections or upgrading their existing connections to access these services.

Therefore, we believe that the BEREC should amend this statement to recognise that content, application and service providers also contribute to a vibrant European economy, as without the European telecoms sector would not thrive without them.

¹ This is also recognised in Section 4 of the Strategy: "OTT players are also developing new innovative services, which in turn foster the demand for more and better network access."

See also our comments on investment in section 4, subsection A ‘technology, market and end-user developments’.

C. STRATEGIC PILLAR 3 – EMPOWERING AND PROTECTING END-USERS

The Strategy remarks that the BEREC needs to continue to address issues around the open internet, as the welfare of end-users is a the core of its mission.

VON Europe welcomes the BEREC’s commitment to the open Internet, and would like to stress that 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.

Therefore, 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. 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.

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 4 – MAJOR TRENDS AND DEVELOPMENTS

A. TECHNOLOGY, MARKET AND END-USER DEVELOPMENTS

The Strategy warns for the tying of OTT services to devices and platforms as potential bottlenecks.

It is not entirely clear to VON Europe what is meant by this statement, nor what the BEREC is worried about, in its capacity as electronic communications regulator. The bottlenecks created at the infrastructure layer are obvious and were nicely identified and analysed by the recent Nobel Prize Winner, Professor Jean Tirole, as ‘natural monopolies’.

The same situation does not exist when looking at the content, application, and services layers, where barriers to entry are much lower, the market more dynamic and switching costs are low. Whilst some situations may lead to anti-competitive claims, at this stage these do not seem to us to be of the competence of the BEREC, but rather in the remit of competition authorities (though we do understand that some of the BEREC’s members may have competencies in both areas).

The growth of OTT services

OTT

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.

A new balance between market players

The Strategy observes that there are calls from some quarters for a new balance between market players.

VON Europe would like to remark that 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.

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.

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 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 knee-caps. 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.

Bundled services – Network convergence

The Strategy considers that bundled services bring new competition challenges, amongst others in terms of consumer switching, as triple- and quad-play bundles could in some cases result to the development of service oligopolies.

VON Europe considers that this is especially true when divergent contractual rules on contract termination and switching apply to the different services composing a bundle, then end-users are effectively prevented from switching to competitive offers for the entire bundle or parts of it.²

We consider that triple or quad-play bundles often translate into a reduction in the switching ability of consumers. Although this is not a problem *per se*, it means that relying on consumers switching providers thanks to transparent information cannot be sufficient.

It is also 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.

Quality of Service

The Strategy points out that some stakeholders have raised concerns about the fact that the provision of guaranteed quality services could impact on the provision of “best effort” internet access services.

² This is also recognised in Recital 61 of the European Commission’s Connected Continent / Telecoms Single Market proposal. See, European Commission. (2013). 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, 2002/22/EC, and Regulations (EC) No 1211/2009 and (EU) No 531/2012 (COM(2013)0627 – C7-0267/2013 – 2013/0309(COD)). Available at, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com%282013%290627_/com_com%282013%290627_en.pdf.

VON Europe is amongst these stakeholders, and we would like to reinforce these concerns. We believe that safeguards are necessary to ensure the quality of Internet access, in order to avoid a ‘dirt road’ effect,³ in parallel to the possibilities for network operators to offer specialised services. Mechanisms need to be put in place to minimise the risk that network improvements favour specialised services only, and/or that Internet access becomes overpriced compared to specialised services.

Therefore, we consider that:

- Quality of Service (QoS) guidelines must focus on creating safeguards for the reasonable network management practices, all others being prohibited, and they should be supported by proactive QoS measurements, whereby regulators monitor network management practices of network operators in a proactive and ongoing manner, in order to be able to step in in case of sudden and arbitrary changes.
- The objective of QoS measurements should be to:
 - 1) identify breaches to the open Internet principles;
 - 2) verify if the announced performances by Internet access providers are met in practice; and,
 - 3) verify the respective qualities available on Internet access and specialised services.
- Data collection about network management practices and QoS should have an open nature as regards to the methodology used, the questions asked and the data collected. This notably includes well-documented and open source measurement tools; openly available data and analytic methodologies, to support independent analysis and peer-review; and a consistently-managed well-documented measurement platform to ensure the robustness of the collected data.
- The setting of QoS relevant measures should be conducted with 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.

³ See BEREC. (2012). BEREC Report on differentiation practices and related competition issues in the scope of net neutrality (BoR (12) 132). p. 61 (Paragraph 294). Available at, http://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/1094-berec-report-on-differentiation-practice_0.pdf.

Investments

The Strategy points out that investment in new high-speed networks should in turn support innovation in content-rich internet services.

VON Europe welcomes this statement, as it recognises the symbiosis between the end-users (including both consumers and the Internet content, application and service providers) and the companies that control the access network infrastructure and provide transmission services at the access network level.

The Internet ecosystem is characterised by a virtuous cycle whereby all actors in the value chain benefit and contribute:

- Internet content providers (including users, public services, businesses across the economy, etc.) bring innovative content, information, applications, tools and services to the global public using the Internet;
- These innovations motivate continued and renewed consumer demand for (better, faster) broadband and mobile Internet access;
- This content-driven demand from consumers provides the return on investment for network operators, hence the basis for further investment in Internet-supporting infrastructure; and,
- Upgrades in Internet infrastructure provide new opportunities for over the top providers to develop new online content, applications and services, thus fuelling the cycle again.

Therefore, we would like the BEREC to amend this statement to reflect this interplay between the various stakeholders in the Internet ecosystem, and the fact that a lot of innovation has been taking place at the content layer, regardless of the lack of enthusiasm sometimes displayed by certain access operators in investing in network upgrades. Maybe an ‘and vice versa’ could do the trick.

Analysys Mason rightfully points out in a recent Report that 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,⁴ while emphasizing that their “main business is the provision of attractive content and applications to end users”.⁵ VON Europe believes that this needs

⁴ See, Analysys Mason. (2014, September). Investment in Network, Facilities, and Equipment by Content and Application Providers. p. 3. Retrieved at, <http://www.analysismason.com/Research/Content/Reports/Content-application-provider-Internet-infrastructure-Sept2014/Report/>.

⁵ See, Analysys Mason. (2014, September). *Ibid.* p. 7-8.

to be put in perspective with the core business of network operators, namely the provision of Internet access and investments in network assets.

Mobile offload to fixed networks

The Strategy refers to the increased mobile offload to fixed networks, which brings along challenges, such as the need to secure sufficient spectrum resources for WiFi and other wireless technologies.

Therefore, VON Europe calls upon the BEREC to support efforts in allocating more spectrum for WiFi. Today the majority of Internet data traffic is already delivered to consumers via WiFi.⁶ WiFi carries 69% of the total traffic generated by smartphones and tablets, 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”.⁷

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

See also our comments on the review of the Radio Spectrum Policy Programme (RSPP) in section 4 ‘major trends and developments’, subsection B ‘EU regulatory developments’.

Market consolidation – Cross-sector mergers, or agreements

VON Europe thinks it is crucial that the BEREC monitors market developments to ensure that competition is safeguarded at the service level on telecommunications networks, especially, if merger and acquisition activity is to be facilitated for the telecoms industry.

B. EU REGULATORY DEVELOPMENTS

Review of the EU regulatory framework

The Strategy considers that the review of the European regulatory framework could include consideration of how best to address the role of OTT players, claiming that these are increasingly providing services considered substitutable for traditional electronic communications services.

⁶ See, Thanki, R. (2013, August). The Case for Permissive Rule-Based Dynamic Spectrum Access. Retrieved at, http://research.microsoft.com/en-us/projects/spectrum/case-for-permissive-rule-based-dynamic-spectrum-access_thanki.pdf

⁷ See, EBU. (2014, July). Spectrum Factsheet. Retrieved here, <http://www3.ebu.ch/files/live/sites/ebu/files/Knowledge/Publication%20Library/Fact%20sheets/Fact%20sheet%20-%202014-07%20Spectrum.pdf>

VON Europe is not convinced of this substitutability.

As regards the different categorisations of players that exist under the regulatory framework, the BEREC has recently recognised that “[...] in many instances, services and applications provided by OTT players are not considered under the Framework to be electronic communications services”.⁸ The European Commission’s explanatory note to the relevant markets Recommendation equally 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”.⁹ The explanatory note also indicates that “unmanaged VoIP is still not considered by the great majority of NRAs as a substitute for fixed voice”.¹⁰ Hence, we would like to urge the BEREC to amend this statement to reflect the current reality. The ‘increasingly’ certainly seems to be inaccurate, unless you consider that any incremental substitution factor when the starting point is zero allows you to qualify something as ‘increasing’.

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 electronic communications service (ECS) definition. We believe that the distinctions between ECS and ‘information society services’ (ISS) is one of the principles that helped generate growth and innovation in the sector to date.

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 ISS classification ensures that the provisions of the E-Commerce and Data Protection Directives provide protections for ISS users.

⁸ 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, http://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/4438-berec-opinion-on-the-commission-recommen_0.pdf.

⁹ 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, <http://ec.europa.eu/digital-agenda/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets>.

¹⁰ See, European Commission. (2014, 9 October). Explanatory Note. *Ibid.* p. 24.

We would also like to remark that the European Parliament 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”.¹¹

Review Radio Spectrum Policy Programme (RSPP)

The Strategy refers to the expected review of the Radio Spectrum Policy Programme (RSPP) in 2015. In light of this, we would encourage the BEREC to put forward three key principles in its work on the RSPP, and also review of the European regulatory framework, 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.

¹¹ See, European Parliament. (2014, 3 April). 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, 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, <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2014-0281>. This amendment is obviously still being discussed under the co-decision procedure.

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.

See also our comments on mobile offload to fixed networks in section 4 ‘major trends and developments’, subsection A ‘technology, market and end-user developments’.

SECTION 5 – BEREC’S STRATEGIC PRIORITIES

STRATEGIC PRIORITY 1 – PROMOTING COMPETITION AND INVESTMENT

OTT players

The Strategy remarks that the BEREC will also look closely at the potential impacts of OTT players on the competitive dynamics of the market. In light of this, we would like to refer to our comments on the growth of OTT services in section 4 ‘major trends and developments’, subsection A ‘technology, market and end-user developments’, and our comments on the review of the EU regulatory framework in section 4, subsection B ‘EU regulatory developments’.

Radio Spectrum

The Strategy recognizes the fact that radio spectrum is essential to the development of the market and of innovative products and services. VON Europe welcomes this, and we would like to refer to our comments on the review of the Radio Spectrum Policy Programme (RSPP) in section 4 ‘major trends and developments’, subsection B ‘EU regulatory developments’, and our comments on mobile offload to fixed networks in section 4, subsection A ‘technology, market and end-user developments’.

A. PROMOTING COMPETITION

VON Europe welcomes the fact that the Strategy emphasises that the demand side is of great importance to ensure competitive national markets, and the BEREC’s focus on information transparency and ease of switching. to oil the wheels of competition. See also our comments on bundled services and network convergence in section 4, subsection A ‘technology, market and end-user developments’.

B. FOSTERING A FAVOURABLE CLIMATE FOR INVESTMENT

The Strategy points out that market players need to be able to rely on a stable regulatory framework for investment in high-speed networks to flourish.

It should be noted that investment in networks is also driven by content, application and service providers. 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.¹²

VON Europe would like to remark that for innovation to flourish on the Internet, content, application and service providers also need a stable regulatory framework. We believe that the distinctions between ‘electronic communications services’ (ECS) and ‘information society services’ (ISS) is one of the principles that helped generate growth and innovation in the sector to date.

¹² See, Analysys Mason. (2014, September). *Ibid.* p. 3.

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.

See also our comments on the review of the EU regulatory framework in section 4 ‘major trends and developments’, subsection B ‘EU regulatory developments’.

C. SUPPORTING INNOVATION

(IP-) interconnection markets

The Strategy indicates that the BEREC will continually monitor the dynamics and functioning of (IP-) interconnection markets in order to inform its views on whether or not regulatory intervention is needed.

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.¹³ We continue to support this analysis.

Review of the Framework

See our comments on the review of the EU regulatory framework in section 4 ‘major trends and developments’, subsection B ‘EU regulatory developments’.

STRATEGIC PRIORITY 2 – PROMOTING THE INTERNAL MARKET

B. TAKING DOWN BARRIERS

The Strategy indicates that the BEREC will seek to cooperate with other relevant EU bodies where appropriate.

VON Europe believes that, while there is room to exchange ideas with other relevant EU agencies, there is also a need to include relevant stakeholders in these exchanges. This would provide all involved agencies access to market players, and allow them to interact with them to gain deeper understanding on the topics being discussed between agencies.

C. EMPOWERING AND PROTECTING END-USERS

¹³ See, BEREC. (2013, December). BEREC Work Programme 2014 (BoR (13) 196). p. 12. Retrieved at, http://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/3939-berec-work-programme-2014_0.pdf.

VON Europe is pleased that the Strategy emphasises BEREC's commitment to put end-user empowerment at the heart of its work.

STRATEGIC PRIORITY 3 – EMPOWERING AND PROTECTING END-USERS

A. PROMOTING END-USER CHOICE, ACCESSIBILITY AND AFFORDABILITY

VON Europe welcomes that the Strategy acknowledges that competition alone cannot always ensure optimal outcomes for end-users, and that as such the affordability and accessibility of Internet access remains a central concern to the BEREC and NRAs. See also our comments on 'empowering and protecting end-users' in strategic priority 2 'promoting the internal market'.

B. SAFEGUARDING AN OPEN INTERNET

VON Europe welcomes the fact that the Strategy reinforced the BEREC's commitment to protecting end-users interests by safeguarding:

- 1) the provided quality of service on networks; and,
- 2) an open Internet and ensuring a common approach to net neutrality.

We are especially supportive of the BEREC's intention to ensure that "the Internet remains a fertile platform for the development of new innovative services".

We would also like to encourage all policy makers to stop using 'open' in front of Internet, as we consider that if they do their job right and regulators are empowered to monitor and enforce net neutrality, the Internet will be per se 'open'. As long as the need is felt to add this adjective, we will all seem to imply that a 'closed' version of the Internet could exist to, something VON Europe certainly does not want to see happen.

C. PROMOTING END-USER PROTECTION ONLINE

The Strategy refers again to the substitutability of OTT services for traditional telecoms services. In light of this, we would like to refer to our comments on the review of the EU regulatory framework in section 4 'major trends and developments', subsection B 'EU regulatory developments'.

SECTION 6 – QUALITY OF BEREC OUTPUT AND OPERATIONAL EFFICIENCY

B. ENGAGING AND COOPERATING EFFECTIVELY

The Strategy notes the continued development of the BEREC's stakeholder engagement strategy. VON Europe would like to applaud the BEREC's continued commitment to engage with stakeholders.

We would encourage the BEREC to engage all stakeholders on as many occasions as possible in their preparatory work, be it through the Stakeholders Forum or public consultations.

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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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.