# Comments on the BEREC Work Programme for 2011

by VON Europe

The Voice on the Net Coalition Europe ('VON') welcomes the opportunity to comment on the Draft BEREC Work Programme for 2011 (hereafter 'the WP').

## A. Improving Harmonisation and Resolving Cross-border and End-user Issues for a Single Market for Telecommunications (points 3 and 5 of the WP)

***BEREC***

*"(…) consistent regulatory practice[, as] both end-users and market players rely on a consistent and harmonised application of the regulatory framework, in order to be protected and to compete on the same basis at the European level. BEREC needs to be reliable, predictable and also firm in case it detects unjustified non-conformity"* (see point 3)

*"(…) Not only does BEREC need to be involved in this investigation, it is also a reason for BEREC to continue to participate in the debate about the single market for telecommunications and to point out the benefits of the single market achieved through a consistent regulation and to run a proper cost-benefit analysis."* (see point 3.1.3)

*"article 28 USD: Any consumer should be able to access any number in the EU. In 2010 BEREC has looked at fraud and misuse. In 2011 BEREC will shift its focus towards accessibility of numbers."* (see point 5.1)

***VON Europe***

*Harmonization*

**VON Europe supports BEREC's commitment to ensure a harmonised application of the regulatory framework (see point 3) and the achievement of single market for telecommunications (see point 3.1.3).**

We therefore call upon BEREC to ensure that the reform brought about by the Telecoms package truly enables the single market for innovative communications solutions and services. Lessons should be drawn from the regulatory experience with VoIP and the limitations that still exist for pan-European supply, in areas such as numbering, treatment of emergency calls, differential consumer protection-related requirements, etc. VoIP can contribute to the Single Market, but only if not unduly restrained by a myriad of different national regulatory environments. A single market for all communications solutions and services should be enabled by law and in practice.

*Numbering*

VON Europe supports BEREC's shift of focus in light of Article 28 of the Universal Service Directive (USD) regarding the access to numbers and services from looking into fraud and misuse towards the accessibility of numbers by end-users, but we would like to highlight that there is equal merit in ensuring that all those who wish to make use of numbers are entitled and enabled to do so.
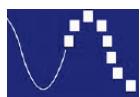
VON Europe believes that numbers have been, are and will remain a critical resource for communications services and applications.

But most national numbering plans, devised more than 30 years ago, remain rooted in a traditional 'Plain Old Telephony Services' paradigm. Hence, they are unlikely to be adequate to cope with new trends and developments, such as the high growth in demand for numbers, proliferation of new applications and services, market liberalisation, customer expectations, and an expansion in the finality of numbers (from location identifiers to personal and service identifiers and access codes to new applications).

The Internet has changed consumer expectations, as both business and residential customers request innovative possibilities including nomadicity and the ability to be reached everywhere on multiple devices of their choice.

Today, the relevance of restrictions associated with geographic numbers is fading, as usage is no longer linked to the location information, but rather to personal information and service and application features. Moreover, in reality geographic numbers are increasingly not representative of the location of a called party, as a result of call forwarding. Furthermore, the link to geographic locations disappears even more when thinking of a Next Generation Network (NGN) environment.

VON Europe therefore believes that a well-designed and forward looking numbering plan will accommodate growth of numerous communications solutions, bring consumer benefits and promote competition. In addition, we wish to refer to Article 10.4 of the Revised Framework Directive (2009/140/EC) stating 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."*

**BEREC and its members should therefore focus on ensuring the fullest possible retail price transparency and removing the link between geographic numbers and location, rather than maintaining restrictions or even creating additional obligations on usage of certain numbers. Let users choose their number(s), keep it wherever they are and use it on the device(s) of their choice!**


**B. Network Neutrality (point 4.2 of the WP)**

**1. Net Neutrality**

*BEREC*

*"In its response BEREC noted that incidents so far remain few and for the most part have been solved without the need for regulatory intervention. BEREC believes that, at present, it would be premature to consider further intervention with respect to net neutrality on an EU level."* (see point 4.2)

*VON Europe*

**VON Europe deems that the recent developments confirm the need for a pro-active and forward-looking approach, as harm is evidenced widely in the EU.** Blocking, degradation and/or discrimination by network operators against a number of Internet applications, services, and protocols – such as VoIP or peer-to-peer
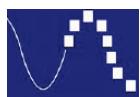
- are occurring across Europe. In some European countries, the situation is such that all mobile network operators in the country have put in place technical and/or contractual conditions preventing users from using VoIP and P2P applications and services , by either prohibiting or blocking access or imposing discriminatory additional retail tariffs.

ISPs do have incentives to discriminate activity occurring at the application and content layers of the OSI model, e.g. commercial application and content providers, but also non-commercial users including their own customers, in particular when ISPs are vertically integrated into the application and/or content layers and if ISPs face limited competition at the transmission and physical layers. In these obvious cases, ISPs can act as monopolists by shaping traffic in a way that departs from the application providers', content/service providers', or users' interests. But ISPs also have an incentive to engage in anti-competitive and other harmful behaviour even if they have not been declared as having significant market power at the transmission and infrastructure layer, and even if they are not vertically integrated.

To demonstrate how these incentives translate into specific abusive behaviours, we want to refer first to BEREC's response to the European Commissions' recent consultation on the open Internet and net neutrality in Europe:

> *"More specifically blocking of VoIP in mobile networks occurred in Austria, Croatia, Germany, Italy, the Netherlands, Portugal, Romania and Switzerland. (…) As regards the cases of blocking of VoIP in mobile networks, some operators in some countries allow the usage of such VoIP services for an extra charge."* (BEREC, 2010, p. 3)

**These and other 'incidents' are illustrated through the following reported cases:**

- 2005: American ISP Madison River (a small US ISP) blocks the traffic of internet telephony service Vonage. It is evident that the blocking is intended to favour its own telephony services, stifling competition. After this comes to light, the Federal Communications Commission intervened.[1]
- 2009: Mobile internet provider Vodafone puts in place p2p and VoIP caps on internet traffic in Italy, by capping this traffic on 64 kbit/s on its mobile network from 7 AM to 10PM.[2]
- 2009: Deutsche Telekom announces that it will block Skype, on iPhone in particular. In the same year, T-Mobile announced that it will block Skype traffic on smartphones with a mobile internet connection, and is considering blocking Skype through its wifi hotspots.[3] Since then and due to customer reactions, T-Mobile charges its users an extra 10 euro monthly fee for the right to use Skype on their mobile devices. Similarly, Vodafone Germany charges 5 extra euro/month for the right to use the Skype application.
- 2010: Swedish mobile telephony provider Telia blocks VoIP and p2p-traffic, according to the advertisements on their website.[4]

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[1] See http://www.bloomsburyacademic.com/pdf%20files/NetNeutrality.pdf (p. 35).

[2] See http://www.areaaziende.vodafone.it/190/trilogy/jsp/programView.do?tk=9610,c&channelId=-8671&contentKey=48195&programId=12545&ty_key=az_uso_equo_servizio_internet_mobilita&pageTypeId=9610&ty_skip_md=true

[3] See http://www.handelsblatt.com/technologie/mobile-welt/telekom-plant-skype-blockade-fuer-iphone-und-blackberry;2219922

[4] See http://www.telia.se/privat/produkter_tjanster/mobilt/surfaimobilen/
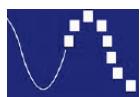
- 2010: French provider SFR sells iPad subscriptions without access to p2p, VoIP and newsgroups, although it is not clear whether these are only contractual or also technical restrictions.[5]
- 2010: French internet provider "Free" restrict p2p, SSH and VoIP services on ADSL. According to Free, all ports and/or protocols which are not standard are blocked in the afternoon, such as SSH, streaming videos, VoIP and p2p.[6]
- 2010: Internet provider Telenor in Sweden does not allow IP-Telephony on some mobile broadband packages.[7]

VON Europe believes that ensuring that users can obtain and use the applications, services and content, and devices of their choice without restrictions, is critical to maintaining and further unlocking the vast potential of the Internet. VoIP is particularly sensitive to degradations in network performance and because of its reliance on peer-to-peer in some cases, can be faced with various network management impediments put in place by access operators. Moreover, because the predominant VoIP protocols used today all generate peer-to-peer traffic (including SIP, H.323, and Skype's own peer-to-peer protocol among others), they are at risk of blocking and degradation as a result of blanket anti P2P measures, even though they do not inherently involve file transfers or intellectual property issues.

Moreover, VoIP and video communications, which rely upon a steady stream of real-time communication packets, can be especially harmed by temporarily delaying sessions using peer-to-peer or other applications and protocols. Limiting or delaying a VoIP session or video communications can be tantamount to blocking, that is negating a user's ability to communicate. Even when VoIP packets are delayed a mere 250 milliseconds, the lag is noticeable and impedes speech communications. This must be put in relation with the fact that peer-to-peer VoIP traffic generally represents just a trickle in today's growing broadband pipes. For most VoIP codecs, between 20 and 90 kbps upstream and downstream is sufficient.

**The reported cases we have listed above are therefore not only detrimental to innovation and user experience. They are also a clear circumvention of the end-to-end connectivity principle of the Telecoms Package enshrined in Article 5 of the Access Directive, the principles set out in Recital 28 of the Universal Service Directive (USD) (2009/136/EC)[8] as well as Recital 40 of the Roaming Regulation (Regulation (EC) No 544/2009)[9].**

Commissioner Kroes affirmed in her hearing as Commissioner-designate for the Digital Agenda before the European Parliament that: *"[t]he core issue is that internet providers 'shouldn't be allowed to limit the access to service or content out of commercial motivation but only in cases of security issues and spamming'"*.

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[5] See SFR's website for details: http://www.sfr.fr/mobile/ipad.jspe#

[6] See http://www.numerama.com/magazine/15461-free-briderait-les-protocoles-ssh-voip-ou-p2p-en-zone-non-degroupee.html and http://pastebin.com/MZ3WF8sz

[7] See http://www.telenor.se/privat/abonnemang/tillaggstjanster/alla-mobiltjanster.html#C45-2100-P45-5468

[8] *"End-users should be able to decide what content they want to send and receive, and which services, applications, hardware and software they want to use for such purposes, without prejudice to the need to preserve the integrity and security of networks and services. A competitive market will provide users with a wide choice of content, applications and services. National regulatory authorities should promote users' ability to access and distribute information and to run applications and services of their choice (…)"*

[9] *"(…) there should be no obstacles to the emergence of applications or technologies which can be a substitute for, or alternative to, roaming services, such as WiFi, Voice over Internet Protocol (VoIP) and Instant Messaging services."*
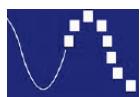
More recently, she stated in a speech at the ARCEP Net Neutrality Conference that: "*Every player on the value chain should be free to fairly position themselves to offer the best possible service to their customers or end users. Any commercial or traffic management practice that does not follow objective and even-handed criteria, applicable to all comparable services, is potentially discriminatory in character. Discrimination against undesired competitors (for instance, those providing Voice over the Internet services) should not be allowed*".[10]

**VON Europe therefore disagrees with BEREC's draft conclusions as regards the lack of need to intervene in this matter and believes there is a need for BEREC to work in close cooperation with the Commission and take the following steps:**

- First, BEREC and the Commission should explicitly confirm the widely-accepted principles that end-users have the right to send and receive the content of their choice, and access and use the content, applications, and services of their choosing, and to connect hardware and use software of their choice that do not harm the network.

- Second, BEREC and the Commission should encourage NRAs to adopt a transparency standard requiring ISPs to provide all end-users (i.e. individual users including consumers, but also service/content/application providers including the media and cultural industries and Government at all levels) with clear, precise, and relevant information on any restrictions on the services, applications and content that can be accessed through their ISP, the traffic management practices employed on the networks, and any quality of service limitations.

- Third, BEREC and the Commission should set a behavioural standard intended to prohibit ISP discrimination that is anticompetitive, creates barriers to innovation (including by providers of services/applications/content and consumers), or harms end-users and consumers, and it should bar ISP conduct that violates the other core, open Internet principles of user choice (see our first bullet point). ISPs may face some technical challenges to manage network congestion and support various online applications.

- Fourth, BEREC and the Commission should ensure that Member states adopt an enforcement mechanism that would handle complaints from all end users (i.e. individual users including consumers, but also service/content/application providers including the media and cultural industries and Government at all levels) on a timely "case-by-case" basis to determine whether an ISP has violated the principles adopted by the regulator, including whether an ISP's discrimination is anticompetitive, creates barriers to innovation, or harms end-users.

- Fifth, VON believes that BEREC and the Commission should state explicitly that discriminating against VoIP services and applications is not seen as legitimate given that these services and applications do not consume substantial network resources and function today on fixed and mobile broadband access networks around the world (in the areas where they are technically and contractually unrestricted).

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[10] See http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/10/153
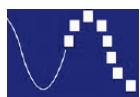
### 2. Transparency and QoS

*BEREC*

*"A harmonised approach towards transparency obligations is favourable. BEREC could issue guidelines on this"* (see point 4.2)

*"Quality of Service requirements: The Regulatory Framework introduces the competence for NRAs to set minimum requirements. What is meant by it? When should NRAs set minimum requirements and what should those be? Internet services are offered on an international scale. Therefore a harmonised approach towards minimum requirements is not only favourable, but necessary to avoid creating inefficiencies for operators, that have to be compensated by consumers."* (see point 4.2)

*VON Europe*

On the topic of Quality of Service (QoS) requirements, VON Europe remarks that network-independent providers, such as its members, have been advocating for open access to the Internet, including the imposition of minimum QoS at the network layer if abusive practices are observed, because we have no control over the network and therefore depend on the good behaviour of network operators.

For VoIP, speeds need to be effective enough as to not be a detriment to the quality of service and latency is also an important factor to consider. It is therefore crucial that packet shaping and data transfer management do not arbitrarily hamper data in any way, as this leads to an unsatisfactory consumer experienceand will damage the companies that provide these services over broadband.

**Hence VON Europe endorses BEREC's comments regarding transparency and QoS in its response to the European Commissions' recent consultation on the open Internet and net neutrality in Europe.**

> *"Transparency is a key pre-condition in minimising the risk of anti-competitive discrimination and the downgrading of the best effort Internet in favour of managed services. The application of traffic management techniques must be made transparent to consumers. Consumers may not be able to detect the actual application of discriminating traffic management techniques and find it difficult to distinguish between the effects of traffic management techniques on quality of service from the effects of other quality degrading factors. (…) Even if operators/ISPs are required to declare which traffic management techniques and policies are being used, consumers may find it difficult to act upon such information if it is presented in a highly technical way which does not explain the „real world' effects. Thus, it will be important to monitor the effectiveness of transparency and quality of service."* (BEREC, 2010, p. 6)

However, if transparency is a key element, it is only one part of the equation, given that markets which are seen by European regulators as being competitive (the fixed mobile retail Internet access markets) do not in fact exhibit dynamics leading to unrestricted access to the Internet, with a particularly critical situation in certain countries where ALL mobile network operators have taken contractual measures and perhaps technical measures as well to prevent or severely discourage the use of VoIP. Transparency informs you of the deal you get as a user, but if that deal is the only one on the market as all or most access operators mirror each other's behaviour, transparency does not lead to choice, and certainly not to unrestricted
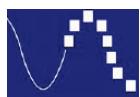
Internet access – which is the end-goal that motivated the introduction of transparency provisions on traffic management and access limitations in the revised EU Electronic Communications Framework.

**In other words, transparency on its own is just not enough.**

**VON Europe therefore encourages BEREC to harmonize the efforts in upholding Recital 34 of the Universal Service Directive (USD) (2009/136/EC):** *"National regulatory authorities should be empowered to take action to address degradation of service, including the hindering or slowing down of traffic, to the detriment of consumers"* **and use the powers put in place under Art 22 par 3** of the USD which stipulates that *"In order to <u>prevent</u> the degradation of service and the hindering or slowing down of traffic over networks, Member States shall ensure that national regulatory authorities are able to set minimum quality of service requirements on an undertaking or undertakings providing public communications networks."* The use of "prevent" indicates that any action undertaken by BEREC or the Commission should occur ex ante rather than ex post,. It is important to note again in this perspective, that blocking, degradation and other hindrances to services, applications and content are already widespread as set out in our comments to Section 4.1. Where there is such evidence of harm, intervention is therefore warranted TODAY, in the form of the imposition of minimum quality of service, whereby an end-user should always be able to access the best efforts, global public Internet, whichever other services they may also be subscribing to.

In setting such minimum quality of service requirements, BEREC or the Commission will have to take into account the fact that the online ecosystem is complex and multi-dimensional. Enforcement of open Internet policies and regulations will therefore require leveraging the deep technical expertise within the regulators and creating a process for gathering input and data from outside experts. BEREC (and/or individual NRAs) and the Commission should convene a technical advisory group – with industry participants (service/content/application providers and ISPs) operating across the EU, and other relevant stakeholders -- as a means of receiving expert input to help inform reasoned decision-making about what forms of discrimination may be anticompetitive or harm end users and consumers, create barriers to innovation (including by providers of services/applications/content and consumers), and what "best practices" should be put forward. Industry experts can provide BEREC, the Commission and NRAs with valuable information on network management practices and developments in network infrastructure and technology, and what constitutes minimum quality of service and/or a 'functional Internet access', as provided for in EU legislation.

Moreover, NRAs should improve consumer switching significantly, as this remains a major hindrance to both consumers and their ability to effect choice.

### C. Spectrum Management (point 4.3 of the WP)

***BEREC***

*"BEREC from its economical expertise will continue to analyse the impact of fixed-mobile convergence, complementarity and potential substitution and its effects on fixed and mobile communications markets in terms of voice and broadband, in order to assist NRAs in their next round of market analysis. In addition it may deliver insights for spectrum management policies."* (see point 4.3)
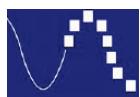
*VON Europe*

On the subject of BEREC's aim in delivering insights for spectrum management policies (see point 4.3), VON Europe would like to point out that radio spectrum:

- Is recognised as an increasingly important link in the delivery of broadband network access, especially to areas that might otherwise be underserved; and,
- Can support a multiplicity of technical solutions, which makes it an optimal tool for enabling many advanced and innovative electronic communications and information society services.

Full utilisation of spectrum (and preferably harmonised utilisation across Europe) will therefore be critical to the achievement of the objectives of the European Digital Agenda. To achieve this we believe that the introduction of more licence-exempt spectrum and spectrum trading represents the best approach to increase efficiencies in the management of spectrum. The switchover to digital television and the subsequent management of the digital dividend provides a particularly opportune moment for the introduction of a harmonised policy on spectrum management and the adoption of rules that permit the most efficient use of unused spectrum in the allocated spectrum for TV broadcasting in particular.

**VON Europe considers that BEREC should examine the increasing opportunities for unlicensed devices and innovative spectrum access models, making a maximum of spectrum available for broadband and improving the transparency of spectrum allocation and utilisation. Besides the often stated Digital Dividend, there are huge parts of the spectrum that remain rarely used (defence for example does only need certain bands at specific times in specific locations). Governments have significant tools at their disposal in the form of increasing the effective and efficient use of spectrum and BEREC could help by identifying these tools.**

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We thank you in advance for taking consideration of these views. Feel free to contact Caroline De Cock, Executive Director VON Europe, by phone (+ 32 (0)474 840515) or email (cdc@voneurope.eu ) should you need further information.

**About 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 – iBasis, Google, Microsoft, Skype and Voxbone – to create an authoritative voice for the Internet-enabled communications industry.

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