

Comments on Proposed CRA/RRT Guidelines to VOIP Service Providers

The Voice on the Net Coalition Europe (“VON”) welcomes the opportunity to comment on CRA/RRT’s “proposed “Guidelines to VOIP Service Providers”.

Question # 1:

a) Are you (are you planning to become) a provider of “Do It Yourself” service?

If your answer to section (a) is “yes”, provide more information (or a link to the information) about provided (or planned) “Do It Yourself” services.

b) What is your view on the possibilities of “Do It Yourself” services to compete with traditional public telecommunication services?

c) If you are not (are not going to) providing “Do It Yourself” service, how will the growing popularity of “Do It Yourself” service affect your business?

Question #2

a) Are you (are you going to become) a provider of VoIP services, provided independently from broadband network access?

If the answer to part (a) is “yes”, give more information (or a link to the information) about provided (or planned) services, disconnected from broadband network access.

b) What is your assessment of the possibilities of VoIP services that are provided independently from broadband network access, to compete with traditional public telecommunication services?

Question #3

a) Are you (are you planning to become) a provider of VoIP services together with broadband network access?

If the answer to part (a) of question # 3 is “yes”, give more information (or a link to the information) about provided (or planned to provide) services.

b) What is your assessment of the possibilities of VoIP services that are provided together with broadband network access, to compete with traditional public telecommunication services?

Question #4

Do you agree that the main technological models for providing VoIP service are discussed in Section 4.1?

If your answer is “no”, comment more, specifying the way this list should be made, and what models should be excluded (included), and why.

VON Europe consists of leading VoIP companies on the cutting edge of developing and delivering voice-enabled innovations over Internet. The coalition, which includes iBasis, Intel, Google, Microsoft, Rebtel, Skype and Voxtel, works to advance regulatory policies that enable Europeans to take advantage of the full promise and potential of VoIP. The Coalition believes that with the right public policies, Internet based voice advances can make talking more affordable, businesses more productive, jobs more plentiful, the Internet more valuable, and Europeans more safe and secure.

More information on VON Europe can be found at www.voneurope.eu

As a representative association of the industry including members that have integrated VoIP in multiple and innovative ways in services or applications offered over the Internet, VON prefers to



answer jointly to questions 1 to 4 and to share with the CRA/RRT some more generic but vital thoughts on the issue of “competition” between different types of utilisation of VoIP technology and “traditional telecommunications services”.

VoIP services do not exist, as copper services do not exist: VoIP-enabled applications, websites, hardware and services, however, are changing the way we work and live!

VON Europe is concerned by the lack of consistency across Europe in the use of terminology pertaining to Voice over IP. We believe that this is partially the reason why we see so little harmonization occurring in this area and misconceptions over the information society market taken in its broadest sense.

VoIP refers to a protocol (the Internet Protocol) used to convey voice.

Voice on the Net (also referred to as “Voice over Internet”) is one of the applications using the VoIP or similar technology that allows voice communications over the Internet. It refers to the specific case where an application or service is available through the Internet, allowing users to have voice communications over the Internet. **The essential characteristic of Voice on the Net is that the provider has no control over the network** used to carry that communication, neither in terms of the reliability of that network, nor in terms of the IP address allocated to the users of that network. Moreover, Voice on the Net does not necessarily connect with the public telephone network (for example, PC-to-PC or peer-to-peer applications and services). It is therefore different from a VoIP service offered by an access operator (incumbent telecoms operator, cable company or alternative market player) where the access operator has control over the network the voice communication runs over (often referred to as “Voice over Broadband”).

What impact is VoIP having and could it continue having if regulators intervene as enablers?

Voice over Internet Protocol (VoIP) technologies can be a platform for innovation, a driver for broadband deployment, and a vehicle for continued economic growth. In fact, with the right policies VoIP can save European consumers (and businesses) billions over the next years – getting real money back to consumers at a time when families really need it.

And the best is yet to come. Some of the most exciting Internet developments for consumers come from applications that move beyond basic voice to put consumers in charge of their own communications and open the door for an entirely new genre of communications possibilities. By integrating voice with the Internet, voice is just another application riding on data networks. It is being integrated into web sites, social networking communities, instant messaging software, blogs, mapping programs, office productivity suites, CRM software, voice recognition applications, and is likely to be used tomorrow in ways we can’t even imagine today.

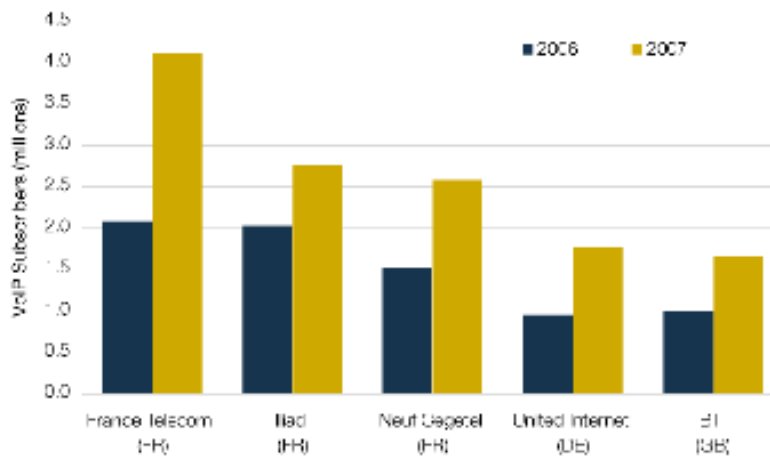
In our responses to Questions 6, 8, 9 and 11, we provide some of the key elements that need to be put in place by regulators if they wish to enable these innovations in a pragmatic manner.



VoIP and competition with traditional public telecommunications services

A Telegeography report of September 2008 demonstrates that, whilst **VoIP traffic** has undergone a boost over the last two years (the number of consumer VoIP subscribers having gone from 15 million in 2006 to 25.3 million at year-end 2007), **this traffic stems for over 94% from traditional network operators**, namely incumbent operators, alternative DSL providers and cable companies. In other terms, 94% of VoIP traffic is at present offered by access operators that are already covered under the existing definition of PATS (Publicly Available Telephone Services) or “VTRP” and comply with the ensuing obligations, as they are in control of the network over which the VoIP traffic in question flows.

Top Five European VoIP Providers, 2006-2007



Source: TeleGeography Research

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In other words:

- VoIP, as a technology, is increasingly used by “traditional public telecommunications service providers”.
- Voice on the Net represents a negligible amount of traffic using VoIP protocol in terms of volume, even if it is true that the “free” or extremely cheap nature of these offerings deliver huge benefits to consumers.

Moreover, from a consumer perspective, Voice on the Net is largely not perceived as a replacement to traditional phones but as an additional tool enabling communications. The myth that consumers get rid of their fixed lines to replace them with VoIP enabled applications seems to ignore the fact that the main driver behind the decrease in fixed voice line penetration in the world is the astounding mobile penetration boom that occurred over the last ten years, and reflects the need for mobility consumers and businesses have.



Question #5

Do you agree with the conclusion that VoIP services that allow initiating and accepting calls from (to) public switched telecommunication, should be considered VTRP?

If your answer is “No”, provide a broader comment.

Question #6

Do you agree with the conclusion that VoIP services provided in Lithuania should be classified as specified in Table 1 (section 4.3)?

If your answer is “No”, give a broader comment.

VON is concerned that the inaccurate uses of the term “VoIP” are leading to the unintended and unnecessary extension of telecommunications regulation to Internet-based services and applications across the EU, which are very different from traditional telecommunications services.

Guidance from national regulators, such as the CRA/RRT Guidelines, represent an important opportunity to clarify the scope of regulation applying to VoIP.

VON agrees that VoIP covers a very broad reality that includes many different applications and services which may justify a differentiated treatment. Consumers have different expectations about different categories of VoIP, which means that different regulatory obligations may have to be envisaged. We acknowledge that the classification of services in Table 1 aims to identify some of these differences.

However Table 1 fails to take into account that some applications, services and hardware that use VoIP (e.g. website click-to-call services, Internet-based voicemail and IVR services, applications downloaded by users allowing calls to traditional phone numbers) may make calls to telephone numbers (and therefore would fall within Category 2 or 3) but are not sufficiently similar to “electronic communications services” that they need to be subject to regulation.

A clear statement that Internet-based interfaces which enable communications by offering applications or services to end users, without offering network access or Internet connectivity, are outside the “electronic communications service” definition under Lithuanian law will have the following benefits:

- ensure that innovative Internet-based services and applications are available to Lithuanian consumers and businesses,
- give providers greater clarity about their regulatory obligations and lower the costs for new entrants,
- encourage more companies to develop and locate Internet-based services in Lithuania rather than choosing other European countries with more receptive regulatory approaches, and
- foster greater interaction among citizens through new forms of communication and collaboration enabled by the web, which will benefit society by providing new opportunities for facilitating creativity, stimulating innovation and building communities.



In other words, Internet-based services, which includes Category 1 services (such as services using PC-to-PC VoIP) and some network-independent Category 2 or 3 services that may use telephone numbers (for example, those provided to end users through a click-to-call button on a web page) but are very different from traditional telephony services, should clearly be classified **outside** the “Electronic Communications Service” definition.

VON would like to further point out that in terms of numbering, the Regulatory Framework sets a *de minimis* rule whereby numbers should be allocated **at least** to ECS/ERP, without precluding the allocation of numbers to non-ECS/ERP. This is set out under Art. 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.”

Recital 14 of the Authorisation Directive (2002/20/EC) also clarifies that “(14) Member States are neither obliged to grant nor prevented from granting rights to use numbers from the national numbering plan or rights to install facilities to undertakings other than providers of electronic communications networks or services.”

Finally, the flexibility given to NRAs appears even more clearly when analyzing the guidance provided by the European Commission in the Information and Consultation Document of 14 June 2004 on the treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework, which states in Section 7.1 that:

“Any undertaking providing **or using** electronic communication networks or services has the right to use numbers”. [...]

The CRA/RRT should therefore take on board this clear encouragement by the European Commission to adopt a more flexible and open approach to numbering, in the interest of developing offerings with global reach.

Only those electronic communications services that have the ability to originate and terminate calls to the public telephone network, and are marketed as substitutes for telephony services, should be subject to the PATS/VTRP classification¹.

¹ It must be noted that under the current Regulatory Framework, PATS/VTRP classification also implies that the ECS/ERP provides emergency calling.



Question #7

Do you agree that services provided based on the “Do it Yourself” technological model described in section 4.1.1 and can be assigned to the 1st category, should not be regarded as ERP?

If your answer is “No”, comment on it more.

Yes: VON Europe fully agrees with this statement. We would also like to encourage CRA/RRT to integrate the very accurate analysis done by Ficora on this issue and referred to in the CRA/RRT guidelines under footnote 37, pg. 13.

It should be noted that many examples of the “Do it yourself” model do not involve the provision of a service at all and strictly speaking should not be considered a Category 1 VoIP “service” as only a software application is being provided. Nevertheless, we agree with CRA/RRT’s assessment that “Do it yourself” products are not ECS/ERP.

Question #8

Do you agree that one-directional VoIP service that allows an option to initiate or accept calls from (to) PSTN, should be considered VTRP?

If your answer is “No”, provide a broader comment.

No. VON urges the CRA/RRT to only consider bi-directional VoIP services that enable calls to and from the PSTN, and that are marketed as replacement services for traditional telephony as possibly fitting under the PATS/VTRP definition.²

The creative use of IP technologies, such as VoIP, and the increased availability of broadband Internet access have resulted in a variety of new products, services and applications that include communications features. These are not marketed or viewed as replacements for PATS/VTRP and should fall **outside** of this definition. The following are examples of some of these innovative offerings:

- One-way VoIP services and applications – using a PC, mobile phone or another device with an Internet connection to either make calls to national numbering plan numbers (outbound-only service) or receive calls from national numbering plan numbers (inbound-only service).
- Click-to-call services – adding a feature to a website to permit a call to a customer support help desk or a product information line, or to a software application like a personal information manager or contacts database that permits a pre-programmed PSTN number to be called.

² It must be noted that under the current Regulatory Framework, PATS/VTRP classification also implies that the ECS/ERP provides emergency calling.



- Interactive voice response systems (IVR) – enabling a business to use VoIP to offer telephone access to voice-activated automated customer service, reservations, and product information systems containing stored content.
- Software applications that include online communications functions, such as online games with VoIP and chat, and virtual worlds.
- Internet-based voicemail systems – these systems store voicemail messages from voice or VoIP calls. The user may access the voicemail message at a website or via email or SMS. The voicemail service does not include PATS offering.

How the ECS/ERP and PATS/VTRP definitions are interpreted in practice determines how broadly telecommunications regulations will be applied to new, innovative offerings.

These definitions are intended to cover traditional fixed-line and mobile telephony services as well as the provision of leased lines, switching facilities, wholesale call termination, terrestrial broadcasting and satellite transmission. For example, inbound services (type 2) and outbound services (type 3) with connectivity to the PSTN offered by providers may, in certain cases, meet the definition of “Electronic Communications Services (ECS/ERP)”.

However, most Internet-based applications with *ancillary*³ communications features should be considered outside the ECS/ERP and the VTRP/PATS definitions for the following reasons:

- **Internet-based providers do not offer customers connections to the Internet or other network access.** Users must obtain their own Internet access to use the offerings.
- **Third parties are responsible for message transport.** Internet-based providers rely on existing Internet connections provided by ISPs or carriers. Their applications/features travel on top of Internet connections and sit on the edge of the Internet cloud rather than being part of access or core networks. Within the OSI Reference Model, these operate at the application layer rather than at the network layer.
- **Offerings are Not Marketed as PATS/VTRP Replacements:** Many of the Internet-based VoIP offerings are *ancillary* to another feature – instant messaging, search, online gaming, website owner’s customer service – and are not intended as ECS/ERP or PATS/VTRP substitutes. Further, consumers typically retain their existing mobile or landline services even when they use Voice on the Net solutions. ECS and PATS related obligations should only apply if the service offers a complete transport service that is equivalent to traditional telephony services.

VON strongly suggests that Internet-based services and applications, including those with VoIP, which enable communications but without offering Internet connectivity to customers should usually be classified as “information society services” under the Regulatory Framework as they are more closely related to online content portals and e-commerce websites, which are considered information society services.

³ By *ancillary* we refer to services and applications where PSTN connectivity is an enabler used to offer an ad hoc Voice application, e.g. instant messaging, click-to-call customer service buttons, but where connectivity is not a main feature.



Question #9

a) Do you agree that VoIP services, attributable to category 4, have the same features as PSTN, and therefore are attributable to PSTN, and should be regulated the same way as PSTN?

If your answer is “No”, provide more comments on it.

b) Is, in your opinion, control of VoIP user service access important, when considering certain services to be PSTN?

Give more comments on your answer.

VON agrees in part with the statement in sub (a) of question 9, and will clarify this below in light of the sub (b) suggestion included in this question.

VON Europe believes that the manner in which the use by different market players of VoIP protocol or equivalent technologies is categorized should be based on the following parameters:

1. Does the provider have control of the underlying infrastructure or not? Absence of control means absence of possibility to guarantee reliability of the communication (broadband down, computer crashed, power out, etc) and absence of control on the location of the end-user. It is therefore critical for any form of regulation to encompass this dimension.
2. For the reasons given above in our answer to Question 8, most Internet-based services and applications with communications features would not be considered sufficiently similar to traditional electronic communications services. However, where Internet-based services have the ability to originate and terminate calls from and to the public telephone network and are marketed as substitutes for telephony services, it may be appropriate to make such offerings regulated as ECS/ERP, and ultimately where appropriate, PATS/VTRP services. This is an appropriate outcome given the rationale for communications regulation. Sector-specific regulation should only be used to protect against sector-specific problems that are not addressed by other regulations. The main purpose of the Electronic Communications Regulatory Framework is to deal with anti-competitive issues in the telecoms sector and to protect consumers and businesses with respect to telecoms services they purchase. Internet-based services present no particular competition issues to justify the application of the competition-related aspects of the Regulatory Framework. In addition, other consumer protection laws, such as those arising from the E-Commerce and Data Protection Directives, already provide protections for users of information society services.

VON Europe therefore urges the CRA/RRT to exclude Internet-based services and applications with communications features from the ECS/ERP definition unless they are clear substitutes for telephony and other full transport services.



Explicit mention should be made that the following products, services and applications are **outside** the scope of ECS/ERP regulation (and thus even more out of the scope of the VTRP/PATS classification):

- one-way VoIP calling, when it consists in an application that is independent from the underlying network that voice traffic run(s) over. This does not cover inbound one-way VoIP services which, under current practice in certain in EU Member States, are required to be classified as ECS/ERP to benefit from the access to numbers. We refer you to our answer to Questions 5 and 6 as regards our views on this approach.
- click-to-call features in websites and software applications,
- web-hosted email,
- web VoIP/video conferencing,
- instant messaging and management of presence information,
- interactive voice response (IVR) services and other services using VoIP to access stored content,
- online gaming, including VoIP audio and text chat features,
- virtual worlds, and
- Internet-based voicemail services.

VON believes that many Internet-based services and applications bring great innovations and benefits to consumers. The publication of these Guidelines is an opportunity for CRA/RRT to ensure that these innovations and benefits are available in the years to come.

We acknowledge that it may be appropriate for Category 4 services to be subject to PATS/VTRP regulations if those services are also marketed by VoIP providers as substitutes for traditional PATS/VTRP services. However, it is not appropriate to require Category 4 services that are nomadic or network-independent to provide information on a user's location (such as when providing access to 112 services) due to technical infeasibility. Moreover, other legacy PATS/VTRP obligations that apply to fixed and mobile network operators – including but not limited to network reliability, tariffs, etc. - should not be applied to VoIP providers that either have no network, or no longer make sense in a competitive environment with multiple providers.

Question #10

Would, in your opinion, the list of data required to be reported in the quarterly report be enough to monitor the activities of VoIP providers?

If your answer is “No”, provide more comments on it.

The compliance with existing and new technical and regulatory requirements adds complexity to any business and represents an unnecessary cost.



If one of the key principles for the CRA is to promote competition of innovative carrier, application and content services, the CRA should aim to reduce the barriers to entry rather than to create additional regulatory obstacles. Reporting conditions are amongst those requirements where the CRA should aim for a balanced approach between its responsibility to monitor the market (economic regulation and consumer protection) and the objective to reduce (or at least not create additional) barriers to entry. Whilst simplified reporting may be needed to allow the CRA to monitor evolutions on the market, (too) detailed reporting obligations and formats inconsistent with other EU member states may discourage new businesses to invest in the country and/or to enter the Lithuanian market.

Question #11

In your opinion, should separate telecommunication numbers be assigned to nomadic VoIP services in the National Telecommunication Numbering Plan?

Please explain your answer.

No.

Numbers, including geographic numbers, should be eligible to be allocated to any provider or user, including those falling under the ECS/ERP definitions and should be eligible to be used by end users outside of the traditional telephone zones or other boundaries, including on a trans-national basis.

VON 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 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 Member State.

VON Europe therefore urges the CRA to ensure that:

- All VoIP providers and users (fixed or nomadic), in particular but not exclusively those falling under the ECS/ERP classification, have a full and unconditional access to both geographic and non-geographic numbers in order to enable new innovative services and applications to be offered to businesses and consumers;
- Mobile and fixed access operators are prohibited from restricting access for their end users to VoIP services and applications, be it through the use of discriminatory practices (in terms of operational access and end-user tariffs) or even simply through the blocking of VoIP services or applications on either their network or the devices connecting to their network, regardless of the numbering range allocated to those services;
- Access to those numbers be unrestricted cross-border, as is the case in countries such as Denmark, Estonia, and the UK amongst others, to the benefit of thousands of consumers and businesses.



- The duration between the application for a number range and the actual allocation be streamlined to be as short as possible, as is the case for example in the UK, where the gap between requesting and obtaining numbers is two days.

Question #12

In your opinion, is it expedient to establish separate quality requirements (QuS) for VoIP services?

If you answer “yes”, please explain why.

VoIP QuS (also known as “Quality of Service” or “QoS”) requirements are not necessary. First, network independent VoIP providers’ offerings cannot ensure QuS because the underlying network operators can take actions, such as filtering, bandwidth shaping, or QuS management that impact VoIP flowing over their networks, and because user equipment (e.g. PC malfunction, malware, error in manipulation) can affect QuS. Second, market forces will ensure that VoIP providers provide offerings that consumers want. If quality of service is poor for a particular VoIP provider, a consumer can easily and quickly switch to another provider.

So, as a general principle, if there is an Internet component, then “best efforts” is the only technically feasible approach. The global public Internet is a network of networks characterised by end-to-end connectivity and the prevailing principle is one of “best efforts”.

However, network-independent providers, including some VON 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.

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.

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ABOUT the VON Coalition Europe

The Voice on the Net (VON) Coalition Europe was launched in December 2007 by seven leading Internet communications and technology companies, on the cutting edge – iBasis, Intel, Google, Microsoft, Rebtel, 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.