VOXBONE
The inbound VoIP Provider

European Regulators Group
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ERG Consultation on VoIP

Dear Madam, Sir,

Voxbone welcomes the opportunity to respond to ERG's consultation on voice over IP.

You will find Voxbone's response in attachment to this letter.

Yours sincerely,

Rodrigue Ullens de Schooten,
CEO

Attachment: Voxbone response to ERG consultation

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Voxbone Response to ERG consultation on VoIP

1. Summary

Voxbone welcomes the ERG's initiative to introduce a common framework that ensures that voice services will be dealt with in a harmonized way regardless of the technology used. Although the 2005 set of rules was also aimed to harmonize the various regulations across member states, it is fair to conclude that the current regulatory regime in the EU is far from harmonized with regard to the regulation of voice services. As the ERG rightly pointed out, a lack of harmonization risks hampering investments and consumer welfare.

In its response, Voxbone has concentrated on the following areas:

- Classification of services
- Access to emergency services
- Access to numbering resources
- Number portability
- Wire tapping.

Voxbone advocates an approach that recognizes voice as just one application using the Internet Protocol in addition to many other applications. It invites the ERG to review the current provider categorization (ECS, PATS, mobile), to re-assess the service categorization proposed in the consultation document and to determine appropriate regulatory requirements that are aligned with each type of service (as proposed by Voxbone below).

Consumer regulation must be technology neutral and must be targeted at all communication providers that provide services to end users (whether they qualify under the current regime as 'VoIP', 'ECS', 'PATS' or 'mobile' operators). Wholesale service providers must only meet those requirements which are not directly related to end users.

2. Classification of services

Voxbone advocates an approach that recognizes voice as just one application using the Internet Protocol in addition to many other applications. VoIP uses the Internet Protocol, the data networking technology that also underpins the public Internet. Today, voice over IP comes in many flavours and only some of them closely resemble the traditional PSTN service from the point of view of the end user.

Many of today's offerings embed IP voice and may be labeled as VoIP: messenger services such as MSN, Yahoo! and Skype allow members of the community to exchange not only text messages, but also voice and video communications. Voice features may also be embedded in online games and virtual worlds such as Second Life. Consumers can buy multi-media equipment that allows the user to make voice communications over a wireless network connection to the Internet. The most recent game consoles like X-Box and Playstation also support making real-time voice communications when users are gaming online through their

broadband connection. Nevertheless, the voice feature embedded in these products or offerings can hardly qualify as a “public telephony service” in the traditional PSTN world.

Voxbone agrees to a large extent that a distinction should be made between various types of voice services. However, Voxbone does not support a generic “one fits all” solution for the purpose of harmonizing the regulatory regime in various member states. Although most services may qualify as “telephony services” in general (in the sense of the definition used by the ERG) Voxbone believes that various regulations should apply to various services. The regulatory regime should be different depending on the type of voice service provided to the end user. A key consideration should be a distinction between services which are primary line substitutes and those which are not.

The distinction between Voice over Broadband (VoB) and Voice over Internet (VoI) is obvious. Whilst VoB is basically provided by incumbent operators and new entrants as a direct substitute/replacement of the traditional circuit switched PATS, many other new voice services or features do not qualify as such. Such new applications are being launched today on the market and are in full evolution. Although all of these new applications are in the ERG paper called VoI, they can come in as many forms and features as possible: in- or outbound, one-way or two-way, with or without E.164 numbers, real-time or non-real time, as complementary feature in other products or applications or as stand alone. What is common for these VoI applications is that many of them are not intended by the service provider as being substitutes for traditional PATS and also not perceived by the consumer as such.

Therefore, Voxbone invites the ERG to review the current provider categorization (ECS, PATS, mobile), to re-assess the service categorization proposed in the consultation document and to determine appropriate regulatory requirements that are aligned with each type of service (as proposed by Voxbone below).

Voxbone proposes the following classification:

1. **Service 1 - PTP**: A service where E.164 numbers are not provided and from which there is no access to or from the PSTN.
2. **Service 2 – Outbound voice**: A service where there is outgoing access only (to the PSTN, as well as to other networks, as chosen by the end user) and E.164 numbers are not provided;
3. **Service 3 – Inbound voice**: A service where there is incoming access only (from the PSTN, mobile networks or via IP) and E.164 numbers are provided. A Service 3 does not provide outbound calls (whether to the PSTN, mobile or otherwise).
4. **Service 4 – voice telephony**: A service where there is incoming and outgoing access to the PSTN and E.164 numbers are provided. This type of service should include traditional ‘PATS’ and other services which can generally be regarded as a substitute for ‘PATS’. Most VoB offerings will qualify as Service 4 as VoB providers provide a VoIP service with a broadband service over their network that will substitute a traditional PATS.

In addition, Voxbone also advises to make a distinction between services provided on wholesale level (between service providers and operators) and services provided on retail

level (to the end user). Consumer regulation (such as right to number portability, directory listing, tariff transparency) must be technology neutral and must be targeted at all communication providers that provide services to end users, whether they are VoIP, ECS, PATS or mobile operators.

Voxbone fully agrees that consumers should be informed about the range of services on offer, features associated with such services and potential usage restrictions. Nevertheless, Voxbone has the impression that there is a tendency or risk for overregulation when it comes to VoIP. Today, PSTN and mobile providers in most member states are not required to inform their customer about the consequences of power outages and loss of service (eg power failure with DECT phone or battery issue with mobile handset), or, in the case of mobile operators, inability to make a 112 call in areas where there is no or limited network coverage (eg in rural areas or in buildings which may represent a serious issue for a mobile customer who replaced his fixed line by a mobile service).

Voxbone believes that the above mentioned classification will allow to overcome the issues with the 'PATS' definition under the existing regime such as the circularity issue (page 26). Today, the mere offering of 112 access classifies a provider as PATS and triggers the regulation to comply with all PATS obligations.

3. Access to emergency services and location information

3.1 Access to emergency services

Voxbone is concerned that the ERG's position is highly confusing for end users as it may create false expectations. In Voxbone's view mandating access to emergency services, appropriate routing to emergency centers and provision of proper location information (if at all technically feasible which Voxbone believes is not the case today), is inappropriate whilst many service providers operating on a worldwide basis would not have the same obligation. By imposing upon such requirement, end users will have a genuine believe that all service providers (not only VoIP providers) will be able to provide such access at all times without restrictions. Obviously, such expectation will not match the actual situation, and as such the outcome will not only be highly confusing for the end user but is far worse than what is happening today.

As a second best solution, Voxbone supports the position of a mandatory access to emergency services on a 'best efforts' basis for Service 2 (outbound voice) and Service 4 (voice telephony). As Service 1 is in many respects not considered as being a substitute for PATS, access to emergency services should not be mandatory. A Service 3 provider only provides to the customer an inbound voice service (eg a 'toll free' service to enable callers to call the customer for free), it is not capable of managing the outgoing traffic from the end users line and therefore should not be required to provide access to emergency services.

Voxbone recommends that Service 2 and Service 4 providers should continue not to provide access to emergency services, or if they wish, to be allowed to offer emergency access on a best efforts basis. A mandatory obligation mandated as an end result obligation will by highly

confusing and detrimental for the end user, and will deter many VoIP operators to enter these service categories which in the end will impede enhancing competition.

On the other hand, consumers should be properly informed of any limitation in service. This should not only be the case for VoIP providers, but also for operators that provide teleworking services to customers, call forwarding of traffic from various locations over one single PRA (where only one CLI will be transmitted to the called party), or mobile services.

Voxbone urges the ERG to explicitly state that Service 1 and Service 3 providers are not required to provide access to emergency services rather than creating confusion by stating on the one hand that 'the possibility to access emergency telephone numbers is foreseen as a right of all citizens' but on the other hand also confirming that 'only service categories 2 and 4 are considered' in section 3 of the consultation document.

3.2 Proper routing

Voxbone supports ERG's pragmatic approach in that it is better for a consumer that a 112 call terminates at some point (even if this point is not the proper emergency service) rather than not at all.

It seems though essential that also the proper routing of emergency call should be no more than a 'best efforts' obligation for the provider. Flagging the nomadic status of the service in the database of registered addresses to prompt the emergency call handler to verify the caller's location may not be suitable in all cases, in particular when the caller is calling from a country which is not his home country. A pop-up interface to enable the user to update his location may not be user friendly (because too complicated or time consuming) which will discourage users to either buy a nomadic service or encourage some others to look for by-passes. In that event, the user should be free to opt in or out.

3.3 Location information

Obviously, there is a clear policy reason in favour of ensuring that location information is available to the emergency services when an end user calls the 112 services through VoIP. It may only be appropriate to require all Service 2 and Service 4 providers to provide location information to the extent that such information is reliable and accurate so that emergency services will be able to locate the caller.

Again, consumers should be properly informed of any limitation in providing accurate location information service provided that such regulation is provided for in a technological neutral way. As a matter of fact, issues with regard to accurate location information of the calling party are not connected to VoIP only, but also rise with teleworking services to customers, call forwarding of traffic from various customer sites over one single PRA (where only one CLI will be transmitted to the called party), or mobile services (accuracy of cell information).

4. Access to numbering resources

The new revised regulatory framework should take into account new market trends and undeniable evolutions on a worldwide basis. Throughout the years, Voxbone detected a clear demand from end-users (both individual consumers and enterprise customers), for:

- allocation of all types of numbers to providers electronic communications networks or services; and

- allocation of numbers, including geographic numbers, outside of the traditional telephone zones or other boundaries, including on a trans-national basis within the EU.

4.1 Availability of numbers

As stated in the "ERG Common Statement for VoIP regulatory approaches ERG (05) 12", although VoIP services can use addresses in several forms (SIP URIs, E.164 numbers, etc), E.164 numbers continue to be essential for any kind of voice service as they are needed to receive calls from traditional telephony services, or to reach subscribers to a PATS network.

Voxbone agrees with ERG that "numbering plans should be technologically neutral, based on the service descriptions and the same number ranges should in principle be available for both traditional voice and VoIP services".

Any other conclusion would not be in accordance with the principles set forth in article 10 of the Framework Directive, as well as with the conclusion of the "ERG Common Statement for VoIP regulatory approaches ERG (05) 12".

The type of numbers that should be made available to Service 3 and Service 4 providers, is discussed in section 4.2.

4.2 Type of numbers

If the ERG aims to enhance competition on the supply side and to encourage the EU citizens to migrate to new innovative services on the demand side, tariff transparency is crucial. In particular, it is of utmost importance that the tariff for the calling party to call a nomadic service should not exceed the tariff of a regular local or national call.

Therefore, Voxbone supports the ERG's view that geographical numbers are most suitable to open up VoIP services to the mass consumers as 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). It invites the ERG to (give guidance to) authorise any kind of provider to be assigned and use geographical numbers. Voxbone is, however, concerned that if the ERG, as it concludes, would continue to allow member states from maintaining the geographical meaning of geographical numbers (eg by requiring that a geographical number may only be allocated to a user with main location in the corresponding geographical zone, or by requiring providers to only terminate calls to equipment physically installed in the

corresponding zone), the result will be a status quo, i.e. a complete lack of harmonization in each of the member states. Such outcome is not desired and will not serve the ERG's objective for more harmonization.

Therefore Voxbone advocates that numbers, including geographic numbers, may be allocated to service providers and be used by end users outside of the traditional telephone zones or other boundaries, including on a trans-national basis within the EU.

Alternatively, the use of specific VoIP ranges may also be made available for Service types 3 and 4 provided that (i) interconnection charges to terminate calls will not exceed the termination rate of a regular PSTN termination; (ii) each access operator will be bound to charge a tariff to the end user calling the VoIP number that will not exceed the tariff for a local or national call via the PSTN, and that (iii) it will be required to implement the specific VoIP numbering range without any reservation and against conditions identical or similar to those of regular geographical numbers.

4.3 Obligations linked to numbers

With regard to the regulatory obligations associated to numbers or specific numbers, Voxbone proposes to make a distinction between services provided on wholesale level (between service providers and operators) and services provided on retail level (to the end user) and to determine regulatory obligations in function of this classification.

Regulatory obligations associated to the end user should be a prime obligation of the retail service provider, and vice versa. As the retail service provider enters into a contractual relationship with the end user and retains the overall management of the customer relationship, a number of regulatory obligations, in particular those relating to the end user, should be assigned to the retail level.

In terms of access to numbering resources, the original entitled operator will remain responsible for those obligations not related to the end users such as pay the numbering fees. Obligations which have to be complied with by the operator to which numbers are sub-allocated include control of allocation to the end users, respect of number portability towards the end user and guarantee of the authenticity of the line identity.

5. Number portability

Number portability is not only essential for the European citizen, it is also a tool to promote effective competition by encouraging consumers to switch from provider as they deem appropriate. Today, consumers in some EU member states such as Belgium are not allowed to retain their number when they want to switch from a traditional PATS to a nomadic voice service.

The regulation should be designed in such a way that different network operators and technologies are not being discriminated and that consumer rights are not being restricted or

denied, including the right to retain his E.164 number when he wants to switch from provider, regardless the service category (however, only relevant for Service 3 or 4).

6. Wire tapping

In principle, Voxbone does not disagree with ERG's position that it may be required by national law enforcement authorities to allow legal intercepts. Nevertheless, Voxbone would like to raise some concerns.

First, such requirement should meet the criterion of proportionate balance between means and purpose. For, it does not make a lot of sense to require each individual operator to invest huge amounts of money in equipment that allows to intercept calls, where such equipment would barely be used. Rather, the market may find appropriate solutions to either share equipment, or to require public authorities to invest in such equipment and charge each provider on a per use basis.

In addition, Voxbone raises a serious concern that if such obligation will be left to the discretionary power of each national member state, the aim for harmonization will hardly be achieved in this respect.

Finally, Voxbone would like to stress that the obligations should also be aligned with the scope and boundaries of each category of Service. A Service 2 service provider should only be obliged to allow intercept for outbound calls, a Service 3 service provider for inbound traffic, a Service 4 provider for all types of traffic.

7. Conclusion

Voxbone advocates an approach that recognizes voice as just one application using the Internet Protocol in addition to many other applications. It invites the ERG to review the current provider categorization (ECS, PATS, mobile), to re-assess the service categorization proposed in the consultation document and to determine appropriate regulatory requirements that are aligned with each type of service (as proposed by Voxbone above).

Consumer regulation must be technology neutral and must be targeted at all communication providers that provide services to end users (whether they are under the current regime 'VoIP', 'ECS', 'PATS' or 'mobile' operators). Wholesale service providers must only meet those requirements which are not directly related to end users.

Done in Brussels on 14 November 2007