

**Position of internic Datenkommunikations GmbH.**  
**on**  
**“Consultation of Guidelines for VoIP Service providers”**  
**by RTR, dated 25.4.2005**  
Version 6.0 / 6.6.2005

## **1. Preamble**

internic Datenkommunikations GmbH. appreciates the opportunity to comment on the consultation, and provide our point of view. Our comments are as follows:

Introducing a VoIP service may be based on the following intentions:

- the plain substitution of TDM telephone networks, by packet switched networks. TDM (conventional) systems will be serviced only a limited time by industry.
- The convergence of voice telephony and internet with potential for innovative services.

If one considers only plain substitution, any obligation on TDM operators could be imposed on VoIP operators. But as applying these obligations for convergent innovative services may prevent the convergence and new innovative services, obligations should be considered carefully.

Compared with conventional telephony, the splitting of ECN operators and VoIP providers is well understood in the consultation document (Fig 1,2). The emerging consequences need to be discussed carefully.

As an example: emergency services for VoIP:

For fixed networks the identification of subscriber location in case of an emergency call - by means of CLI - is relatively fine, for mobile networks this quality is definitely lower. It is not reasonable to impose the quality of a fixed network subscriber location for a nomadic application of VoIP without giving industry time to adopt and deploy appropriate location solutions – note that in the past, ample time had been granted to the wireless industry to support a very basic location capability, at a time when the wireless subscriber base was actually orders of magnitude larger than current VoIP adoption.

Furthermore obligations should be competition neutral. That means that all operators, national and international should be subjected to equivalent obligations, which can be controlled by the NRA. If international (non EU) providers don't care about any national obligation, national operators will suffer under unfair competition or will emigrate to a non EU location

Also, obligations should be reasonably implementable by all players in a way which permits development of new services, and without a disproportionate burden. While a local service provider offering fixed-line replacement service might comply with, for instance, emergency service requirements, the nature of an IP-based service is global and it would be unreasonable to assume that an operator providing nomadic service will be able to provide emergency service visavis the legacy situation in all

countries of the world at short notice. Such a requirement would also stifle any attempts of local companies to provide service abroad reciprocally.

A minimum, and short term requirement falling on all jurisdictions, and their respective regulators, to enable emergency calls from nomadic endpoints is to publish coverage areas, and geographically reachable emergency operator numbers such that emergency calls can be properly delivered by any service providers wherever their POI to the PSTN actually is. It can be reasonably expected by a VoIP service to identify an Internet-side user to country granularity with very high accuracy, and work through geographically reachable emergency numbers until a better method becomes available.

In the medium term we envisage a staged approach – starting with the abovementioned per-country capability as a stopgap measure, and work from there to reach, and eventually surpass, the geolocation quality of the current emergency call system, while at the same time removing dependencies on the PSTN, per-country legacy solutions, numbers, area codes, and the concept of a service provider per se being necessary to place an emergency call at all, as well as restriction to specific media types like voice. IP technology can deliver such a “next generation 112” capability with vast improvements over the state of the art. We encourage such an approach and note that this will happen only if all involved parties work towards such a goal, it will, however be prevented by “regulating down” the industry to exclusively support the legacy situation.

It is a key issue to distinguish between incoming and outgoing calls. Even in TDM telephony, obligations are sometimes different for incoming and outgoing calls. It is not allowed to originate a call from a premium rate service number (e.g. 900...). For VoIP, the distinction is very important, there are many unidirectional services. Separate obligations for incoming and outgoing calls makes it easier to foster convergent and innovative services. The examples of many other countries show, that differentiating between incoming and outgoing is state of the art (US, UK, France, Poland and recently Switzerland).

VoIP is inevitable. It may be important to redefine voice telephony as well as Universal Services, bearing in mind customer needs, what the customer could need in the future and what politicians want to achieve to be elected.

The major ISPA issues are the following:

- Control of retail pricing mechanisms, if VoIP services are obstructed to get on the market for customer benefits
- The controlled use of geographic numbers for nomadic IP purposes
- A fair and effective introduction of emergency services,
- Prevention of bypassing current remedies on voice markets by VoIP services.

## 2. Remarks on Consultation Document (p: page, pg:paragraph)

Ad Executive Summary paragraph 4 and 2.2 conclusion p6 pg2 and 2.4 p7 pg3

*“This document deals only with classification of services and not with market definitions and analysis.”*

If a service is classified as neither PATS nor ECS it will be free of regulation. This is acceptable for stand alone applications, but could be dangerous if it is bundled by an voice retail operator with SMP as a tollfree VoIP2VoIP service with BB access (“public closed IP onnet user group”). This could be used to bypass retail price control remedies on PSTN telephony. The NRA is asked, to keep a careful “ex ante eye” on that potential problem, to prevent an abuse of SMP by the incumbent.

On the other hand, ISPA explicitly welcomes, and encourages, the introduction of open and interworkable services based on global standards, provided by any market player, as long as their open nature precludes their use as a vehicle for re-introduction of a new, Internet-side termination monopoly.

### Ad 3. Access to emergency services

It is a key question, whether emergency obligation are put on national ECS Operators with infrastructure and/or VoIP Providers without infrastructure (see Fig 2 of Consultation Document). ECS operators must operate in Austria, VoIP providers may work worldwide. Obligations on VoIP providers are not in all cases executable by national authorities. If a national VoIP provider must accept the obligations, international providers may not. This could create an unbalanced competition. On the other hand, if any person will be injured, because of an insufficient emergency service, it will be unacceptable for the national press to state the uncontrollability of international VoIP providers. Emergency Services are only reasonable if the rules are clear and effective.

### Conclusion

To put obligations to VoIP providers only is dangerous and is against the basic intention of Austrian politicians to provide a save emergency service for any Austrian.

### Requirements:

- Any obligation or solution should be harmonized at least with the EU, any implementation should be based on global standards.
- Any obligation should be comparable (economic standpoint; investment per subscriber) with other operator- and providertypes (fixed and mobile networks).
- Any obligation must have a reasonable transition time for implementation

#### Ad 5.1 Allowance of virtual network termination points of geographical numbers (p8pg1)

Permitting virtual network points should be discussed for incoming (PSTN-to-Internet) and outgoing (Internet-to-PSTN) calls. For outgoing emergency-calls prohibiting virtual network points is reasonable, for incoming calls and non-emergency outgoing calls it is not.

In the US geographical numbers may be used in for incoming nomadic call applications, and several European countries permit use of geographic numbers for passive reachability on nomadic endpoints. Different restrictions might create competition problems within the EU.

Conclusion:

The prohibition of virtual network points should be discussed (call forwarding) and finally abolished.

#### CLI for nomadic use of geographical numbers (p9pg4)

It is an unreasonably high economic obstacle for the originating operator to distinguish between outgoing emergency calls from a fixed location (geographic-CLI) and outgoing emergency calls from a nomadic location (non geographic CLI). It is recommended, that in any case the CLI may be the non geographic CLI. For non-emergency calls the geographic or non-geographic CLI may be sent.

#### Potential shortage of geografic number blocks (p10pg2)

The potential shortage of geographic blocks should be discussed. National requests could be covered to a great extent by NP. Only foreign requests have to be considered. The granted blocksize of 10.000 per service operator (KDB) is to be discussed as well as length of the subscriber number (KEM-V §37(4)Z2), which could be enlarged e.g. to 8 for certain new blocks. The blocksize could be managed by giving large blocks to Gateway-operators, who could then distribute small blocks to VoIP providers.

We believe that the usage pattern of such virtual access numbers for consumers will follow locality, as it does in the case of domains (note that while there are no residency requirements for obtaining an .at domain, 80% are held by residents and over 96% are held by german-speaking domain holders). The likely impact of business users on local number use is likely to be much lower, both because of lower incidence and the use of DDI.

#### The incoming use of geographic numbers for VoIP applications

The termination of VoIP calls from PSTN mobile or fixed networks is economically similar to geographical termination. This means, that the cost basis is similar to calls to fixed networks. As long as retail prices of calls to 780 numbers are completely unregulated, pricing strategies of operator groups may kill a potential new emerging market (trust behaviour). This behaviour might appear, if VoIP calls are in principal

threatening revenues. It is very unsure, that competition mechanisms will prevent such behaviour.

If geographical numbers are allowed for incoming calls, this behaviour will not appear. Another method could be to say that calls to 780 may cost not more than calls to geographic numbers.

The worst case scenario which might appear if this problem remains unaddressed is as follows:

- numbers for nomadic use might face non-adoption by end users if end user tariffs remain erratic and high
- prohibiting the use of geographic numbers for passive reachability might leave no low-cost alternative for virtual VoIP operators.

We believe it would be short-sighted to use the geo/non-geo differentiation as a means of national industrial policy to foster infrastructure (local) versus applications (wherever).

This would not only impact national application-based operators, but also the spectrum of services and their cost point available to consumers just as well – noting that service creativity, which benefits consumers, has so far come mainly from application service providers, which would be particularly stifled by such a situation.