<u>Ericsson's Response to</u> <u>ANACOM's Public Consultation on</u> <u>Regulatory approach to voice services</u> <u>supported in IP technology (VoIP)</u>



Question 1 - How do you view the future development of mobile VoIP use, specifically with respect to technical development and applicable standards?

[Ericsson]

Mobile VoIP has already been deployed as the media in PTT over Cellular (PoC) and it will be deployed as an enhancement of the telephony services as part of the true end-user multimedia experience. In Release 7 of 3GPP the current ongoing standardization Ericsson is driving the Multimedia telephony service standardization. By true multimedia experience we mean that VoIP will not just replace the circuit switched telephony but be a vital part of a much wider service.

Question 2 - Do you consider the categories of VoIP services accessible to the public presented here to be suitable? To what degree could the criterion – control of network access – be decisive for regulatory treatment which is differentiated with respect to VoIP services that are accessible to the public?

[Ericsson]

The proposed categories of VoIP services are the appropriate ones for this discussion and conform to the generally used classification.

Control of the network access is a factor that may influence a service provider's capabilities and control. However, if it is the service that is regulated the control of the network access should not be made a criterion for the regulation of the service, which might be provided by a separate party outside the control of the access provider.

Question 3 - Do you agree that service providers which offer VoIP services in a fixed location should be assigned geographic numbers? What is the best way of guaranteeing that such an assignment of geographic numbering is not subject to a use which defeats the intended purpose?

[Ericsson]

Ericsson concurs with the proposal to assign geographic numbers to VoIP services provided from a fixed location.

Question 4 - Do you agree with the use of a new range of non-geographic "30" numbers for VoIP roaming use? And what is your position on a potential number portability obligation in this range?

[Ericsson]

The assignment of non-geographic numbers to roaming VoIP services is a practice that clearly distinguishes the specific nature of these services from those provided from a fixed location. We therefore support this proposal. Consumers subscribing to such services should be offered number portability.

Question 5 – Do you identify any constraints in the provision of access to 112 by VoIP service providers? If so, how can these constraints be overcome?

[Ericsson]

In the interest of consumer protection and to create technology neutrality requirements on the full provision of emergency service (112 routing, CLI info and location info) should apply equally to all VoIP providers, both fixed and roaming. If current technical deficiencies justify exceptions in the provision of full emergency service provision such exceptions should be time limited. Such a time limit should be set taking current international standardization activities into consideration. Regulatory measures to enforce full emergency service in all cases may entail extending the range of entities and network elements considered.

Question 6 – How can the risks of improper and abusive use of emergency services be minimized?

[Ericsson]

From telephony perspective there is no difference between circuit switched and VoIP based services, but since the service as such is IP based, proper

measures must be taken to prohibit or reduce the impact of e.g. denial of service attacks.

Question 7 – Do you feel that international standardization bodies, namely the ETSI, should study and propose standardized locating procedures in IP networks or emergency call routing for VoIP service customers to the appropriate emergency call center?

[Ericsson]

Yes, there are ongoing ETSI and IETF activities in this area.

Question 8 – Do you think it would be useful for roaming service providers to give their customers the real option of communicating a change in their usual access location, for the purposes of locating the caller in case emergency calls are placed? How do we guarantee that this information is updated and that it arrives to the emergency call centers in time?

[Ericsson]

Yes, this should be required. The service providers should be required to include this info collected from the end user in the information delivered with the emergency call.

Question 9 – What type of technical solutions could be implemented to provide legal interception of calls? What is the estimated cost thereof and what is its impact on the development of VoIP services? Do you feel that the participation of standardization bodies may be relevant for the development and reduction in costs of these technical solutions?

[Ericsson]

Yes, 3GPP already develop those standards which will also be used by ETSI/TISPAN to assure interoperability and reduced cost to support legal intercept.

Question 10 – Do you consider it appropriate to define quality parameters for VoIP services? If so, what parameters should be considered?

[Ericsson]

Yes, parameters corresponding to those applied to voice service should be applied.

Question 11 – How do you think situations like SPIT or throttling should be handled?

[Ericsson]

Anti-SPAM regulatory measures can be put in place to support operators' actions to filter such messages.

Throttling can be disallowed; compare with recent US regulatory decisions.

Question 12 – Keeping in mind technological and market developments, how do you predict, in the short-term, that interconnection will develop between IP and PSTN networks and between IP networks (peering?)

[Ericsson]

Today the interconnection is done based on the legacy network support thus PSTN Gateways are used. Between IP networks H.323 is the most widely used interconnection but in the future we foresee that SIP will be the main interconnection mechanism.

Question 13 – What constraints on interconnection and interoperability of networks and services could restrict the development of VoIP? What tangible solutions do you propose to avoid or solve those potential problems?

[Ericsson]

It is very important to standardize mass-market services to insure interoperability both on terminal but also between operators to allow quick service uptake. This is driven in 3GPP and OMA standardization bodies which will be used to define the Service Level Agreement between operators.

Question 14 – What type of parameters do you consider to be appropriate for the accounting of VoIP traffic in IP interconnections?

[Ericsson]

To allow both mass-market services as well as differentiated services the common accounting parameters such as type of service, time of day, duration, volume including bit rate etc. are foreseen.

Question 15 – What mechanisms could be used to prevent deterioration of the service quality in IP interconnections?

[Ericsson]

The quality of service in the interconnection point is defined in the SLA between the Operators and to both insure this SLA and protect their networks operators will deploy a Session Boarder Gateway at the interconnect point. These SBGs can both be used to prohibit unauthorized usage (e.g. request some best effort service and use it for Video conference) and prioritization of services.

Question 16 - What sort of impact could the rising offer of VoIP services have on net costs associated with the provision of US and on the affordability of retail prices?

[Ericsson]

Clearly if universal service fund collection is escaped by VoIP services a gradual decrease in fund income will result if fees are unchanged. If US costs are fixed, such a situation will necessitate increased fees on POTS and a resulting degradation of its competitiveness. A technology-neutral regulatory approach would levy corresponding fees on all voice services irrespective of technology used for its provision.

Question 17 – Do you agree that providing information on the set of topics presented (numbering, portability, access to 112, network quality, integrity and security) is what is most relevant and influential for consumer choices and the protection of their interests?

[Ericsson]

Since the end user cannot be expected to understand the difference in capabilities (whatever they are) in the underlying technology any service offering the basic functional equivalent of traditional POTS must be subject to strict information obligations with respect to lacking capabilities. The regulator must furthermore decide on minimum required capabilities to protect the consumer and the public interest.

Question 18 - Do you agree that there should be a specific document which alerts users of VoIP roaming services to the restrictions on access to 112?

[Ericsson]

Yes, if such restrictions are accepted by the regulator. However, to protect the consumer such restrictions on access to emergency services should not be accepted.

Question 19 – Do you find the list of indicators presented suitable for statistical monitoring of the activity of VoIP providers? If not, what information would you consider relevant for suitable statistical monitoring of the activity of VoIP providers.

[Ericsson]

The list of indicators proposed seems to be sufficient for statistical monitoring.