

Prepared (also subject responsible if other) ENOC Evelyn Phang		No. Uen		
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## Ericsson Comments to the PUBLIC CONSULTATION ON THE POLICY FRAMEWORK FOR IP TELEPHONY AND ELECTRONIC NUMBERING IN SINGAPORE

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### Executive Summary

Ericsson commends IDA on this initiative to propose a licensing and regulatory framework to support the deployment of IP Telephony services in Singapore. We think this should be implemented as soon as possible with the objective to increase the legal certainty, stability and transparency for the parties willing to invest in Next Generation Services and Networks for deployment of IP Telephony or even IP Multimedia services in Singapore.

A clear regulatory framework is necessary not to hinder development of new applications, business growth and competition that may benefit consumers and enterprises. An ongoing evaluation of existing rules is necessary in light of technological development. Regulation should be clear and technology-neutral, provide legal certainty, be kept to a minimum and only serve to support justified public policy objectives. All regulatory measures, and specifically those that may apply to VoIP, should be harmonized globally as far as possible.

The following contribution provides a manufacturers' perspective of some key considerations highlighted by IDA in the consultation paper.

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## QUESTIONS

### IP TELEPHONY:

a) IDA welcomes views and comments on the potential of and benefits arising from the deployment of IP Telephony; the likely services/applications to be deployed; and the potential demand from businesses and consumers. IDA further seeks comments on how IP Telephony is likely to change the telecommunication competitive landscape in Singapore.

### Ericsson View:

VoIP will be instrumental in delivering all voice services in Next Generation architectures. Carriers are already deploying “all-IP architectures” and enterprises are currently driving demand by choosing to invest. Ericsson foresees a gradual adoption of all-IP architectures. There are many advantages of VoIP for consumers such as lower costs and the provision of new and innovative service components and features. To achieve these advantages it may be necessary to adapt some of the regulatory demands on service features to this evolving environment.

Ericsson believes that:

- To a large extent, carrier grade VoIP offerings can replace current Telephony services offerings and is a pre-cursor to an IP-based multimedia network.
- VoIP brings to broadband platforms a component that adds considerable value to the multi-service offers available to broadband users, including nomadic, such as the possibility to enjoy HiFi quality voice communications, multiple phones and phone numbers on a single termination, as well as combining voice, data and video.
- Services and obligations motivated by public interest are considered legitimate by industry and problems concerning them should be resolved on a case -by-case basis, using the same flexibility for finding VOIP -based solutions as that applied earlier to other types of non-PSTN communications such as mobile and wireless.
- Expansion of VoIP will impact the economics of the communications sector making new business models possible and shifting the balance between different service categories. In time, this will also impact today’s approach to voice regulation. New regulatory issues, such as identification and authentication, will become more important, and some old will lose their importance.
- In the perspective of migration to Next Generation Networks, new VoIP interconnection models and service level agreements between IP network operators and service providers to guarantee satisfactory QoS and services to consumers will have to be developed.

b) IDA welcomes views and comments on IDA’s proposed regulatory approach to be taken to encourage the development of emerging technologies such as IP Telephony in Singapore.

### Ericsson View:

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Voice over IP is an implementation of the voice service that uses technology that differs from that of the PSTN. It is therefore appropriate to consider if specific regulatory measures are needed for this technology implementation, or how existing regulatory measures shall be applied.

With the development of new services on and the emerging transition of existing services to a multi-media broadband network based on IMS (of 3GPP origin), regulatory measures must be applied in a manner that does not create different conditions for similar services provided through different technical implementations. Interconnection rules must take this new architecture in due consideration.

The regulatory analysis is complicated by the technical opportunities to integrate and bundle a VoIP service with other applications and also by the significant technical differences that exist between the technologies and network architectures used to provide VoIP and those of the PSTN.

When voice (provided by VoIP) is part of another application it should be called multimedia and might be subject to a different regulatory environment than a pure VoIP service; possibly no regulation at all.

The regulatory challenge appears when VoIP is offered as a stand-alone replacement for the traditional regulated voice service provided on the PSTN.

One option to maintain fair competition and to protect the consumer is to compare the services offered and come to a conclusion on when a VoIP service should be subject to normal voice regulation, reformed or not.

#### **If the (VoIP) service:**

- is marketed as a substitute for the traditional public service; or
- appears to the customer to be a substitute for the traditional public telephone service over which they would expect to be able to receive and originate calls based on the international telephone numbering plan including: access to emergency services, directory enquiries, etc. without difficulty; or
- provides the customer's sole means of access to the traditional (circuit switched) public telephone network,

#### **then it should be regulated as the traditional voice service.**

- VoIP is one of a large variety of IP based applications that can be envisioned. The regulatory framework should apply to Voice as well as Multimedia communication. The regulatory framework need to fit in a context where Information, Communication and Entertainment applications all will be delivered over IP.
- VoIP is relevant to both Fixed and Mobile communication services. The regulatory framework should enable both markets to be part of the converged future, where the distinction between different network types will be fuzzier.
- VoIP over broadband access is applicable to a variety of access technologies, i.e. Copper, Coax, Fiber and Radio access networks. Regulation should offer equal opportunities across all types network types and not favour any underlying technology.
- VoIP can be terminated in different parts of the network, i.e. all the way to the user device, at the customer premises in a gateway or in an access node. Regulatory frameworks should be applicable over multiple scenarios as more than one is likely to apply in a given market.

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(d) IDA welcomes views and comments on the proposed phased approach in assigning new number levels to FBO and SBO (Individual) licensees for IP Telephony services. Please provide supporting reasons for the comments and proposals made.

**Ericsson View:**

For NUMBER ALLOCATION-Option "D" as suggested by IDA allows for differentiation, while making it simple in not adding a prefix. Comparing with the prefix added with TeliaSonera's broadband telephony service, this is similar to area codes used in Sweden. As Singapore does not have area codes, it may be better to stick with the current numbering schemes.

g) IDA welcomes views and comments on whether there are issues relating to the provision of emergency services in the context of IP Telephony. IDA further invites comments on the availability of operational solutions to address the issue of emergency calls.

**Ericsson View:**

Ericsson strongly agrees with IDA to refrain from imposing the so-called social obligations on IP-enabled services and permit industry-led efforts to address these needs.

The necessary evolution of how emergency services are operated and guaranteed to consumers will be a function of the type of call (PSTN-IP, IP -IP).

- Many aspects of emergency services are already possible using IP technologies, e.g. caller location – routing – caller ID. However, Ericsson recognizes that there are still technical issues to be resolved regarding the provision of location information for nomadic applications or services and welcomes the progressive approach proposed by the Commission. EICTA notes that in this respect currently work is ongoing in standards bodies.
- The level of possible accuracy for location data differs greatly from one type of network/user to another. A best effort compromise should be reached by emergency agencies in cooperation with industry, leading to a common interface standard.
- In any case, the provision by the network or service provider of adequate information to the customer regarding how they deal with emergency services and caller location is imperative in managing expectations at the consumer end. The example of the offering of the US VoIP provider Vonage, could be taken as an example where the customer is properly informed about the nature and (limited) capabilities of the '911' service.
- Ericsson welcomes the IDA's proposals on how such functionality can be introduced for VoIP services, thus allowing industry to develop the most suitable solutions.

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