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2 Nov 04

Mr Andrew Haire
Senior Director (Policy and Competition Development)
Infocomm Development Authority of Singapore
8 Temasek Boulevard
#14-00 Suntec Tower Three
Singapore 038988

Dear Sir,

Proposed Policy Framework for IP Telephony and Electronic Numbering in Singapore

We enclose our comments on the above and hope that it will contribute positively towards the development and growth of the IP Telephony Industry in Singapore.

We look forward to being more involved in future policy discussions and contributing our ideas.

Yours sincerely,

Ian Chua
Chief Operating Officer

IP TELEPHONY

We believe that IP Telephony as defined requires further discussion and clarification.

According to Paragraph 3 “that allows a user to make and receive voice, data and video calls”, does the term “voice” refer to voice transmitted via PSTN or voice transmitted in the form of data via Internet Protocol (IP)? There is also no mention of whether the calls are made and received within the IP network or between the IP and PSTN networks.

IDA’S POLICY OBJECTIVES AND APPROACH

With reference to Paragraph 8, we agree with IDA’s view that there are key differences in attributes and service outcomes that differentiate IP Telephony and circuit-switched telephony services, especially in relation to the routing of IP Telephony traffic over the public Internet, thus subjecting it to congestion and relatively lower service levels.

NUMBER ALLOCATION

In relation to Paragraph 11, the relevance of IP Telephony numbers only arises when a call is made from the PSTN network to the IP layer, in other words, from a PSTN phone to an IP phone. However, the main benefit of IP Telephony is that it reduces call charges for outgoing calls, since it is generally the global norm that the Calling Party Pays (CPP). Since incoming calls are almost always free of charge, customers can receive incoming calls via the PSTN (existing fixed line).

We propose that IDA considers demarcating IP Telephony into two types – Partial-service IP Telephony and Full-service IP Telephony.

Partial-service IP Telephony would mean that the service allows the customer to make calls from a VoIP device to a PSTN number, but disallows calls originating from the PSTN network to the VoIP device. Thus, in our view, the number allocation is not relevant here.

Full-service IP Telephony would mean that the service allows the customer to make and receive calls via a VoIP device to and from a PSTN number. Thus, the numbering scheme is relevant to ensure that there is no overlapping of numbers so that there is proper call-routing.

To spur the development of IP Telephony, it is important to ensure that upfront capital expenditure on infrastructure does not become too onerous, as there is a significant difference in capital outlay between Partial-service and

Full-service IP Telephony. Partial-service IP Telephony requires significantly less capital than Full-service IP Telephony.

There has been concern that IP Telephony would erode fixed line revenues. If IP Telephony is in the form of Partial-service as explained above, such customers will more likely retain their fixed line subscriptions to enjoy unlimited incoming calls for a fixed monthly/quarterly rate as well as enjoying fixed line benefits, such as access to emergency numbers and so on. These advantages can also be extrapolated especially to customers overseas and would result in less regulatory hurdles as incumbents are less threatened.

As per Paragraph 12, conforming to the number allocation should only be relevant to providers who offer both the ability to receive and make calls between the IP/PSTN networks. The number allocation should not apply to providers (of Partial-service IP Telephony) who provide only outgoing calls within the IP layer/ to a PSTN number, and not incoming calls from the PSTN network.

For Paragraph 16, the proposal by IDA to adopt Option D (ie assign a new 8-digit number level starting with "3") for IP Telephony services will enable consumers to distinguish between IP Telephony numbers and PSTN numbers, as well as allow scalability.

Going straight to Option D and bypassing other options would avoid costs of switching between options such as expenses related to the re-education of consumers of the change and physical re-configuration to migrate each VoIP device to a new numbering scheme as well as the operators' backend modifications.

With reference to Paragraph 19, it was clearly stated that IDA will allow telephone numbers to be given to both FBOs and SBO (Individual) licensees providing IP Telephony services. How about SBO (Class) licensees?

QUALITY OF SERVICE (QOS)

For Paragraph 22, we agree with IDA's proposition not to impose QoS on IP Telephony.

BASIC OBLIGATION AND PUBLIC SAFETY

In relation to Paragraph 24, we agree with IDA's view that there may be practical constraints to provide directory enquiry services, free access to emergency numbers, and others as IP Telephony can be located in any part of the world that has internet connection and thus calls made from any part of the world to emergency numbers would face problems with routing, in relation to which locality's emergency numbers.

For Paragraph 25, we agree with IDA's proposition on this issue.