

From:

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To,

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Respected Sri Misra.

Sub: Comments on Consultation Paper on relaxing restrictive provisions of Internet Telephony

Summary

When voice communication is carried out on public internet clouds, it is called IP Telephony. Presently, IP Telephony is used for generating voice communication from a PC in India to a PC/device outside India. Difference in tariffs for utilizing IP Telephony for ILD has made many a follower of this technology. However, currently, IP Telephony cannot be used for local and/or national long distance calls in India. Connecting a voice call originating from IP Telephony to PSTN/PLMN exchange in India is not permitted.

TRAI has issued a consultation paper in this regard on 12th May 2008. The TRAI Consultation Paper on relaxing restrictive provisions of Internet Telephony has sought stakeholder and industry comments in view of the issues related to internet telephony in India. The concerned issues are that of

- Permitting ISPs to provide internet telephony to call PSTN/PLMN subscribers within the country
- Numbering issues
- Emergency number dialing
- Effective monitoring and lawful interception

Permitting ISPs to provide internet telephony to call PSTN/PLMN subscribers within the country

In our view, way forward is to have convergence of technology. A subscriber should be immune to technology backbone and must not be disallowed certain services because of the lack of interface between different technologies. This forms the basic underlying reasoning for various responses by us.

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We feel that entry fee, carriage and termination charge are of prime concern to existing players if IP Telephony is permitted. However, these components have not been adequately addressed by the regulator.

Once ISP providers are able to connect to PSTN/PLMN exchanges in India, they could be considered at par with NLD/ILD operators. Likewise, we recommend ISPs interested in providing voice services to its subscribers to obtain appropriate license. For a PAN-India license, enabling ISPs to provide domestic voice communication, should pay license fee upto Rs. 5 crore, provided ISPs are utilizing the network infrastructure of licensed access provider. In case ISP is keen on providing IP Telephony by applying for spectrum, a normal UASL license must be obtained by ISP to be eligible for getting access to spectrum. Also, in this case the technology will no more be termed as IP Telephony but Voice over IP (VoIP). This will also ensure a level playing field amongst NLD players and IP Telephony providers.

Second component is Carriage. ISP utilizes leased lines of a licensed service provider and pay charge for utilizing its infrastructure. As much, this is being taken care of already. Moreover, we recommend termination charge payable by ISP to the PSTN/PLMN exchange at which the voice call terminates.

Numbering issues

Separate numbering for IP Telephony and non-IP Telephony will segregate subscribers on the basis of underlying technology, thus defeating the objective to achieve convergence and seamless integration of technology.

Emergency Number Dialing

Technology backbone utilized for providing access services should not disqualify subscribers from availing certain mandatory services. Emergency number dialing must be a mandatory service provided by IP Telephony providers to its subscribers.

Effective monitoring and lawful interception

Levying termination charge will ensure that origin of voice packet can be ensured. This will introduce provision for monitoring and lawful interception, which is prerequisite for introduction of any service in the country.

Comments on the issues are attached.

Yours sincerely



Brijendra K. Syngal
Senior Principal

With best personal regards

Issues for Consultations

- 4.1 Whether Internet service provider should be permitted Internet Telephony services to PSTN/PLMN within India? If yes, what are the regulatory impediments? How such regulatory impediments can be addressed? Please give your suggestions with justifications. (para 3.10)**

Way forward is to have convergence of technology and interoperability amongst various technologies. Voice traffic originating from ISPs must be allowed to be received on PSTN/PLMN networks as well and on the basis similar to that for current license holders.

Commercially, ISP voice traffic revenue can be divided into 3 parts – Entry Fees, Carriage and Termination charge. ISPs interested in providing voice services to their subscribers must obtain appropriate license with license fee upto Rs. 5 crores for PAN India. Since ISPs are likely to use infrastructure of licensed access service providers, NLD/ILD operator's carriage is already taken care of. Moreover, point of interconnection between ISP and PSTN has to be at the point of termination because of the very nature of the technology, thereby ISPs being charged a termination fee is quite logical.

- 4.2 Whether allowing ISPs to provide Internet Telephony to PSTN/ PLMN within country will raise issues of non-level playing field? If so, how can they be addressed within present regulatory regime? Please give your suggestions with justifications. (para 3.11)**

We recommend, ISPs interested in providing IP Telephony for domestic exchanges, must obtain a license with PAN-India license fee of upto Rs. 5 crores. This will ensure level-playing field for operators and ISPs providing IP Telephony. Moreover, commercial arrangements should not bar masses from benefitting from technological advancements. Additionally, they must pay termination charge at the terminating end.

- 4.3 ISPs would require interconnection with PSTN/PLMN network for Internet telephony calls to PSTN/PLMN. Kindly suggest Model/ architecture/ Point of Interconnection between ISPs and PSTN/PLMN? (para 3.12)**

In our view, the point of interconnection has to be at the point of termination, where voice packet is handed over to exchange. Also, we recommend ISP to pay a termination charge to PSTN/PLMN exchange at this point.

- 4.4 Please give your comments on any changes that would be required in the existing IUC regime to enable growth of Internet telephony? Give your suggestions with justification to provide affordable services to common masses? (para 3.12)**

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By very nature of the service, being a subset of an already existing service, the key element is the charge for terminating a call into a PSTN/PLMN network. This charge is required to be introduced. The rest of infrastructure is that of an existing licensee from whom either telephone lines or broadband services have been obtained and paid for.

- 4.5 What should be the numbering scheme for the Internet telephony provider keeping in view the limited E.164 number availability and likely migration towards Next Generation Networks? Please give your suggestions with justifications. (para 3.13)**
- 4.6 UASL and CMTS operators are allocated number resources and permitted to provide Internet telephony including use of IP devices/Adopters. Whether such devices should be allocated E.164 number resource to receive incoming calls also? If so, whether such number resources should be discretely identifiable across all operators and different than what is allocated to UASL and CMTS to provide fixed and mobile services? Give your suggestions with justifications? (Para 3.4)**
- 4.7 If ISPs are allowed to receive Internet telephony calls on IP devices/Adopters, what numbering resources should they be allocated? (para 3.13)**

In our view, regulator's objective should be to chart a road-map to ensure convergence of technology and interoperability amongst different technologies. Separate numbering scheme in our view is against the concept of convergence.

- 4.8 Is it desirable to mandate Emergency number dialing facilities to access emergency numbers using internet telephony if ISPs are permitted to provide Internet telephony to PSTN/PLMN within country? If so, Should option of implementing such emergency Number dialing scheme be left to ISPs providing Internet telephony? Please give your suggestions with justifications. (para 3.14)**

Irrespective of the technology deployed towards providing access services, all the access service providers must be mandated to provide emergency dialing facility.

- 4.9 Is there any concern and limitation to facilitate lawful interception and monitoring while providing Internet telephony within country? What will you suggest for effective monitoring of IP packets while encouraging Internet telephony? Please give your suggestions with justifications. (para 3.15)**

Provision of termination charge will ensure that origin of traffic can be traced back to its IP address thereby ensuring traffic monitoring.



- 4.10 Is there a need to regulate and mandate interoperability between IP networks and traditional TDM networks while permitting Internet telephony to PSTN/PLMN within country through ISPs? How standardization gap can be reduced to ensure seamless implementation of future services and applications? Please give your suggestions with justifications. (para 3.16)**

Convergence of technologies calls for mandating interoperability between various types of technologies.

- 4.11 Is there a need to mandate QoS to ISPs providing Internet telephony to PSTN/PLMN within country? Please give your suggestions with justifications. (para 3.17)**

All the access providers should be committed towards providing a reasonable communication experience to its subscribers. Technology employed should not act as an impediment in this regards. In our view, ISPs providing voice communications (IP Telephony) must be encouraged to provide a reasonable QoS to its subscriber base as per ITU standards.

