

# **ISPAI Response to TRAI Consultation Paper on Internet Telephony**

There are two major categories for voice transmission over IP networks based on type of IP network used. When voice is transmitted over public Internet, it is termed as Internet Telephony. Similarly, when voice is transmitted over managed IP networks, it is termed as Voice over IP (VoIP). The primary difference between voice services on managed and unmanaged IP Networks is quality of speech. However, this difference is getting diminished with technological advancement, new coding techniques and availability of higher bandwidth as provided by broadband connections. (Source: TRAI Recommendations dated 18.08.2008).

The topic of unrestricted Internet telephony has consistently been debated and discussed within the ambit of Indian Regulations since 2002 as Internet telephony as a service and as technology gained prominence across the world. Department of Telecom announced the guidelines for opening of Internet telephony w.e.f. 1st April 2002 with restricted use of Internet Telephony. Existing ISPs were permitted to offer Internet telephony services only after signing the amended ISP license called Internet Telephony Service Provider (ITSP) license. Internet telephony was permitted only in limited way, as there were restrictions on the type of the technology and devices, which could be used. ITSPs were not permitted to have connectivity with PSTN/PLMN. Initially provisioning of Internet telephony service did not envisage any financial implications (no additional entry fee or license fee) but later on license fee was imposed on Internet Telephony services revenues.

In March 2006, Unified Access Service Providers (UASPs) and Cellular Mobile Service Providers (CMSPs) were permitted to provide Internet telephony and broadband services. However, Internet Telephony services were not provided by any of the Access Providers as an Access Service using Internet as a medium/technology. This position continues till date.

A significant step in this direction was the keenly debated and participated consultation process undertaken by the Authority in the year 2007-08 culminating into path breaking recommendations of TRAI dated 18th August 2008 which recommended permitting ISPs to provide unrestricted Internet telephony. The Government did not take any action on these recommendations and the same was challenged by ISPAI in the Competition Commission vide Case N 0. 10/2009. The Competition Commission vide its Order dated 29.06.2010 stated as follows:

"7. The informant has also stated that TRAI has already recommended their case to the Department of Telecommunications but they are not taking any decision. The reply from Department of Telecommunications clearly states that they have received the recommendations of the TRAI and it is under active consideration of the Department. Since the matter is under the consideration of the -Government -no further action\_ is required at this stage. However, the Commission feels that a communication may be sent to the Department of Telecommunication suggesting to them to take an early decision in the matter.

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10. A 'letter may also 'be sent -to -the Department of Telecommunications for taking an early decision on the recommendations of TRAI."

Thereafter the Government took decision not to accept TRAI Recommendations dated 18.08.2008.

It is also imperative to consider the operational aspect of unrestricted Internet telephony and the power of Internet in general so that the same can be used to enable better access, quality, affordability and opportunities for the consumers.

Adding to the context is the tremendous growth in the IP technology and Internet access globally which has ensured that the service delivery increasingly has got delinked with the provision of network and connectivity. Not only the same, some of the advancements in services are intrinsically linked to IP technology with no parallel application in a circuit switched – TDM domain for e.g. the High Definition Voice services enable by virtue of IP Codec developments, needs end to end IP network and cannot be replicated in the TDM domain.

With proliferation of high speed broadband and 3G/4G services the convergence of voice, data, messaging services has disrupted the traditional business models of Telecom Operators across the world. It's not wrong to say that today the biggest voice traffic carriers in the world are not the Telcos but over the top players like Skype, Whatsapp, etc. While the non-licensed entities are gaining a strong foothold in the territory of Internet Telephony services it would be extremely unfair to restrict the licensed Internet Service Providers in respect of the nature and character of Internet Telephony services which they provide and the proposal contained in the Consultation Paper to enable ISPs to provide unrestricted Internet Telephony service is a welcome one which would lead to increased proliferation of Broadband services in the country.

Issues for Consultation -

Q1: What should be the additional entry fee, Performance Bank Guarantee (PBG) and Financial Bank Guarantee (FBG) for Internet Service providers if they are also allowed to provide unrestricted Internet Telephony?

# ISPAI Response:

Internet Telephony is just one of the many services (such as chatting, browsing, email) that internet technologies have made possible and convergence of voice, text and video is inevitable. Internet Telephony cannot be treated as a standalone application or service and has to be viewed as a part of the Internet ecosystem. It is, therefore, our view that ISPs should be freely allowed to provide unrestricted Internet Telephony with no extra entry fee just as they are freely allowed to provide email, browsing and chat services.

ISPs should be charged the appropriate licensee fee (AGR) on Internet Telephony services.

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Q2: Point of Interconnection for Circuit switched Network for various types of calls is well defined. Should same be continued for Internet Telephony calls or is there a need to change Point of Interconnection for Internet Telephony calls?

# ISPAI Response:

As the concept of interconnect is based upon the peering of networks and data travels in packets so there is no need of POI for Internet to Internet calls but for Internet to PSTN calls separate PoI over the SIP interface for internet telephony calls may be required.

Q3: Whether accessing of telecom services of the TSP by the subscriber through public Internet (internet access of any other TSP) can be construed as extension of fixed line or mobile services of the TSP? Please provide full justification in support of your answer.

## ISPAI Response:

Yes this should be considered as an extension of TSP as TSP networks are mostly migrated to IP based NGN.

Q4: Whether present ceiling of transit charge needs to be reviewed or it can be continued at the same level? In case it is to be reviewed, please provide cost details and method to calculate transit charge.

# ISPAI Response:

As the packets travel seamlessly across the Internet cloud there is no need of any transit media. Therefore there is no need of any transit charges for Internet Telephony calls.

Q5: What should be the termination charge when call is terminating into Internet telephony network?

#### ISPAI Response:

The same as for fixed line phone service

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Q6: What should be the termination charge for the calls originated from Internet Telephony Network and terminated into the wireline and wireless Network?

## ISPAI Response:

In respect of Interconnect Usage Charges (IUC), Internet telephony services should be treated in the same manner as fixed line services.

Q7: How to ensure that users of International Internet Telephony calls pay applicable International termination charges?

## ISPAI Response:

International Internet Telephony calls terminations should be allowed only through ILDO.

Q8: Should an Internet telephony subscriber be able to initiate or receive calls from outside the SDCA, or service area, or the country through the public Internet thus providing limited or full mobility to such subscriber?

#### ISPAI Response:

The concept of SDCA is based on geographic boundaries and exists from the time when phone calls and telegram services were charged based on the distance between the originator and recipient. With modern technologies costs of carriage and end customer pricing are independent of distance. Internet technologies, and now cloud technologies, have made it easy for subscribers to access any service from any device from anywhere in the world transparently. Artificial restrictions on geographic roaming will be impossible to monitor and control. Restrictions will also slow down the growth of Internet access and use in this country defeating the objectives of the Digital India initiative.

We are of the view that full mobility should be allowed to promote Internet Telephony and to encourage One India.

Q9: Should the last mile for an Internet telephony subscriber be the public Internet irrespective of where the subscriber is currently located as long as the PSTN leg abides by all the interconnection rules and regulations concerning NLDO and ILDO?

#### ISPAI Response:

Yes.



Q10: What should be the framework for allocation of numbering resource for Internet Telephony services?

# ISPAI Response:

A separate number series should be created for Internet Telephony services for allocation to ISPs.

Q11: Whether Number portability should be allowed for Internet Telephony numbers? If yes, what should be the framework? *ISPAI Response*:

## <u>ISPAI Response</u>:

Yes. A framework can be set up by the agency controlling the number resources.

Q12: Is it possible to provide location information to the police station when the subscriber is making Internet Telephony call to Emergency number? If yes, how?

## ISPAI Response:

Yes relevant IP addresses should be made available.

Q13: In case it is not possible to provide Emergency services through Internet Telephony, whether informing limitation of Internet Telephony calls in advance to the consumers will be sufficient?

# ISPAI Response:

Informing the consumers about non availability of emergency services would be sufficient in line with the global practices

Q14: Is there a need to prescribe QoS parameters for Internet telephony at present? If yes, what parameter has to be prescribed? Please give your suggestions with justifications.

#### ISPAI Response:

The QoS of Internet Telephony calls has been improving exponentially over the past few years. Although there are many parameters that can be monitored such as PDD, ASR, ACD, lost media packets etc., these have been found to be of little use to judge users' subjective experience. We do not believe that QoS should be prescribed. We believe market forces will ensure QoS.

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Q15: Any other issue related to the matter of Consultation.

# ISPAI Response:

The issue of permitting unrestricted Internet Telephony to the ISPs has been debated ad-nauseam for over a decade but no concrete results have been forthcoming. As a result many unlicensed players (like Whatsapp, Facebook Messenger, Skype, Viber, Google Talk etc.) are offering real time voice services freely, bypassing any form of regulatory oversight, all kinds of taxation, and thereby potentially causing significant revenue loss to the national exchequer