



## Association of Unified Telecom Service Providers of India

AUSPI/12/2016/026

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**Subject: AUSPI's Response to the TRAI Consultation Paper No.13/2016 on Internet Telephony (VoIP)**

Dear Sir,

We are pleased to enclose AUSPI's response to the TRAI Consultation Paper on Internet Telephony (VoIP) for your consideration.

Thanking you,

Yours sincerely,

**Ashok Sud**  
**Secretary General**  
**Mob: 9312941515**

Encl: As above

Copy to :

1. Shri R S Sharma, Chairman, TRAI
2. Shri Anil Kaushal, Member, TRAI
3. Shri Sudhir Gupta, Secretary, TRAI



**AUSPI's Response to the TRAI Consultation Paper No.13/2016 on  
Internet Telephony (VoIP)**

- 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?***

**AUSPI's Response**

The ISP licensees who are willing to provide unrestricted Internet telephony should be mandated to obtain / migrate to UL with Access Service Authorisation and then seek Interconnection with the existing PSTN / PLMN. All the rules related to FBGs and PBG should be similar to UL (Access authorization). Any new entrant should be asked to take UL with Access authorization.

- 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?***

**AUSPI's Response**

IP has the inherent characteristics that routing information is part of the IP packet itself and that it uses the shortest path between the packet origination point and the packet termination point as its first choice for reaching the destination. Imposition of the circuit switched network's interconnection system on the IP network would add to complexities and suboptimal network exploitation. Therefore, Point of Interconnection for circuit switched network for various types of calls cannot be made applicable for Point of Interconnection for IP Telephony calls. **The Point of Interconnection for Voice traffic, while they are being handled in the IP domain, should be as per the mutual arrangement between operators.**

- Q4. *Whether present ceiling of transit charge needs to be reviewed? In case it is to be reviewed, please provide cost details and method to calculate transit charge.***

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- Q5. *What should be the termination charge when call is terminating into Internet Telephony network?***

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Q6. *What should be the termination charge for the calls originating from Internet Telephony Network and terminated into the wire-line or wireless network?*

**AUSPI's Response**

As outlined in the response to Q2, Point of Interconnection for circuit switched network for various types of calls cannot be made applicable for Point of Interconnection for IP Telephony calls and hence the IUC currently exist cannot be implemented in case of voice traffic if they follow the IP domain. Thus, we propose that **Bill and Keep (BAK) should be implemented for all kind of termination charges.**

Q3. *Whether accessing of telecom services of TSPs 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.*

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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?*

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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?*

**AUSPI's Response**

Access to the telecom services of TSPs by the subscriber through public Internet (Internet access of any other TSP) should not be permitted.

Accessing of telecom services of TSPs by the subscriber through public Internet (Internet access of any other TSP) can be construed as an extension of Fixed Line or Mobile Services of the TSP and hence should not be permitted as it would facilitate bypassing of the ISD / STD calling mechanism.

Internet telephony services are just an application over the IP network. Just as the IP networks are characterised by their seamless connectivity over the physical boundaries artificially created by the mankind, so is the reach of services being provisioned over this network.

Access of the native telephony resources through the internet, from anywhere other than a customer's parent TSP's network is akin to remote access of the services of the parent TSP. Once a subscriber has remote access to his parent TSP's services, he would be in a position to make local calls / send local SMSs from any location across the globe. Therefore, access to the telecom services of

TSPs by the subscriber through public Internet (Internet access of any other TSP) would facilitate bypassing of the STD / ISD calling mechanism and tariffs as each and every call would be initiated as a local call is akin to the customer bypassing the STD / ISD calling mechanism. In addition, the service can be misused by anti-social elements to mask their call origination, especially when using the handset as an interface between the IP telephony and PSTN / PLMN call.

In view of the above, we suggest that **access to the telecom services of TSPs by the subscriber through public Internet (Internet access of any other TSP) should not be permitted** as it would facilitate bypassing of the STD / ISD calling mechanism and tariffs as each and every call would be initiated as a local call.

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

#### AUSPI's Response

We believe that identification and segregation of international internet telephony calls from the bulk traffic that is received over the high capacity international backhaul network would add on to the complexities of security and other traffic handling requirements. The process of identification and segregation involves a lot of overheads and is an extremely tedious and complex process. This would also lead to a lot of arbitrage on account of metering and billing between the operators. It is therefore, suggested that **Bill and Keep (BAK) would be most suited for International termination charges for International Internet Telephony calls.**

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

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

#### AUSPI's Response

The framework for allocation of numbering resource for Internet Telephony services should be same as was proposed by TRAI in its recommendations on this subject on 18 Aug 2008.

Number portability should be allowed for Internet Telephony numbers and its framework should be similar to the existing framework for PLMN telephony services.

Q12. *Is it possible to provide location information to the police station when the subscriber is making Internet Telephony call to Emergency number?*

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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?*

### AUSPI's Response

In the PSTN/PLMN network, the circuit between origination and destination location of the voice call is determined before the actual call establishment and hence it is possible to get the location of the subscriber. As IP telephony is a connection-less service and also has the ability to be accessed from anywhere across the globe, it is very difficult to accurately map the location information in case a subscriber uses IP telephony for calling emergency numbers.

Despite this limitation of the VoIP, many countries have adopted specific regulations for Emergency calling through VoIP.

We suggest as follows:-

- a. **Provisioning of facility for being able to dial emergency services should be mandated for IP telephony services that are interconnected to PSTN / PLMN networks.**
- b. **Mobile subscriber's utilizing IP telephony service should be mandated to provide their location information, prior to the activation of their service, to their TSPs. The process can be automated by the TSPs through usage of Apps as well.**
- c. **TSPs should be mandated to provision facilities for the subscribers to be able to update their location with the TSP so that emergency calls could be routed based on that registered location based information.**





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.*

AUSPI's Response

**Yes, the QoS parameters need to be prescribed for Internet Telephony**

It may be recalled that in 2002, The Authority had prescribed the Regulations on Quality of Service for VoIP based International Long Distance Service, 2002 (as amended from time to time). These regulations define the end-to-end service quality parameters based on MOS value or R value along with other parameters e.g. end-to-end delay, packet loss, jitter, DTMF tone transparency etc. for Internet telephony parameters on similar lines should be mandated. Apart from prescribing the technical parameters' benchmark, TRAI should also prescribe the QoS regulations related to billing, fault rectification, customer services, call centre / customer service etc.

**In views of the above, we suggest that the Authority should prescribe the QoS technical benchmark for VoIP services in line with its 2002 Regulations for VOIP based ILD services and also prescribe QoS benchmarks for other parameters related to billing, fault rectification, customer services, call centre / customer service, etc.**

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

AUSPI's Response

1. OTT players are providing communication services under the garb of Internet telephony which are similar to services being provided by Licenced operators, these services are required **to be regulated** due to the following reasons.
  - a. **Security Implications of Non-Monitoring of their Services.** OTT communications provide a means of communicating through voice and messaging services without any concern for the interception or monitoring of the calls / messaging service as the services are mostly provided ex-India where the LEAs have limited / restricted access.
  - b. **Ensuring a Level Playing Field amongst Operators providing same Service.** Now that the Authority is looking at the regulatory and financial aspects of 'Internet Telephony'. It is the bounden duty of the Authority to ensure a level playing field for the providers of similar services, i.e. Same Service Same Rules.
2. **OTT service providers should be mandated to obtain UL / UL (VNO) with Access Service Authorisation for enabling them to connect to the local PSTN / PLMN networks.**

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