

Submissions by Global Internet Policy Initiative

Summary of Issues for consultation

- 1. Does the introduction of Internet Telephony help achieve any or some of the policy objectives outlined in the NTP 99? If so, how?**

Wide spread access of telecommunications is of utmost importance for achievement of India's social and economic goals. The NTP 99 envisions affordable and effective communications for the citizens of India.

Internet Telephony will provide a cost effective means of communications for the citizens of India. Introduction of Internet Telephony will take telecommunication to the masses and enable all sections of the society even those who are currently being deprived of these facilities because of distance or purchasing power. With the introduction of Internet Telephony consumers will have choice of premium (Toll Quality) and Non-Premium (Non-Toll Quality) quality of service and can choose according to their need and purchasing power. Internet Telephony will also throw open long distance telephony to those sections of society that could not afford the same earlier. It will result in huge cost cutting for the businesses that in turn will help in increasing our GDP.

Thus Internet Telephony shall definitely help in achieving the objectives of the NTP 99 in so much so that it will help in encouraging the development of telecommunication facilities in remote, hilly and tribal areas of the country without hampering the existing telecom structure of the country.

One of the objectives of NTP 99 is also to make India companies truly global, Internet Telephony can help achieve that. Internet Telephony and VOIP are used by most Global companies the world over. Indian companies need to take advantage of the same to be cost effective.

Further it will also allow the provision of universal service to uncovered areas as has been envisaged in the NTP 99.

2. In case Internet Telephony is permitted, whether it should be through the present ISPs? If so, will the ISPs, then be regulated as a Value Added Service provider or as an operator of a Public Telecom Service such as BSOs, MTO, CMSOs etc.?

All telecom operators should be allowed to offer Internet Telephony as an additional service under their existing licenses. ISP's are already allowed to provide last mile access and also their service is in the nature of providing a public telecom service and hence ISP's should also be permitted to provide Internet Telephony Services under the prevailing ISP license by modifying the scope of service therein, suitably.

There should not be a separate regulation for Internet Telephony. Entry barriers in Internet Telephony Service should be minimum in the larger interest of the nation and consumers at large. Internet Telephony will help not only in the growth of telecom sector but an overall growth of the Indian economy. India must not be deprived of the technological growth and the Indian public should be allowed to reap the benefits of Internet telephony. ISPs should be allowed to offer Internet Service under their existing license, except for modifying the scope of Services as given in the ISP license conditions (i.e. by removing the restriction on providing Telephony on the Internet). Similarly other Public Telecom Service Providers may also be permitted to offer Internet Telephony.

3. In case ISPs are permitted to offer Internet Telephony, will it necessitate some modifications in the terms and conditions of the existing operators such as BSOs, CMSOs, NLDOs, because of bypass of their network for voice calls?

Internet Telephony has a lower QoS compared to carrier grade circuit switched telephony and does not compare and compete with the later. It is pertinent to mention here that Basic Telephony operators were allowed to offer CDMA limited mobility services (WLL), which were not part of the original license for Basic Services. Internet Telephony is also similarly bringing benefits to the consumer and the economy at large and should not be stopped or curbed because of the vested interests of few players in the telecom sector.

With ISPs being allowed to offer Internet Telephony, suitable modifications in the terms and conditions of the existing Operators such as BSO's, CMSO's, NLDO's may be undertaken, only if deemed necessary.

4. Whether Internet Telephony i.e., telephony on Public Internet be permitted, considering the fact that it will mean a bypass of the PTOs toll network ?

Consumer's right to choose and availability of Affordable telecommunication services should be the be the only consideration and must be considered above all other interests and considerations.

Internet Telephony will give increased choice to the customer without infact causing harm to the existing PTOs considering the fact that the overall telecom market will also expand. The QoS of Telephony on the Public Internet does not match that of PSTN. Internet Telephony will help Customers make suitable choice, in terms of Quality and Tariffs – based on differentiated QoS. Moreover the existing tariffs of the PTOs is artificially high so as to be out of reach of a large section of the society. With the introduction of Internet Telephony the competition will increase and there will be reduction in the tariffs benefiting the customers.

Already, substantial quantum of international calls (incoming as well as outgoing) are being routed through Public Internet – at least in parts – while the subscribers continue to be charged way-above-the-cost-tariffs for outgoing calls. Thus, toll bypass – is already happening without consequent benefits being passed on to the subscribers.

Innovations always challenges status quo. If it is perceived that there could be bypass of the toll network due to Internet telephony, it can very well be perceived that the fax and courier services resulted in bypass of the mailing systems and later, were themselves bypassed by e-mail.

5. If the answer to (a) above is yes, who Should be allowed to offer Internet Telephony:

- i) ISPs only by a process of migration**
- ii) All Access providers?**
- iii) New entrants including existing players under a new operating category called Internet Telephony Service Providers?**

All Public Telecom Services operators including ISP's must be allowed to offer Internet Telephony. ISP's are already allowed to provide last mile access and also their service is in the nature of providing a public telecom service and hence ISP's should be permitted to provide Internet Telephony Services under the prevailing ISP license by modifying the scope of service therein, suitably.

Any new license will only complicate and increase the licensing regime without any equivalent benefits.

- 6. If answer to 2(b)(i) is yes, should conditions of the licence of existing Internet service providers (ISPs) remain same in case they are permitted to provide Internet Telephony or they should be modified to reflect the change in the scope of their service.**

No changes are required in the ISP license except removing the provision that prohibits Telephony on the Internet and the corresponding obligations/restrictions of the ISPs to prevent telephony on their network.

- 7. Should PC to PC voice service be regulated?**

Voice Services across PCs and / or other Internet Access Devices such as Palmtops, Set Top Boxes, etc., wherein the first leg of connectivity between the subscriber and the Internet is without the involvement of PSTN switch, should not be regulated at all. Infact such regulating PC to PC voice services is not practically possible and any attempt to do so far greater costs and difficulties involved than any benefits that would be or are sought to be achieved by such regulation. It will hamper the growth of Internet and the IT industry as well which is already in recession. Voice services are an integral part of all messenger applications and is in fact a killer application with greater potential than e-mail and chat. India needs to and deserves to participate in the technological development and cannot afford to be left behind. Unregulated PC to PC voice services will give the much-needed impetus to the Indian software industry.

- 8. How do we define Internet Telephony? Should it mean PC to PC voice transmission using public Internet, or also PC to Phone (in other country) as well as Phone to Phone without any restrictions?**

Notwithstanding the devices being used Internet Telephony should encompass the whole gambit of services whether PC to PC, PC to PSTN or PSTN to PSTN without any restrictions at all. Any restrictions whatsoever will be detrimental to the interests of the nation and the public at large. It is re-iterated interests of the nation can not be overlooked for interests of few telecom players who have vested interests.

The Service Providers should be allowed to offer different QoS for their services and accordingly charge different tariffs so that a customer to whom non-toll quality is acceptable may use the service at lower costs.

9. Whether 'Internet Telephony' should also include Fax over IP?

Yes – where a subscriber gets an acknowledgement / activity report online, viz. ability to send a real-time fax, the term 'Internet telephony' includes the same.

However, as long as the fax is being sent / relayed / routed in a 'store and forward' mode, the same cannot be included under the term 'Internet Telephony'. All types of store and forward services are already covered within the ambit of the ISP license.

No transmission on Internet whether voice/ data/fax should be restricted only because it will reduce the revenues of some players with vested interests. Indian Public should not be deprived of the developments in the technology.

10. Should the new licencees for the Internet Telephony be mandated to use the Access Network of BSOs, or have their own facilities in the last mile including CPEs?

There is no need for a separate / additional category of License for Internet Telephony Service Providers, due to reasons already provided above. Further the ISP License already permits the licensee to establish the last mile to the subscriber and hence where ISPs will provide Internet Telephony, they can either choose to set up their own last mile or can provision it from the Access Networks of BSO's. As such all service providers of Internet telephony should be free to use the access network of the BSOs and/or build their own last mile.

11. As far as the carriers are concerned, should they be permitted all three options shown in figure 4, or allowed only the managed VOIP option shown as option No. 2 of the diagram, so as to ensure a specified QOS end to end, in the interest of the consumer?

Carriers should be allowed to use the engineering solution / network architecture as per their choice / availability of technology/ market forces to provide services to the subscribers However the Service Provider may be directed to disclose to its subscribers

the QoS he commits and also declare that QoS of the Internet Telephony may be inferior to that of the PSTN (toll Quality)

12. Considering the fact that the present generation Internet protocol (IP V4) and its associated protocols do not provide for QOS guarantees, should Internet Telephony be permitted to the ISPs, without specifying any QOS?

Market driven Choice of Quality and tariffs would enable the customers to differentiate and choose across various Service providers / packages. Consumers must have a right to choose what they want.

Internet Telephony must be permitted to Service Providers including ISP's without specifying any QoS. The competitive forces in the market would automatically put the onus on the service providers to improve Quality of Services.

13. Should there be a separate licence for Internet Telephony Service or some of the existing facility based Service Providers should be permitted to provide this service?

As already mentioned above, all the licensees of Public Telecom Services including ISP's must be permitted to provide Internet Telephony. Hence there is no need for a separate license category of Internet Telephony Service. In any case, Internet telephony service should not be restricted to only facilities based Service Providers.

14. In case ISP's are permitted to provide Internet Telephony, what terms and conditions be imposed on them to ensure a Level Playing Field, vis a vis BSOs/NLDOs/ILDOs?

The key bottlenecks in telecommunications networks lie in the access segment and hence, operators like BSOs who control access and others like NLDOs/ILDOs will not be impacted much in terms of their PSTN business. For some time to come, therefore, Internet telephony may remain a niche market targeted at very specific customer segments.

In fact, Internet service in general and Internet telephony in particular represents a major opportunity for BSOs/NLDOs/ILDOs as the overall usage of the telecom network increases and more and more customers use more and more services – thanks to lower tariffs, choice of service providers and more number of people to communicate with.

Hence, there is no requirement to impose any additional terms and conditions on ISPs providing Internet Telephony Services.

15. Whether a separate category called Internet Telephony Service Provider be created or only the ISPs be permitted to provide Internet Telephony, with some modification in the terms and conditions of their licence?

As already mentioned hereinabove, all the licensees of public telecom services, including ISPs, should be permitted to provide Internet telephony. In the ISP license the only change required is the deletion of the provisions prohibiting telephony on Internet and related conditions/ restrictions.

16. Does Internet Telephony really provide a cheaper option to conventional telephone service?

Definitely Yes. Open standards which VOIP adopts mainly enables Internet Telephony to remain a cheaper option, since it also obliterates the distance sensitive nature of costing which is typical in the PSTN. Thus because of Internet Telephony Indian public will be able to afford and use telecommunication facilities which otherwise a large section of the society was deprived of.

17. What impact the immediate introduction of Internet Telephony will have on:

- i) Tariff rebalancing for domestic and International calls?**
 - ii) Settlement rate system?**
 - iii) Spread of rural telephony**
- i) Internet Telephony will result in a more robust competitive environment in the telecom sector in India, which is also envisioned as an objective of the NTP '99. Hence, fall in telecom tariffs of both domestic and international calls is foreseen.
 - ii) Internationally there is already a downward trend in the settlement rate systems and the same is foreseen in India too with growth in competition.
 - iii) Rural telephony will definitely receive an impetus, as rural consumers will have access to an array of affordable telephony and Value Added services. Internet Telephony will definitely help in achieving provision of universal services.

18. What costing methodology should be used for fixing tariff of Internet telephony service?

For the time being there should be forbearance on tariffs for Internet telephony service apart from the same ceiling as for normal PSTN service and a floor – the latter, to take care of potential cross-subsidisation by multi-service operators.

While fixing any tariffs it must be borne that the tariffs for internet telephony are relatively independent of the distance.

19. Can Internet Telephony play any role in reducing the so called Digital Divide?

Internet telephony will act as a key driver for local entrepreneurs to set up Community Information Centers / Cyber-kiosks / Internet dhabas, etc even in small towns and villages. It represents an effective means of providing affordable communication to public at large, including those unable to pay the prevailing high tariffs and/or living in remote / difficult terrains.

The consequent impact of Internet telephony will be in terms of higher utilization of the resources (access device as well as the network) thereby accelerating returns on investment, which in turn will further incentivize expansion of the network infrastructure in remote areas. Improvement in accessibility will thus go a long way in bridging the Digital Divide.

In fact, Internet telephony will be the Killer Application that will make distance-learning, tele-medicine or e-governance, etc a reality. Web-based contact centers present major opportunity for the country's far-flung areas and ought not to be neglected. PC and telecom penetration will also grow in small towns and rural areas which will have an overall multiplying effect. It will also give a much needed push to the IT industry and have a positive impact on India's GDP

20. Will infrastructure for Universal Service grow faster as a result of introduction of Internet Telephony?

Yes –Internet Telephony will accelerate the Universal Service by generating higher value for subscribers in terms of range and tariffs of services, improving overall utilization of the network infrastructure and consequently provide for better Return on Investments. This will spur the growth and expansion of the infrastructure for Universal Service.

21. Can immediate introduction of Internet Telephony have any impact on the rollout plans of facility based operators?

Immediate introduction of Internet Telephony shall positively impact on the rollout plans of the facility-based operators. It will accelerate the demand for network facilities including bandwidth, last mile access, and other connectivity resources. Higher demand for these facilities will also create the need for optimum utilization of existing resources too and as such we foresee a growing need for network operators to interconnect and share the infrastructure with each other on equitable terms. Hence, facilities based operators will be fully motivated to roll out in new areas, expand and upgrade in existing areas faster.
