INTERNET TELEPHONY IN INDIA: EMERGING LEGAL ISSUES

By Adv. Nisha Parekh

Introduction:

Internet Telephony is a methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. After several months of debate, on April 1, 2002, the Government of India finally permitted Internet Service Providers (“ISPs”) to offer Internet telephony services. Earlier, the legal and regulatory framework in India did not permit ISPs to offer Internet telephony. After the opening up of this sector, the Department of Telecommunications (“DoT”) has granted approvals and licences to several telecommunication companies to commence these services.

This paper explains the meaning of Internet telephony, analyses the guidelines and license issued by the DoT for providing Internet telephony services and discusses some of the emerging legal issues that are offspring by this liberalization.

Meaning

Internet Telephony is a form of Internet Protocol (“IP”) Telephony. IP Telephony is used as a generic term for the many different ways of transmitting voice, fax and related services over packet-switched IP-based networks. The basic steps involved in originating an Internet telephone call are conversion of the analog voice signal to digital format (binary data) and compression/translation of the data into IP packets for transmission over the Internet; the process is reversed at the receiving end. This process is called modulation-demodulation, giving the term “modem.” The communication usually takes place ‘real time’.

Thus, the main difference between Internet Telephony and normal telephony is that whereas in normal telephony, circuit switching technology is used, Internet Telephony is based on packet switching technology.

65 Visiting Lecturer in ROFEL College, Vapi
66 http://www.dotindia.com
67 Aashit Shah and Annapoorna Ogoti, “To Phone or Net to Phone” Economic Times, Saturday, December 15, 2001
Different ways of Internet Telephony

Following are the popular methods of Internet Telephony as recognised by the International Telecommunications Union (“ITU”)

1. **PC to PC**
   Under this method, calls are transferred from one PC to another PC. No gateway with a PSTN is required, because calls are not switched by a PSTN. Rather, the principal medium of transmission is always the Internet.

2. **PC to Phone / Fax**
   Under the “PC to Phone / Fax” method, the conversion of speech into packets takes place on the originating user’s PC. The process is reversed at an Internet Telephone Service Provider’s (“ITSP”) gateway server, which then dials the called party’s telephone number and, when a connection is made, starts sending the caller’s speech and transmitting the called party’s speech in the other direction. The “PC to Phone / Fax” category includes PC to Phone Voice and PC to Call Centre services.

3. **Phone to Phone**
   “Phone to Phone” method of Internet Telephony is closely associated with the traditional telephone experience. In “Phone to Phone” Internet Telephony, the customer, using an ordinary telephone, dials an access code and then the telephone number; the access code then routes the call to a special computer gateway (the IP network). Local computer gateways for companies offering this type of service must be optimally placed in strategic geographic areas.

**Classification of Internet Telephony under GATS**

The General Agreement of Trade in Services (“GATS”) under the World Trade Organisation (“WTO”) envisages the progressive liberalisation of trade in telecommunications services. Though, India has made no specific commitments for Internet telephony, it has made certain commitments for other telecommunication services. Going forward, it would be

---

69 https://www.unc.edu/courses/2010fall/law/357c/001/VoIP/basics.html
important for the Indian Government to understand how Internet telephony services could be classified under the GATS framework while making any commitments.

Under GATS, ‘telephony’ falls within the purview of telecommunications services as per the Central Product Classification System (“CPC”). Telecommunications services are further classified as basic telecommunications and value-added telecommunications.\(^{70}\) It would be useful to see what commitments India has made in this sector and analyse how Internet telephony can be classified for the purposes of GATS.

For the purpose of Internet telephony services, voice telephone, packet-switched data transmission and other services would be relevant. Of these three, India has made commitments with respect to voice telephone and other services.

**Licensing Internet Telephony Services in India:**

Pursuant to the New Telecom Policy, 1999, the DoT has announced guidelines permitting ISPs to process and carry voice signals. ISPs can only offer these services within the service areas for which they have a license. Pursuant to the Guidelines, the DoT has revised the License Agreement for ISPs to include the provision of Internet telephony services. The Revised License has been issued under the authority granted to the DoT under the Indian Telegraph Act, 1855, the Indian Wireless Telegraphy Act, 1933 and the TRAI Act, 1997.

All ISPs desirous of providing Internet telephony services also have to make an application to the DoT for signing an Amendment to their existing ISP license.

**Legal issues regarding Internet Telephony:**

(a) **Ambiguity in Definition:**

While the Guidelines and Revised License discuss what services would amount to Internet telephony for the Indian context, they have failed to define the term “Internet telephony” per se. The meaning given to the Internet telephony is a restrictive in nature, as it states what services would fall within and outside the purview of Internet telephony for the Indian ISPs. In fact, many of the services, which are prohibited under the Revised license amount to Internet telephony in the international context. For

---

example, originating or terminating a voice communication service from / to a telephone in India would amount to Internet telephony in the international context, if the public Internet is used as the medium of communication.\(^{71}\)

The Guidelines and License do not lay down any clear parameters that need to be satisfied by any telecommunication service to be classified as Internet telephony. While this problem exist world over, and even at the ITU level, this ambiguity could lead to problems in the future when new forms of technology and modes of communication emerge.

(b) Meaning of PC and Telephone:

The Revised Licence states that “PC to PC” Internet telephony is permitted in India. However, the Revised Licence does not clearly define a PC. Under the Information Technology Act, 2000 (“ITA”), a computer is defined as follows:

“Computer means any electronic magnetic, optical or other high-speed data processing device or system which performs logical, arithmetic or memory functions by manipulations of electronic, magnetic or optical impulses, and includes all input, output, processing, storage, computer software, or communication facilities which are connected or related to the computer in a computer system or computer network.” \(^{72}\)

Thus the definition of a computer is extremely wide and is not merely restricted to a normal computer, which is used at home or in offices. Moreover, while the Revised Licence states that the telephone call cannot be originated from or terminated on a telephone in India, it does not define the word “telephone”. Even the telecommunications laws in India have no clear definition of the term telephone.

With the emergence of new technologies and products, the meaning of PC and telephone could be extended to also include personal digital assistants (“PDA”) (eg. palm pilots) and even mobile phones with computing power (like the Nokia 9110).

---


\(^{72}\) Section 2(1)(i) of the ITA.
Moreover, there is also a convergence between PDAs and telephones (like the TREO). If a call is made from such devices, it is uncertain whether the same would be legally permissible.

(c) Quality of Services:

One of the major difficulties in Internet telephony is in achieving a similar standard of QOS for Internet telephony services as for normal telephony services. The difficulty could arise due nature of the IP network. The IP network uses packet mode of data transmission that can degrade the quality of the voice communication as the packets could get lost in transmission on the public Internet, there could be a delay in transmission, there could be a variation in the packet arrival or there could be an echo effect due to the delay between the transmission of a signal and its receipt.

Another practical difficulty that ISPs are facing is the lack of adequate cooperation from basic telephone operators. Unless the basic operators give better QOS in their agreements with ISPs, ISPs will not be able to provide better QOS to their subscribers.

(d) Liability of the ISP:

The ITA contains provisions dealing with the liability of Network Service Providers (“NSPs”). A NSP has been defined under the Act to mean "an intermediary" who on behalf of another person, receives, stores or transmits tha message or provides any service with respect to that message73.

Under the ITA, publication or transmission or causing publication of any obscene information is an offence74. Therefore, if while using Internet telephony services, if the subscribers transmit any obscene information, the ISP could be held liable for such transmission. However, if the ISP can prove that it was not aware of such contravention or if it had taken reasonable steps to prevent such contravention, it may be immune from any penalty or liability. Therefore, ISPs must be careful to include appropriate terms in their subscriber agreements to preclude such liability.

---

73 Section 2(1)(w) of the ITA
74 Section 67 of the ITA
(e) **Blocking of Internet telephony websites:**

The ISP licence does not require that an ISP must provide Internet telephony services only to its Internet subscribers, nor does it mandate that Internet telephony and Internet services have to be provided together. However, news reports indicate that after April 1, 2002, some ISPs have started blocking access to websites of other rival ITSPs (including foreign ITSPs). If so, do they have the authority to block the sites? Further, many ITSPs have tied up with international ITSPs to leverage their customer base. The viability of this option remains to be seen, as foreign ITSPs can set up 100% subsidiaries in India without the help of Indian ISPs. Indeed, it may be economically advantageous for them to do so as they would already have their servers and networks established in foreign countries.

**Conclusion**

While the growth of Internet telephony will certainly increase the competition with basic service operators, on the whole the consumer will stand to gain. However, regulations that artificially restrict the usage and growth of Internet telephony will only make the viability of this service more complex and ambiguous. The DoT needs to try to resolve all forms of ambiguity in the license terms to avoid future misunderstandings. At the same time, service providers must ensure that their Internet telephony services fall within the parameters of the existing regulatory framework. This will assist in minimizing legal liability.