



30 January 2007

**Mr. Sudhir Gupta**  
**Advisor, Mobile Network**  
**Telecom Regulatory Authority of India**  
**Mahanagar Doorsanchar Bhavan**  
**Jawahar Lal Nehru Marg (Old Minto Road)**  
**New Delhi-110 002**

Dear Mr. Gupta,

**Review of Internet Services**

The Call Center Association of India comprising stakeholders of the Business Process Industry provides a network for its members to jointly address challenges facing the industry and to explore the \$20 billion export opportunity by promoting India as the preferred call center destination. CCAI builds the Indian brand equity for call center and back office operations and takes up policy and infrastructure related issues with the government.

We are writing to you in reference to your recent consultation paper on Review of Internet Services due today.

We have attached a document detailing our response.

We will be happy to participate in any further consultation process and will be happy to answer any questions you may have.

Sincerely,

Sam Chopra  
President

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**Q1. At present, there are 389 licensed ISPs out of which only 135 are offering Internet services. Top 20 ISPs cater to 98% Internet subscriber base. In your view, is there a rationale for such a large number of ISPs who are neither contributing to the growth of Internet nor bringing in competition in the sector? Suggest appropriate measures to revamp the Internet service sector.**

*There is a rationale for a large number of ISPs. Historically the smaller ISPs have failed because they had no easy access to the customers. The basic service providers who owned the copper refused to unbundle the last mile or share dialup revenues denying fair access to ISPs. This policy requires a review and the last mile must be unbundled.*

*In the future access technologies will not be restricted to copper and fiber - wireless technologies will proliferate with Wifi, Wimax and others yet to be launched. These technologies should be encouraged to free up access and provide a level playing field for all ISPs including the smaller ones to provide services to customers.*

*Another measure will be to encourage the separation of infrastructure providers from service providers. SPs should be allowed to ride on infrastructure provided by companies who could only own and operate infrastructure but not the service. This will ensure efficient use of infrastructure and drive Internet usage growth.*

*Experience has shown that it is the smaller ISPs and companies that provide niche and specialized services that the larger ISPs may not – this will ensure robust competition and better services for the end customers*

**Due to limited availability of spectrum for wireless broadband access, and high cost of creating last mile infrastructure, many ISPs are left with only option to provide Internet dialup access services. With increasing penetration of broadband, what efforts are required to ensure viability of such ISPs in changing scenario? Please give suggestions.**

*Wireless broadband access is the way forward with technologies of Wifi and Wimax operating in the unlicensed bands. Technologies will evolve to make the most efficient use of unlicensed spectrum. Other wireless technologies using lasers are in an experimental stage and will surely evolve.*

*Larger bandwidth in the RF spectrum should be made available as 'unlicensed' spectrum to provide a kick-start to this sector.*

- Q2. At present limited services are permitted under ISP licenses. There is no clarity in terms of some services whether they can be provided under ISP licenses. Do you feel that scope of services which can be provided under ISPs licenses need to be broadened to cover new services and content? Suggest changes you feel necessary in this regard.**

*The ISP license by definition should be restricted to provision of vanilla bandwidth. All other Internet enabled services, whether ASP applications, video and voice, www, hosted applications should be freed from licensing.*

*Growth of Internet enabled applications is only restricted by human imagination and new applications are being invented every day. Most application service providers are not ISPs. The provision of Internet bandwidth has nothing to do with the delivery of Internet enabled services, whether it be voice, video, entertainment, business applications etc.*

*The concept of regulating services delivered via the Internet is illogical and has no rationale. Applications and services are evolving and being added every day. The basic question is what is the purpose of regulating applications and services? The second question relates to a practical problem. How do you regulate when the Internet has no geographic boundaries - and no practical technology restrictions can be placed on provision of services via the Internet? What are the criteria? What do you do about services that do not exist today but will be available in future?*

*Our view is that Internet provisioning may be regulated but delivery of services over the Internet should not be.*

*What difference does it make if application servers reside in India or overseas? The decision to locate source servers of applications within the geography of India should be determined by economic and technology considerations and not be regulation.*

- Q3. UASL/ CMTS licensees have been permitted unrestricted Internet telephony however none of them are offering the service. ISPs (with Internet telephony) can provide Internet telephony within scope defined in license condition. The user friendly and cheaper devices with good voice quality are increasing Internet telephony grey market. Please suggest how grey market operations can be curbed without depriving users to avail such services?**

*Our belief is that markets will embrace technologies and practices that are*

*perceived to deliver value. In this respect Internet Telephony delivers excellent value via the innumerable VoIP providers, both web enabled (using credit cards) and those selling calling cards for cash. The technology to enable this is being commoditised – it is possible to buy pre-configured devices that do not require any technical skills using a plug and play approach.*

*Why should this be perceived as a 'grey market' by the Government? In most developed nations VoIP has been entirely freed up requiring no licenses. This has led to an overall addition of value for end customers and also resulted in healthy competition amongst wholesale large carriers.*

*Experience has shown that many of the traditional TDM telcos overseas started their own retail VoIP services adding to the healthy competition.*

**Q4. How to address the issue of level playing field amongst the licensees of UASL, CMTS, and ISPs?**

*The way forward is to free up Internet enabled services, whether Voice, Video, Gaming, www, business applications etc. for all. Let each large and small or niche player, deliver service without being bound by regulatory issues.*

*If Internet enabled services have to be regulated, then the question arises what criteria to use to regulate each service and what to do about future services that do not exist currently.*

**Q5. The service roll out obligations under ISP license is very general and can be misused by non-serious players. Do you feel the need to redefine roll out obligations so that growth of Internet can be boosted both in urban and rural areas? Give suggestions.**

*The ISP license should be unrestrictive in nature and not place restrictions on rollout. Each licensee will have its own business model and every ISP will attempt to run it as a business. For these businesses to succeed there has to be fairness in the use of access networks both wired and wireless.*

**Q6. Do you feel that ISPs who want to provide unrestricted Internet telephony and other value added services be permitted to migrate to UASL without spectrum charges? Will it boost Internet telephony in India? What should be the entry conditions? Give suggestions.**

*We disagree with the premise that ISPs are the vehicles to provide Internet Telephony and Value Added Services. The world over, providers of voice,*

*entertainment, business services, gaming, dating services etc. are not ISPs. Providers of these services are users of the Internet to deliver services.*

*We are of the view that value added service providers, including voice and video, should be unlicensed and allowed to provide services without restrictions – as long as there is no interconnect with the TDM networks within the geography of India.*

*We also of the view that any interconnect between VoIP networks and traditional TDM networks should be treated just like any other interconnect between the various TDM providers with the ensuing AGR, and interconnect charges.*

- Q7. UASL/ CMTS licensees pay higher regulatory levies as compared to ISPs for provision of similar services. Do you feel that similar levies be imposed on ISPs also to maintain level playing field? Give suggestions.**

*We believe that the playing field must be level. The nature of the Internet is such that effective policing and enforcement of regulations is very difficult from a technological standpoint. We believe that UASL and CMTS licensees should be freed from levies as long as the value added service (including voice and video) is not interconnected with the TDM network within India.*

- Q8. Virtually there is no license fee for ISPs at present. The amount of performance bank guarantee (PBG) and financial bank guarantee (FBG) submitted by ISPs is low. Do you feel the need to rationalize the license fee, PBG, FBG to regulate the Internet services?**

*We are recommending that ISPs are licensed only for bandwidth provision and the license fee for this should necessarily be low. We are also recommending that value added services be freed up for everybody and therefore ISPs will also be able to run their own value added services.*

- Q9. At present ISPs are paying radio spectrum charges based on frequency, hops, link length etc. This methodology results in high cost to ISPs prohibiting use of spectrum for Internet services. Do you feel that there is a need to migrate to spectrum fee regime based on percentage of AGR earned from all the revenue streams? Give suggestions?**

*Our view is that it is always the most efficient to move to a tax regime that is simple and unambiguous. The current method is the cause of a huge amount*

*of misreporting and misuse. A move to an AGR regime for spectrum use is more logical and efficient.*

**Q10. The consultation paper has discussed some strategic paths to boost Internet telephony, bring in level playing field vis a vis other operators, and regulate the Internet services. Do you agree with the approach? Please give your suggestion regarding future direction keeping in view the changing scenario.**

*Our members are most concerned with policies relating to VoIP and hence we wish to discuss this in detail.*

- 1. The current VoIP policies are ambiguous, non-transparent and lack clarity. Why should voice, which is not connected to the PSTN in India, be treated differently from any other Internet enabled service – whether it be www, ftp, business applications, video, gaming, social interaction, or any other. In fact many of these services are converging and provide multiple media interactions.*

*It is rather common these days to find ‘click to talk’ and ‘click to view’ buttons on web pages, which directly establish a voice or video path to an agent. Is this going to be classified as VoIP? Our contention is that the Internet is a medium for the transportation of data, and whether the transported data represents voice, video, a medical image, text, business applications or any other kind of information – it should not be regulated by the State – the only exception being offensive content, which in any case is a criminal offence under existing laws.*

- 2. There is much architecture for voice over the Internet, which neither the current laws, nor this consultation paper address. An example is:*

*Many of our members use hosted predictive dialers overseas. In this architecture the predictive dialer is physically situated overseas and dials into the foreign PSTN there. Permanent voice connections are established from the overseas dialers to agents in India using VoIP technology. This scenario does not fall into the conventional VoIP definition since the VoIP connection is point to point and no IANA or E.164 dialing taking place from India.*

*The BPO and Call Center industry in India is adopting VoIP technologies at an ever-increasing rate. To stay competitive it is necessary to use the latest technologies and use the most cost effective VoIP services from around the world. Very often, the overseas principals (clients) of call centers insist that a particular provider be used for providing services. Our members in India are then constrained contractually to use these providers from overseas.*

*The current licensing is not clear on these aspects and it is necessary to be unambiguous and freely allow the use of any VoIP providers, including those*

*from overseas, for the BPO and Call Center industry to survive and thrive.*

*Our Association will be happy to address security concerns by assisting security agencies with voice logs and facilities for legal interception.*

3. *We completely agree that a level playing field needs to be put in place for overseas and domestic providers. Our recommendations are:*

*No AGR for VoIP providers who are not connected to the PSTN in India.*

*An AGR or other revenue mechanism, and a licensed regime for interconnection of VoIP and public PSTN within India.*

4. *We have specific comments against certain paras of this consultation paper:*

*Para 3.2.2: Internet telephony, whether over the Internet or a managed network is no different from data transfer over the Internet. What makes it different is the connection to the PSTN. This can be regulated. As long as there is no connection within India there is no need for regulation.*

*It should be treated as separate service only if interconnected with the PSTN in India.*

*Para 3.5.1 and 3.5.2: We are addressing the issue of lawful interception of voice calls made over the Internet. Every voice data stream has to pass through the ISPs network - the ISP who has provided the bandwidth. It can therefore be intercepted at that point. The vast majority of VoIP media streams use RTP as the media protocol. These streams can be separated at the ISPs nodes. This is true whether or not the call set up signaling follows a different path with the use of gatekeepers and proxies.*