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 rational 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.

Response: To understand the present situation, one should understand the scenario under which ISPs were created. The second half of 1990s witnessed IT boom and there was an urgent need felt to increase the Internet penetration in the country. One of the major decisions taken was to remove the monopoly of the VSNL which was the main ISP at that time.

That the strategy worked can be seen in the initial growth of internet connection at more than 200% per annum. This was largely due to the then existing latent demand of a large number of PCs not having access to the Internet.

The subsequent downtrend in the growth of internet connection can be attributed to the following collapse of IT boom in early part of the decade. Some of the ISPs found it profitable to cater to corporates rather than individuals.

Now that the IT and IT enabled services have come back with a bang and the entire information services, commerce, education, health, entertainment and personal communications are going to be heavily dependent on the same, it is time once again to give a boost to the ISP industry so that they can respond to the needs of the country to provide Internet access to all cross sections of the society. Internet based services instead of being discouraged are required to be promoted as this is the emerging communication means in the time to come and will be a positive means to spread the broadband services in the country and improve people to people connectivity Towards this it is essential that

- Fostering a policy that encourages business model and technological innovation to provide the best service at the lowest cost to consumers.

- There should be no undue restrictions put on ISPs. In fact the ISP regulations should be relaxed further.

- The Government should ensure that ISPs get just access to bandwidth and connectivity at competitive rates from these service providers. As many of the telecom service providers are themselves ISPs, they should not discriminate other ISPs and charge them exorbitant rates for connectivity and bandwidth.
• For the growth of this service it necessary to free the last mile difficulty by unbundling the copper line.
• The penetration of PC plays a very important role. The much promised cost of a PC at below Rs 10,000 is still to be realized. If this happens it would ignite a fresh demand for internet connectivity.
• Both dial up and leased circuits should exist for some more time, till the broadband connection becomes prevalent in all parts of the country. The dial up network should also be properly maintained.
• The ISPs who have violated the license conditions should be penalized. But the entire ISP community should not be looked down as there are many genuine ISP providers.
• The grey area services which have happened in the past are because of the control of the termination line at the subscriber premises is under the control of a different organisation as compared to the ISP.
• Foreign investment into ISPs should continued to be encouraged by maintaining the current FDI limits.
• The government should not get unduly concerned with the large number of non-operational ISPs. The market forces will determine the number of ISPs that would stay in the fray.

Q2. 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

Response: As 60% of the Internet subscribers still continue to be on the dial up basis, it is important that this dial-up network should be maintained properly for its full performance. With the availability of broadband and cellular services, the dial-up network is getting less loaded. This unused capacity can be exploited to provide ISPs the connectivity at lower tariffs. The basic service providers and the infrastructure providers should be encouraged to provide connectivity and bandwidth to ISPs on a non discriminatory basis and tariff. Those ISPs who can set up their own last mile access network should continued to be encouraged to do so without any restrictions on medium to be used i.e. copper, fibre, wireless/ satellite depending on the location and availability of infrastructure of the subscriber. Unbundling of the copper for last mile access is very important.

Q3. 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.

Response: Services should not be provisioned on a service by service basis as this limits innovation. Plain ISPs should be allowed to provide all the existing multimedia services
and additionally all the services mentioned in the Table in Chapter 4 under Plain ISP. The scope should be broad enough to include services based on future technologies. A special category of ISP should be allowed even unrestricted telephony. The telephony on IP can provide a service at a low cost.

**Q4. 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?

**Response:** As is well understood by now the technological advances are running ahead of regulation. These technologies are now rapidly being built around IP and are directly amenable for plug and play. Keeping the restrictions on type of devices, etc will only increase the unlicensed usage. Restrictions on technologies, services and devices should be removed and even scope should be there to incorporate emerging technologies. Keeping in view national security conditions, we should look for technological solutions for monitoring the traffic. The same industry whose technologies make monitoring of traffic difficult will also be able to provide solutions. There should be a pro-active role from the monitoring agencies to seek solutions from the industry for monitoring the traffic.

**Q5. How to address the issue of level playing field amongst the licensees of UASL, CMTS and ISPs?**

**Response:** Providing a level playing field between the ISPs and UASL/CMTS is not a correct approach. UASL/CMTS are conventional switching technologies which will continue to dominate the telephony market and value added services riding piggy back on telephony network. ISPs provide by very nature of the IP technology are already into Next Gen technologies. Data services will constitute a major portion of ISP business and telephony will only be a piggy back on IP network. Even the revenues from ISP with unrestricted telephony will never be on the same scale as those of UASL/CMTS. Therefore ISPs should be treated with softer levies including entry fees.

**Q6. The emerging technological trends have been discussed in chapter 3. Please suggest changes you feel necessary in ISP licenses to keep pace with emerging technical trends?**

**Response:** As stated in response to earlier questions all new technologies should be allowed as they would benefit the end user. IP-v6 should be introduced in all new networks and old networks should gradually evolve into IPv-6. All last mile technologies for direct access to the user such as wireless, satellite, copper, fibre which themselves keep evolving should be allowed. As stated earlier we should take the help of industry itself to come out with appropriate monitoring enablers.
Q7. 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

Response: Certain minimum roll out obligations could be considered. But it would be better to leave it to market forces to determine the viability of an ISP.

Q8. 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

Response: ISPs even with unrestricted telephony should maintain an identity independent of UASL as they use two different technologies and they differ in volume and revenues greatly

Q9. 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.

Response: As stated earlier the levies imposed on ISPs should be lower than those of UASL/CMTS

Q10. Virtually there is no license fee for ISPs at present. The 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?

Response: To encourage ISP industry the entry fee and the license fee should be reasonable keeping in view the nature of ISP operations. The license fee can be a % of the AGRU

Q11. 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?

Response: Spectrum fee as small as, say 1 to 2% percentage of AGR would be a reasonable approach.
Q12. 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.

Response: While the approach looks all right with respect to boosting Internet telephony, it should also be recognized that level playing field is only between equal levels of operations. Level of ISP operations should be taken into account while evolving the entry fees, etc.

........................................END............................................................