- Q1) At Present, there are 389 licensed ISPs out of which only 135 are offering internet services. Top 20 ISPs contribute 98% of the 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.
 - A) Of the many services in the telecom sector, it is indeed a remarkable policy of the Government to offer 389 licenses in internet services which enabled intense competition among the service providers leading to consumer being the ultimate beneficiary.

Why 65% of the licensees are not offering the services and what needs to be done to make them active to make industry more competitive for the benefit of consumer?

In our view, the reason for only 135 ISPs offering service vs 389 licenses issued is because the standalone ISPs are incurring losses or generating very low returns compared to the investments made. The Consultation paper also recognizes this fact. In our view, the negative ROI in ISP industry is due to the following reasons and the Government should amend the policies to address these issues:

a) Allow more services under ISP umbrella to make standalone ISP business sustainable: Many standalone ISPs have only one revenue stream - Internet Services. The IP-VPN services were interpreted as a separate service and were excluded from ISP service leading to further weakening of the ISPs.

Large ISPs are integrated telecom players offering various services thus sharing the same infrastructure for various services like basic /mobile telephony, NLD, IP-VPN, IPLC and Internet services.

While the government lowered the barriers of NLD/IP -II and ILD licenses by lowering the licence fee which is a welcome move, it is still beyond the reach of "B" class and C class ISPs to enter these services. Here, Government could consider offering 3 categories of NLD/IP-II licenses – A,B and C on the lines of ISP license so that ISPs with the existing infrastructure can offer the NLD /IP VPN /IP-II services within their geographical limits, at a lower License fee compared to the existing country wide NLD license fee so that the existing infrastructure can be better leveraged by ISPs.

b) While IP Telephony has taken off in a big way in developed countries leading to further lowering of tariff, India is yet to reap the benefits of the technology. VOIP has brought down the rates of ISD calls to a level of 50 paisa per min to the U.S., while the local calls and STD calls are ironically costlier. As mentioned in the Paper, the UASL operators have not embraced IP telephony yet, leaving no service provider to translate the technology benefits to a consumer benefit.

To pass on the benefits of the technology to the common man, unrestricted IP telephony should be allowed to ISPs without any license fees. However, to maintain level playing field, revenue share to government may be charged on the IP telephony subscription revenues.

- Unrestricted telephony will not only benefit customers and ISPs, it will also bring more revenue to the government and make the ISP /ITSP industry more competitive. This will eliminate grey market operations and the risks tagged to the grey market.
- -While Cable/ wireline infrastructure need more funds for deployment of networks turning away many ISPs, with the advent of new technologies like Wimax, the problem can be overcome. Here again, Spectrum pricing is the key to drive internet penetration. It is appreciable that TRAI has recommended to the government to allocate 200 MHz for wireless broadband. It is recommended that Spectrum for Wi-max may be earmarked for various classes of ISPs (A,B and C) to prevent hoarding of spectrum by few large operators. The spectrum should be made available free for small ISPs to be able to operate.
- Inspite of the policy for allowing domestic leasedlines for ISPs by the incumbent players, it is not happening on the ground which needs to be enforced. Also the lastmile access of incumbents needs to made available to ISPs.
- To summarise, in our view, restricting the number of ISP licences is not the solution to make the industry more competitive and grow the internet penetration. ISPs need to be strengthened by allowing more services and removing barriers to attract and retain the competitive players.
- 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 dial up access services. With increasing penetration of broadband, what efforts are required to ensure viability of such ISPs in changing scenario? Please give suggestions.
 - **A)** As mentioned above, ISPs should be allowed to use wireless broadband access using the emerging wireless technologies like Wi-max and the each of the ISPs should be given free spectrum in line with the number of customers the ISP has.
 - **B)** The infrastructure of incumbents should be allowed to be used by the ISPs at a nominal cost or on a small revenue share basis, so that the smaller ISPs are able to

offer broadband services to customers. This will increase the competition among broadband players leading to consumer benefit.

Q3) At Present limited services are permited under ISP licenses. There is no clarity in terms of some services in terms of whether they can be provided under ISP licenses. Do you feel that scope of the services which can be provided under ISP Licenses need to be broadened to cover new services and content? Suggest changes you feel necessary in this regard.

Since internet domain is fast developing in terms of applications and the benefits should be quickly passed on to the common man for the development of the country, it is not recommended to debate and delay the launch of such new services and also restrict such services after they are rolled out.

From the ISP industry point of view to facilitate viability of ISPs to survive as stand alone ISPs as well as for the consumer benefit, it is necessary to allow all services and applications which use TCP /IP and other IP compatible protocols like IPTV, Unrestricted IP telephony, IP –VPN, IP-II services under the purview of ISP license. Such blanket permission will revive the diminishing ISP industry and make it vibrant and innovative which benefits the country at large.

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 with in scope defined in license condition. The userfriendly 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?

As TRAI and the government want more tele density which is directly linked to affordability to a common man, it is essential to embrace the new technologies faster which translate to consumer benefit.

As rightly pointed out in the paper, UASL / CMTS licensees are not keen on IP telephony and that should not deprive a common man the benefits of this technology. The regulatory restrictions are leading to grey market to flourish leading to loss in revenue to the government and also increasing the risks associated with it, while the law abiding ISPs are kept out of the services. As admitted in the paper, there is no fool proof way to curb illegal telephony given the faster technological developments and consumers are willing to use illegal services over legal, but costly services.

While PC to PC telephony is allowed under ITSP license, it has not picked up from convenience point of view and lower penetration of broadband among internet subscribers.

From the points of view of

- (a) consumer benefit of lower tariffs
- (b) increasing teledensity especially in rural areas,
- (c) encourage stand alone ISPs to invest, expand and survive
- (d) and curb the grey IP telephone market and increase revenues to government and remove the security threats and other risks

it may be considered to allow unrestricted IP telephony with no license fee but revenue share to government at par with other voice operators on the IP telephony service revenue alone. This will eliminate the grey market and the associated problems, as ITSPs can offer similar services legally at lower tariff.

The restrictions on protocols used in the IP telephony should be removed to make it protocol neutral/technology neutral.

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

a) The consumer interest is the top most priority and the desired goals in terms of tariffs and penetration are not met through the existing technology or existing operators, it is necessary to open the field to others to translate these benefits to the consumer. While unrestricted IP telephony is allowed to UASL players, the benefits have not been derived by the consumers and the best operators prepared to pass these benefits is ISP community.

In the name of level playing field w.r.t. license fee and revenue share to the government, the consumer should not be denied the benefits of the technology. As many standalone ISPs will not be able to pay one time license fee and the UASL /CMTS players have already enjoyed the restricted competition over the years as reflected in their financials, it is not to be debated regarding the one time licence fee and ISPs should be allowed to offer IP telephony without license fee while the revenue share of the IP telephony subscription revenues may be levied on ISPs.

- 6) The emerging technological Trends have been discussed in Chapter 3. Please suggest the changes you feel necessary in ISP licenses to keep pace with emerging technical trends.
- 7) 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.

No comments.

8) 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? Whhat should be the entry conditions? Giive suggestions.

We strongly believe that allowing unrestricted IP telephony by ISPs will boost Internet telephony in India and will draw more investments in ISP sector revive the ISP industry as such.

We strongly recommend not to charge any entry license fee but levy 6% revenue share to Government on the IP telephony subscription charges alone.

9) 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 maintain level playing field? Give Suggestions.

UASL licensees are allowed to offer multiple telecom services and they have reaped the benefits in these years of restricted competition leading to higher tariffs which more than compensates the levies like entry fee etc.

The ISP industry while looks attractive from outside in terms of relatively lower entry barriers, has brought in a flood of competition. The need to build infrastructure for one service alone has not helped the stand alone ISPs in terms of return on investments. This can be seen in the financials of the UASL / CMTS players vs standalone ISPs as majority of standalone ISPs are forced to wind up operations.

From the ISP industry point of view and more importantly from consumer point of view, it is recommended to open multiple service related to internet – IP VPN,IP Telephony, IPTV services. The recent introduction of revenue share on IP telephony needs to restricted to the subscription revenues of IP telephony alone and not on the CPEs or any other revenues.

10) Virtually there is no license fee for ISPs at present. The performance bank guarantee and financial bank guarantee submitted by ISPs is low. Do you feel the need to rationalize the license fee, PBG and FBG to regulate the internet services?

As mentioned previously, ISPs especially standalone ISPs are incurring losses as the investments made by them in the infrastructure is very high and services offered by them are too restricted and further levies and guarantees will only worsen the situation of ISPs.

Taking cues from the developed countries like the U.S. where there is no license required for ISPs, India should further liberalise for the benefit of consumers than increase restrictions / levies as this will burden the consumers.

11) 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 revenue stream? Give suggestions.

To promote Internet services on wireless, we had recommended above to provide free spectrum to ISPs to launch service on upcoming technologies like Wi-max, based on the subscriber base and also earmark spectrum for A,B and C class licensees.

As an alternative, Since the ISPs use various access methods like –wireline and wireless, the migration to spectrum fee based on percentage of AGR earned is welcome but should be restricted to AGR generated from those customer services which use the licensed spectrum and should not be on the revenues which do not use the spectrum- for example, the revenues generated from wireline or unlicensed spectrum should not be charged.

12) The consultation Paper has discussed some strategic paths to boost internet telephony, bring level playing field vis a vis other operators, and regulate the internet services. Do you agree with the approach? Please give your suggestions regarding future direction keeping in view the Changing Scenario.

We welcome the concern of the Paper regarding the under development of Internet telephony and we also agree that ISPs are the right players to promote Internet telephony which also make ISPs healthy as they will have more services to offer. We also agree that the restrictions on the protocols allowed should be removed for Internet Telephony to adapt new technologies.

We would like to emphasise that there should not be any entry license fee for ISPs offering unrestricted telephony as this would again slow down the internet telephony services. However revenue share on the internet telephony service income alone is acceptable.