

INTERNET SERVICES: A RESPONSE TO TRAI

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.

Modify, update & provide incentives to the ISP policies. Within 1 year from the issue of new guidelines & changes in license conditions, cancel the licenses of those that do not operate anymore.

To revamp the sector some telecom reforms (see later) are certainly required. Alongside other non-Telecom measures are also necessary like a) build & supply of low cost basic PCs b) availability of power using non-conventional energy, where required c) PC content in Hindi & other major local languages d) Killer applications in content e) General entertainment & sports content f) Data & Info base on rural lifestyle / living g) Educational content h) Gaming programs etc.

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.

The goal is to spread both Dial-up Internet & Broadband services. Once the Dial-up services, Internet Telephony etc become popular to the masses at low costs the next wave of Broadband will come at increasingly higher bit rates. Unless the dial up penetration increases (presently only 8 mn) the more expensive Broadband service will not pick up proportionately.

One option for the ISPs to promote Broadband via Wireless Access (or ADSL) is to work out sharing of infrastructure - both active (including spectrum) & passive. Another approach is to pitch in low prices as far as practicable, particularly in Tier 2 & Tier 3 cities & towns to speed fast take-up rates & create volumes simultaneously. Of course applications & content will be the real driver.

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.

ISP licensees should be allowed to provide *any services* based on IP based protocols (as per ITU standards). Perhaps this is an area where the essential 'umbrella' concept of Single Licensing for any IP services can *now* be considered within the licensed areas. However as & when any licensee chooses to provide a particular service under such a simplified license, it will then have to comply with the basic conditions of that service as applicable.

Only migration to this new Single Service regime will be *free*. ISPs could also scale up operations to Pan India level at the prescribed entry fees along with furnishing necessary PBG & FBG. License fees for a SSA, circle or all India coverage could be uniformly rationalized at 6% of the AGR.

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 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?

In principle any internet telephony under UASL / CMTS / ISPs should be subject to the same pricing irrespective of technologies. That way the competition becomes more effective & 'arbitrage' factors disappear. To make the competition more effective, the conditions to provide the services should also be made the same or very nearly similar.

The Access Providers like UASL / CMTS licensees can provide unrestricted Internet Telephony but the ISPs cannot. The former have last mile access but the ISPs do not. Now that the UASL / CMTS businesses are well established after so many years, their local loops should be opened up for sharing by ISPs - if necessary by mandate. Earlier TRAI recommended LLU to be shared only by the Access Service Providers. If that is not allowed as yet, it should open up to at least ISPs - more so in 'hungry market segments' like type C circles, semi-urban & rural areas. Given a chance, the ISPs could then get available local access paths (around 40 mn) to reach potential users for at least Dial-up services (including possibly 7 mn for Broadband). Such sharing in the spirit of Competition & Cooperation introduces new revenue streams for both the parties.

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

Internet Telephony has improved in quality but still not the same like Circuit Switched Voice Telephony. In License & Regulatory context Internet Telephony is usually considered a different class because service quality is normally at lower level & prices at relatively much lower levels too. Another reason to differentiate the class of service is because it is via Internet cloud & not often allowed to connect to PSTN - the elite network. Hence this particular service should have only one set of conditions (including the restrictions, if any) to operate that should apply to one & all whatever be the licenses of the operators. That will be the real level-playing field! Usually it's better to remove the restrictions, if possible, to get to free market competition. This kind of freer environment also ensures technology neutrality in the true sense.

With the advent of Convergence & IP based NGN architecture, it may rather be timely to facilitate now the transition to ISP-specific Single License. Some suggestions: a) Allow PSTN connections, if necessary only as exception b) Allow PC to Telephone calls & vice versa within the country. This will enable only PCs (say in rural communities / cyber cafes) to receive & send calls to & from anywhere.

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?

In view of the emerging trends changes in the ISP licenses are a must. As suggested the license should include references to 128 bit address, IPv6, greater use of ERNET Test Bed (if allowed), greater use of NIXI, connection to PSTN (where necessary with specific clearance like SACFA in spectrum), sharing of UASL's existing local loops etc. Encryption & security are the ongoing issues that depend on solutions & developments. Of course allowing PSTN links will help in vigilance checks.

As regards Internet Telephony the license should be liberal not to distinguish between whether it uses Internet Cloud or Managed Networks. Also it should allow any TEC certified CPE (not just limited to H.323 or SIP).

New technologies also enable Internet services on TV. ISPs could be encouraged as well to provide such services. The target could then increase to approx 105 mn existing TV households.

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.

Unless the key constraints in the service operations & big differences between licensees (UASL & ISPs) for the same service are reasonably removed, growth in internet cannot be expected. No redefinition of Roll Out obligations can become the driver to growth.

Urban India mainly requires Broadband at Individual & Corporate levels. However Rural India requires Broadband at community centers & Dial-up services elsewhere - thereby connectivity becomes the critical factor. In addition the lack of affordability to own PC, skills to support & maintain PCs, non-availability of local language programs, killer applications for rural folks, lack of power supply etc are the other major impediments.

If a part of USO funding is feasible to support ISPs for Dial-up & Broadband services along with other measures as already indicated, perhaps some Roll Out obligations could then be specified.

To improve PC penetration one option is to do what Doordarshan promoted for the DTH Direct TV services at the start; supply low cost PCs free or rent out or sell in Hire Purchase schemes initially to Rural Community Centres, schools, other educational institutions etc. DIT's Statewide Wide Area Networks (SWAN) projects of e-Governance should also encourage Internet telephony forcefully besides other applications & services. MAIT, ISPAI & key government nodal agencies together may further take a joint initiative to bring out & distribute low cost PCs (GSMA takes similar initiative with Industry to get handsets around Rs 1000/-).

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.

This is an alternative strategy. Better will be to widen the *existing* ISP license to make it look Single License & include any IP based direct end-user services by removing the hurdles as they presently exist. It will then be level-playing field in respect of the services. Internet Telephony will only grow when major reforms (as suggested above) are so undertaken.

Migration to UASL (without spectrum charges) will still require substantial entry fees. Also the new breed of ISPs with such UASL licenses will be additionally required to fulfill many other obligations & conditions therein at great costs. ISPs will now be at greater disadvantage having already lost all these years! The ISP business will also change unfortunately to a higher cost model. The focus changes too.

In essence ISPs are service providers without switched telephony. That's the USP. They should only migrate to ULR (not UASL now as suggested) when it is fully implemented.

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.

The goal of ISPs is to spread Internet & IP based services (for example Internet Telephony) in Dial-up (or Broadband without voice) to masses. However various restrictions from the outset could not quite spur growth. The industry is now sick! Imposing any further load (whatever it may be) will make it worse - not better.

The strategy should rather be: Aim at Level-playing field for any particular type of service (say Internet Telephony). UASL / CMTS licensees operate with different missions - to spread voice telephony & associated services (e.g. Broadband in Triple Play) in switched telephony networks. Their services are positioned usually at relatively higher costs consistent with higher quality. Therefore the ISP license should only be updated to remove the restrictions as suggested earlier.

Q10. 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?

No, not at this stage. First the restrictions should go. Allow the local loops to be shared. Intervene in pricing where required. Increase vigilance all round. Thereafter allow a grace period of 1 year to effect the turnaround in Internet Telephony before considering any future steps on levies, fees etc. Regulatory steps may not even be necessary at that time to check the 'grey market', if any.

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?

Yes, this rationalization is most imperative. However the percentage of AGR has to be initially pegged *low* linking possibly to the *business so generated* using the radio spectrum. Also if it provides services in rural areas & at small towns, there should be suitable adjustments (as incentives).

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.

The objectives are clear. Internet Dial-up services, Internet Telephony etc should no doubt spread to the masses much faster through less restrictions, minimal barriers etc. ISPs are specifically this class of licensees to do it but their basic needs should primarily be addressed & redressed. For this to achieve, the issue is not to impose more levies, fees etc to bring in line with UASL licenses in the name of level-playing field. To promote mass services what is often required is 'light touch regulation' stressing on pricing, rebates, incentives etc without compromising on security issues.

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