

Consultation Paper No 19/2006

Review of Internet Services (Response by Telxess Consulting Services Pvt Ltd)

Q1. At present, there are 389 licensed ISP's out of which only 135 are offering Internet services. Top 20 ISP's cater to 98% Internet subscriber base. In your view, is there a rational for such a large number of ISP's 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. Yes, there is a need for India with a population of 1.1 billion, to have a large number of ISP's. Examples of various countries is given:

- | | | |
|--------------|---|-------------|
| a) Belgium | - | Approx 62+ |
| b) Pakistan | - | Approx 70+ |
| c) Nepal | - | Approx 35 + |
| d) Hong Kong | - | Approx 188 |
| e) Taiwan | - | Approx 180 |
| f) Hungary | - | Approx 71 |
| g) Indonesia | - | Approx 70+ |
| h) UK | - | Over 400+ |

The reason why top 2 ISPs control 62.33%, top 5 licensed ISP's control 86% of subscribers and top 7 licensed ISPs control 92%, is a better frame to understand, why the others are languishing. First top 2 are government telephone company incumbents, among the top 5, 4 are telephone operators and only 1 player is a standalone ISP. Among the top 7, 5 are telephone operators and only two are private ISPs with a combined share of 12.83%.

Hence, it is clear that nearly 88% share is with the integrated telephone operators and only the balance 12% is serviced by the standalone ISPs.

The government and the regulator failed over the years to check the vertical price squeezing and resource crunch tactics of the incumbent operators. Standalone ISPs were thus made unviable to a large extent by sheer regulatory apathy towards incumbent tactics.

We agree that revamping of the sector is necessary. This can be achieved by simplifying the conditions under which ISP's operate. Suggested measures are:

1. Remove A, B, C License category classifications for ISPs
2. All ISPs should be registered on the lines of OSP registrations. Alternatively ISPs should be A category, by default, with a choice to select service locations.
3. Remove all service specific conditions such as on Internet Telephony (without restriction on type & device), VPN, (except layer 1 & 2), UMS, Audiotex,

Videotex and any other application, content services, available presently or in the future.

4. Define “ISP services as a Value Added Service which means all types of wired, wireless, radio/satellite access, content and application services including data, voice and video, using the IP Protocol V4, V6 or any other subsequent enhancements or upgrades.
5. TRAI may consider recommending 5% AGR share on such newly defined, unrestricted services, and if it also ensures “no discrimination” against any ISP by another dominant integrated Operator.
6. Spectrum charges may be levied additionally at 2% of AGR.
7. ISPs wanting to surrender licenses should be allowed to do so without restrictions.
8. Most importantly, Regulator should ensure that infrastructure resources are made available to ISP’s on a non-discriminatory and non-predatory basis. Ring fencing of ISP services by Integrated Operators needs to be ensured, so as to create transparency in favour of dependent standalone ISPs.
9. ISPs with internet telephony may be considered as interconnection parties with other operators to enable them to negotiate commercial terms on an equitable basis.

The above simplicity and predictability in Service conditions will –

- a. Encourage small but serious operators to scale up significantly.
- b. Or they’ll become franchised operators of bigger ISP’s and
- c. Stimulate global scale Service Providers to establish registered services in India thereby growing the market, participate in security monitoring actively, discourage illegal opportunities, and contribute to local government revenues.

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.

- A. For supporting Dial-up ISPs, TRAI must revisit earlier suggestions by the ISP industry to introduce FRIACO type of models, where such ISPs can buy the telephone minutes at a bulk discounted rate and in turn bill their dial up customers with some margins to cover costs.
- B. For Broadband internet access, Regulator must ensure that if the government owned incumbents with SMP are provisioning Broadband at X rates, standalone ISPs should be simultaneously provided with comparable bandwidth at X – 2 rates.

- C. For Last mile access, while, fibre, radio and underground copper is now allowed, use of satellite connectivity should not be restrictive as per clause 7.3 of Condition 7 of Part II of Schedule 'C' of the ISP licence.

Q3. At present limited services are permitted under the 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.

- A. The original ISP license condition as per Schedule C, Part II, Clause 24, defines Services/Service all types of Internet access/content services, except Internet Telephony. Subsequently an amended License for ISPs with Internet Telephony (partly restricted) was allowed in 2002.
- B. There was ample clarity considering that the original terms of the license agreement leave no scope for ambiguity. Doubts and Restrictions about the scope of services were introduced later such as in the case of VPN services.
- C. Regulator needs to strongly recommend suggestions given above already. To Repeat :

Remove all service specific conditions such as on Internet Telephony (without restriction on type & device), VPN, (except layer 1 & 2), UMS, Audiotex, Videotex and any other application, content services, available presently or in the future.

Define "ISP services as a Value Added Service which means all types of wired, wireless, radio/satellite access, content and application services including data, voice and video, using the IP Protocol V4, V6 or any other subsequent enhancements or upgrades.

Q4. UASL/CMTS licenses have been permitted unrestricted Internet Telephony however none of them are offering the service. ISPs (with Internet Telephony) can provide Internet telephony within the scope of defined in license condition. The user friendly and cheaper devices with good voice quality are increasing Internet Grey market. Please suggest how grey market operations can be curbed without depriving users to avail such services?

- A. India is a unique example where Unrestricted Internet Telephony is allowed to only UASL/CMTS. UASL and CMTS in turn are required to pay ADC charges in favour of the incumbent PSU operator. Artificial restrictions in turn create price barriers, providing opportunities for grey market operators and illegal call termination.
- B. Removal of restrictions on ISP/ITSP by allowing them unrestricted service along with use of any IP device, will remove the arbitrage opportunity and curb any incentive for illegal call termination.

- C. Legalising provision of user friendly services and devices by ISPs will help immensely in curbing grey market, revenue leakage and security threats.

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

- A. There is no logical comparison between the scope of services provided by ISP and UASL/CMTS and the markets addressed by both sets.
- B. UASL/CMTS are allowed to provide telephone numbers under the E.164 National Numbering Plan. UASL/CMTS can provide both Voice and Data services, including Internet and Broadband. They are also allowed to provide unrestricted Internet Telephony, unlike ISPs who are restricted.
- C. Additionally, ISPs have always been dependent upon the infrastructure resources of UASL/Integrated Operators for provisioning of Internet services, which has been made available with either great difficulty or at unviable prices. ISPs have been subjected to discriminatory practices and as a result most ISPs have not been able to significantly contribute to the Internet growth. Most large ISPs continue to be Integrated Operators.
- D. TRAI must ensure non-discriminatory practices by the operators against the ISPs.
- E. In any case, it is being suggested to consider recommending 5% AGR share on the new recommended ISP terms and conditions.

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?

- A. The US Congress is currently set to consider, the Markey-Boucher-Ishoo-Insley amendment, that stipulates that the last mile broadband access networks controlled dominantly by the telephone/cable companies, do not discriminate unfairly against the web based business and voices.
- B. Internet was protected under the non-discrimination rules of the FCC, requiring telecom carriers to keep a “hands off” approach towards the Net so as to ensure consumer choice, and innovation. The new amendment seeks to re-enforce the Freedom of the Net.
- C. Internet in India on the other hand has been subject to restrictions from the beginning e.g. ban on internet telephony, partial lifting of the ban, segregation of VPN services, and other doubts raised on the scope and service definitions by the policy makers themselves.
- D. It must be realised by TRAI that the position of the majority ISPs is akin to the web service providers of the US, being discriminated against by dominant telephone companies. Market Power is mostly in the hands of incumbent telephone operators who are also the most dominant ISPs and their control over the last mile and long distance is complete. Other majority ISPs are in

any case, no shape currently to discriminate against applications and content providers.

- E. There fore, to the extent that TRAI can ensure Net neutrality in the Indian context, ie. Ensuring that dominant last mile owners don't discriminate against other ISPs as well as the futuristic move to thwart any discrimination against content and applications availability, it will be a welcome move.
- F. Specific suggestion for TRAI would be to allow unhindered use of available and emerging technologies to create last mile links by ISPs including Wired, Wireless, Radio, Copper and specially Satellite including VSAT and DTH. Similarly, no restrictions or doubts should be allowed to hinder delivery of any content and/or application to any customer by any ISP. (case in point being the IPTV issue recently).
- G. In so far as the Spectrum recommendations of TRAI are concerned, it needs to do more than suggest restrictions of 12 operators per circle for WBA spectrum allocation. It needs to list out all such frequency bands that can be made available for ISPs for their wireless requirements in a predictable manner rather than let WPC decide on a case to case basis.

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? Please give suggestions.

- A. There is no co-relation between roll out obligations and growth of services. Growth and boosting of services both in urban and rural areas are a function of liberal policies, judicious regulation (especially in terms of protection of small and new players against predatory tactics of established and large players) that encourages active competition to tap and deepen market opportunities.
 - i) As already suggested, a single Registration/Authorisation system for ISPs will serve the purpose of boosting their ability to plan scalable services. While shifting to the new system, existing dormant licensees can be asked to surrender without obligation, their current licences. This will weed out the current set of non-serious players holding dormant licenses.
 - j) For Rural areas, new empowered ISPs, who can provide all types of access, applications and content and if supported adequately by active non-discrimination policies, predictable availability of spectrum and bandwidth resources, can drastically alter the current lack of contribution.
 - k) Since most rural infrastructure is owned by the government incumbent operator, it must be the obligation of the TRAI to ensure that interested competitors are provided competitively priced bandwidth resources, so as to make a business case for commercially viable services in the rural areas.
 - l) USOFA has announced that a slot on the subsidised Telecom infrastructure will made available for broadband service providers. Commitments such as these will encourage rural forays by private ISPs.

- m) TRAI should recommend reservation of adequate and identified spectrum bands for rural ISP services only. This will emphasize and underline the need for Internet/broadband penetration in rural India.

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.

- A. Recommendations on future course for Licensing / Registrations / Authorisations has been given above – basically to free the ISP/ITSP from licensing, geographical, service restrictions. These suggestions are also based on ISP regulations in various other successful internet economies, mentioned in the TRAI consultation paper itself.
- B. ISP/ITSP are value added / enhanced services as opposed to the UASL/CMTS, which are facility based operators, with vastly different scope and levels of services. Hence the very idea of asking a section of ITSPs to move to UASL is unrealistic and devoid of merit.
- C. All UASL holding companies also hold ISP/ITSP licenses and they do not provide internet telephony services, let alone encourage and boost these services.
- D. Conditions for entry have been suggested along with the suggestion for upto 5% AGR share.

Q9. USAL/CMTS pay higher regulatory levies for provision of similar services. Do you feel that similar levies be imposed on ISPs also to maintain level playing field. Give suggestions.

- A. As mentioned earlier, ISPs have faced nearly 8 years of tariff and resource discrimination from the integrated operators who are UASL/CMTS, rendering the industry commercially unviable. Regulator has time and again failed to address and stop discriminatory practices against ISPs, especially from the incumbent operators and still has no effective regulation to check predatory practices e.g. vertical price squeezing tactics. It has been unable to convince policy makers to bring in progressive regulation for ISPs, e.g. last mile unbundling, partial private circuit availability, etc.
- B. TRAI has itself suggested that the CMTS services received the major boost when levies such as license fee, interconnection fee, IUC were rationalised. It has been recommending further lowering of levies/license fee to boost these services, especially to serve the rural areas.
- C. It is therefore, inconsistent with the Regulators own principles, to suggest introducing any additional burden on ISPs on the pretext of introducing a level playing field, which is in any case skewed against the ISPs as pointed out earlier.

- D. 5% AGR share is being suggested upon the condition that the TRAI ensures the Licensing for ISPs is re-integrated, simplified, and effective measures are taken to stop marginalization of the standalone ISPs.

Q10. Virtually, there is no license fee for the 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 rationalise the license fee, PBG, FBG to regulate the Internet services.

To the extent that 5% AGR share is introduced under the new Registration/Authorisation that is being recommended, FBG to the extent of securitising the 5% AGR share is reasonable. The need for the current cumbersome process of submitting/resubmitting PBGs is unproductive. Need for PBG itself should not arise if the penalty for violating clearly laid down terms and conditions are specified properly. Licensor has not been able to effectively utilize the PBGs to check misuse/violation, hence should be done away with. TRAI itself has noted that:

1. Grey market operators corrode the market share of genuine licensed operators. This is specially true in the context of ITSP services.
2. Spectrum charges are unreasonably high compared to charging methodology for UASL/CMTS, because of which spectrum has not been utilised effectively for ISP services

Under such circumstances, to consider bringing levies on ISPs somewhere at par with UASL/CMTS will not be logical and rational.

Q11. At present ISPs are paying radio spectrum charges based on frequency, hops, link strength 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.

- A. Definitely, the present regime of charging spectrum fee from ISPs need to be reviewed. Percentage of AGR is a suitable method for charging spectrum fee.
- B. However, unlike UASL with mobility/CMSTS, which are pre-dominantly spectrum based services, ISP services are a value added application and content dependent services, that may partially utilise the wireless spectrum.
- C. Method, therefore should be to charge percentage of AGR earned only from those services that are the outcome of spectrum utilisation.

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.

- A. The Internet along with Internet Telephony and other Applications/Content of Internet and their usage cannot be boosted whilst comparing it with Telecom services and subjecting it to regulation.
- B. Internet has grown to this extent only because regulators such as FCC and Policy makers in the USA as well as world over have adopted not only a “hands off approach” to Internet but have effectively ruled against predatory tactics of telephone and large cable companies to choke the services of other ISPs.
- C. Additionally, efforts were always made to support ISPs, by such regulators like Oftel, who introduced, FRIACO, ring fencing of services and regulating bandwidth pricing of the incumbent operators in the UK to ensure that ISPs were not disadvantaged. FCC ensured that last mile unbundling was introduced, so as to enable ISPs to use the infrastructure of telcos to grow the services. Most other developed Internet economies have followed suit, certain examples of which have been provided by TRAI in its consultation paper itself.
- D. While, the ISP policy of 1998 was remarkably clear in terms of the direction, barring only internet telephony, the amendments subsequently have truncated the broad objectives established earlier.
- E. TRAI should use this opportunity to unshackle the Internet services once again, not only with a view to grow and boost broadband internet, but also to boost innovation and development of new content and applications. Attempt to make ISP/Broadband services as extensions only of Integrated Operator services will be against the principles behind the growth and popularity of Internet itself.
- F. Strong Recommendation is for TRAI to consider the approach suggested in response to Question 1.

The above response has been prepared by:

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Background: Amitabh is a founding member of ISPAI, who, among other things, had advised the government on the original license conditions in 1998. He initiated the international connectivity/bandwidth issues way back in 1997, when it was a government monopoly, and subsequently sought the opening up of international gateways for private investment and breaking up the monopoly. He conceptualised and helped setting up of NIXI of which he is a Founder Member and was the CEO till Sept 2005, and is currently on its Board as Director. He has recently set up his own consulting firm, Telxess.

