

## **RELIANCE'S COMMENTS ON TRAI's CONSULTATION PAPER ON REVIEW OF INTERNET SERVICES**

### **Question 1**

**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.**

### **REMARKS**

The ISP sector can be categorized as follows, based on the type of services provided:

- Non-facility based ISPs providing dial-up internet services
- Facility based ISPs providing broadband internet services
- ISPs providing internet telephony (ITSPs)

Non-facility based ISPs are typically characterized by:

- Low investment – limited to setting up of POPs.
- Low entry barriers
- Limited range of products / services
- Poor quality of services – low speeds
- Major cost to the customer is the PSTN dial-up cost rather than internet access cost
- Essentially resellers with limited value addition - “Near virtual ISP” business model with branding, packaging and distribution being the main value additions
- Some non-serious players indulging in grey market operations to make a fast buck by arbitraging on differential regulatory treatment of UASL/CMTS

Obviously, such a service model results in a large number of players, each of whom cater to a small set of customers. Large number of such ISPs makes monitoring / control difficult.

On the other hand, Broadband ISPs typically are infrastructure based service providers with large investments in last mile access. They are in a position to provide a range of internet services (bandwidth scalable up to 2 Mbps, on-demand bandwidth), content services and application services.

**The large number of non-facility based ISPs is not a core issue as such, except to the extent of preventing grey market operations. The core issues that need to be addressed are:**

- **Promote ‘always-on’ and broadband services. The services should be made affordable and available to a larger set of customers to ensure achievement of targets as per telecom policy**
- **Mainstream all technologies for internet telephony to offer greater choice to customers. However, this should be subject to conformity with Security stipulations**
- **Ensure level playing field with UASL / CMTS licensees for voice services**

Keeping in view the above objectives, there is a need to revamp the sector, with differential treatment for the segments as below:

(A) Non-facility based ISP – Remove non-serious players.

This could be achieved in multiple ways:

- (i) Stipulation of minimum number of customers within 2 years of operations. The benchmarking should be based on minimum 5% market share of dial-up internet subscribers. Non-achievement of target within 2 years can lead to invocation of bank guarantees
  - (ii) Stipulation of geographical coverage (number of cities with POPs for dial-up access)
  - (iii) Stipulate provision of minimum 256 kbps bandwidth to customers
  - (iv) Imposition of regulatory charges / revenue share is **NOT** a viable option for this segment considering the thin margins for this business
- (B) ITSP segment – Mainstream all internet telephony technologies for making voice calls terminating abroad. Ensure level playing field for UASL / CMTS licensees with whom ITSPs compete for voice services. This would be achieved by making ITSP regulatory conditions on par with UASL / CMTS – in terms of circle-wise license fee (other than mobile spectrum charges), revenue share, bank guarantees, legal interception and other techno-commercial terms
- (C) Broadband ISP segment – Facilitating framework for Right of Way and Spectrum should be developed to increase market penetration. The following initiatives are suggested in this regard:

**Right of Way**

- Declare Broadband as an Essential Service
- Modify the building and Coop society bye-laws to make it mandatory for them to invite Broadband service providers to get the building broadband enabled by at least @ 10 Mbps per household. They should provide free space for electronics and permit in-building cabling to facilitate connection of Broadband to each house or customer unit.
- Municipal authorities to provide blanket clearance to connect street furniture of up to size 100 cm \* 80 cm \* 30 cm without any restriction and also provide for up to 100 watt of power for each such cabinet (like a street lamp).
- City Civic authorities should declare safe hours (time slot of 8 hours) when any maintenance related to optical fiber or broadband cable jointing / repair is allowed up to a stretch of 15 Meters without any permission.
- The expense incurred for ROW, particularly in metros, is highly disproportionate to even the Broadband equipment and installation costs. The Government should rationalize the ROW cost to enable the faster uptake of broadband in the country

**Fiscal Policies for Broadband Services Penetration**

- All Broadband infrastructure/service providers, regardless of underlying technology or media to be provided with a 10 year income tax waiver. (As provided for the IT companies).
- Exempt customer premises equipment for providing broadband services (DSL modems, Wimax CPEs, Set top box, Ethernet devices) from customs duty and excise duty, and Sales Tax.

- Allow 100% depreciation allowance on equipment for broadband.

#### **Regulatory policies for Broadband Services Penetration**

- Continue with NIL revenue share for broadband services
- Incentivise broadband penetration in rural areas by providing subsidy from USO fund
- Charge Spectrum Fee for Broadband Wireless Access only on revenue from “Internet services over wireless access”
- Spectrum charges to be lower than 0.025% of AGR for up to 21 MHz . Additional charges of 0.015% for additional 21 MHz
- There should be no royalty or any other fee for WiMax CPEs like in case of Fixed Wireless phones or terminals

#### **Question 2**

**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.**

#### **REMARKS**

As mentioned in answer to question 1, there are a large number of non-facility based ISPs providing only dial-up services. Their business does not involve large investments and the business model is based on the margin differential between wholesale and retail internet bandwidth price. The viability of these players can be maintained / improved in two ways:

- (i) Continuing with the regime of low regulatory costs for dial-up service
- (ii) Reducing the number of players based on size / geographical coverage and other such criteria
- (iii) The Authority could consider provision of dial-up internet access services under “Other Service Provider” license category or an equivalent registration, subject to stipulations mentioned above. ISPs providing broadband services can be retained under existing ISP license terms

#### **Question 3**

**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.**

#### **REMARKS**

Currently ITSPs are allowed to “Internet telephony is a service to process and carry voice signals offered through public Internet by use of personal computers (PC) or IP based customer premises equipment (CPE) connecting the following: - (a) PC to PC: With in or outside India (b) PC in India to telephone outside (c) IP based H 323/ SIP terminal connected directly to ISP node to similar terminals within or outside India.”

Further to the above, TRAI in its recommendation dated 20 March 2006 on issues relating to convergence and competition in broadcasting and telecommunication has recommended that all CPEs using protocol recommended by ITU /IETF be permitted instead of just H 323/SIP terminals. ITSPs can hence offer complete range of voice services (except termination in PSTN in India) similar to UASL / CMTS licensees – without having to incur the heavy regulatory costs imposed on UASL / CMTS licensees

It is felt that there is no need to increase the scope of services under the ITSP license. In fact, the concept of ITSP license may be abolished and all ITSP licenses migrated to UASL license such that they are on par with UASL / CMTS licensees in terms of scope of services as well as regulatory costs. The consultation paper has indicated that the license fee upon such migration may exclude spectrum fee payable by UASL for mobile services – which is a fair suggestion.

#### Question 4

**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?***

#### REMARKS

There are different types of grey market practices, each of which calls for a different strategy.

- (i) *Illegal domestic termination of international calls – by using IP-PBX to connect PSTN and internet.* This leads to revenue leakage to the Government and to licensed operators in India. Users necessarily need to be deprived of this service. This can be curbed mainly by policing
- (ii) *Subscribers making outgoing ILD calls by dialing PCO operator, who conferences them through internet telephony.* This practice leads to substantial loss of revenue to licensed UASL / CMTS operators and to the government. The suggested solution for this is to bring ITSPs on par with UASL / CMTS licensees in respect of regulatory costs, by migrating them to a UASL license. In such a scenario, there will be a level playing field between UASL/ CMTS and ITSPs. Competition between internet telephony and switched telephony will be based only on quality of service / pricing and not on regulatory arbitrage. In such a scenario, conferencing service by PCO operator may not be an issue
- (iii) *Using adaptors to convert voice to data and sending through internet.* Such services cannot be prevented / blocked. As such, migration of ITSP licensees to UASL will allow them to provide these services as well as afford protection to existing UASL / CMTS licensees
- (iv) *Skype type services allowing domestic PC to international phone connectivity:* While these services are highly affordable, they bypass a number of laws and regulations. The service providers do not pay service tax. They are not licensed to provide telecom services within India. They do not pay any license fee and regulatory charges. They do not provide facility for lawful intercept and pose a threat to security. As such, these services should be BLOCKED

### Question 5

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

#### REMARKS

The following steps are required:

- Internet (other than internet telephony), content and application services, whether provided by UASL/CMTS/ISP should not attract revenue share
- ISPs desiring to provide internet telephony services (ITSPs) should be migrated to UASL license and should be subject to the same revenue share, license fee and other conditionalities applicable to existing UASL licensees

### Question 6

**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?**

#### REMARKS

- (i) *Internet Telephony* – As mentioned in the consultation paper, there is little difference in quality between internet telephony over Internet vis-à-vis that over a managed network. Hence, no objective is served by making a regulatory difference between these services. ITSPs should be allowed to provide internet telephony by shifting to UASL license and corresponding scope of services should be allowed
- (ii) *Migration to NGN* – As observed in the consultation paper, the possibility of separation of network layer from service and application layer has facilitated launch of new services and contents with great ease. This development has a greater impact on UASL licensees, potentially requiring exchange of IP data amongst telcos rather than traditional voice / data. New policies need to be formulated to facilitate this technological change, by specifying a framework for interconnection of NGN networks
- (iii) *IPv6* – As recommended by TRAI in its recommendation dated 9<sup>th</sup> January 2006 on Issues Relating to Transition from IPv4 to IPv6 in India, steps need to be taken to promote migration to IPv6
- (iv) *Lawful interception of internet telephony* – This is to be insisted upon
- (v) *Issue of net neutrality*: There have been stray cases of ISPs blocking competing service providers' sites. However, customers always have multiple options to access any and every content over internet. Hence, no regulatory intervention may be required at this stage

### Question 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.**

#### REMARKS

As mentioned earlier, there is a need to reduce the number of players based on by criteria such as size (minimum 'x' number of subscribers within 2 years of operations) and/or geographical coverage. However, geographical coverage based on urban / rural break-up may be infeasible as the PC penetration is very low in rural areas today. Hence, geographical coverage could be based on number of internet POPs (for dial-up services with local access) or based on coverage of population of the licensed area. The Authority should also consider providing subsidy from USO fund for rural broadband connections

### Question 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? What should be the entry conditions? Give suggestions.

#### REMARKS

All ITSP should be migrated to UASL license such that they are on par with existing UASL / CMTS licensees in terms of scope of services as well as regulatory costs. The consultation paper has indicated that the license fee upon such migration may exclude spectrum fee payable by UASL for mobile services – which is a fair suggestion.

### Question 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 to maintain level playing field? Give suggestions.**

#### REMARKS

The following steps are required:

- Internet (other than internet telephony), content and application services, whether provided by UASL/CMTS/ISP should not attract revenue share
- ISPs desiring to provide internet telephony services (ITSPs) should be migrated to UASL license and should be subject to the same revenue share, license fee and other conditionalities applicable to existing UASL licensees

### Question 10

**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?**

#### REMARKS

No, the existing ISP license fee, PBG, FBG, etc. should not be modified. This would vitiate the viability of internet services.

ISPs desiring to provide internet telephony services (ITSPs) should be migrated to UASL license and should be subject to the same revenue share, license fee and other conditionalities applicable to existing UASL licensees.

### Question 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 the revenue streams? Give suggestions?**

#### REMARKS

It has already been recommended that the spectrum for broadband access should be based on percentage of AGR rather than based on frequency, hops, etc. However, this solution could be worse than the problem, unless the definition of AGR is suitably modified.

Currently, for an ISP, “The Gross Revenue shall be inclusive of Internet access service, Internet content service, Internet telephony service, installation charges, late fees, sale proceeds of terminal equipments, revenue on account of interest, dividend, value added services, supplementary services, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense, etc.”

Stipulating a revenue share on this basis would lead to high costs as this would lead to applicability of revenue share on a number of other revenue streams which do not require spectrum such as:

- Dial-up internet access using wireline
- Broadband internet access using wireline
- Revenue from router / CPE / LAN and other customer premise infrastructure
- Revenue from sharing of infrastructure
- Revenue from enterprise solutions predominantly in the nature of services

The Authority should consider stipulating revenue share only from revenue accruing from providing “Internet access over wireless spectrum including service charges and installation charges” and exclude all other revenue streams from AGR. If the same is not possible, then the existing mechanism based on frequency, hops, link length etc may be continued.

## Question 12

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.

### REMARKS

The consultation paper has presented the following scenario for views of stakeholders:

- Migration of ISPs wanting to provide end-to-end internet telephony to UASL license
- Non-migrated ISPs to be allowed to provide (a) internet telephony using any device for PC-PC calls and PC-PSTN abroad calls, (b) IPTV (c) IP VPN (d) MPLS VPN (e) Application based services subject to payment of 6% AGR on all revenue streams

Our views on the same are:

- Provision of internet telephony, of whichever flavour, should be on level playing field basis with UASL / CMTS / NLDO licensees. As mentioned in the consultation paper, there is no quality difference between internet telephony over internet cloud and managed network. Hence, there is no reason why there should be a regulatory arbitrage on internet telephony calls between various licenses. As such, provision of any type of internet telephony should be through UASL license only
- ISPs (other than internet telephony) would be mainly providing dial-up and broadband internet services. These services are thin margin businesses. Imposition of revenue share would vitiate the business plan for these services, make them unaffordable to the customers and would have a negative impact on the penetration of these services. We strongly feel that imposition of additional license costs for internet (data) services is an option that would be disastrous for the industry
- Addition of scope of services that can be provided under ISP license (other than internet telephony) is welcome as this would increase viability of the business. However, this should not result in imposition of revenue share on dial-up and broadband internet services (other than internet telephony)
- ISPs who have invested in setting up last mile infrastructure to access the customer should be allowed to utilize the same to the maximum extent to improve the viability of the services. One of the options in this regard would be to allow ISPs to act as franchisees of UASL service providers. This would enable UASL services to grow faster as well as allow better utilization of last mile of ISPs.