VSAT Services Association of India response to the TRAI Consultation paper No. 12/2014; Consultation Paper on Delivering Broadband Quickly:

Response

Q1. What immediate measures are required to promote wire line technologies in access networks? What is the cost per line for various wire line technologies and how can this cost be minimised? Please reply separately for each technology.

Response - No Comments

Q2. What are the impediments to the deployment of wireless technologies in the access network? How can these deployments be made faster? Please reply separately for each technology.

Response:

One of the main impediments in the deployment of wireless technologies is the backhaul. Satellite offers a viable backhaul proposition. VSAI made a number of recommendations to the USOF on the backhaul and VSAT form of broadband deployment. The comments are enclosed. The telecom regulations allow for the distribution of broadband through VSAT.

Q3. The recommendations of the Authority on Microwave backhaul have been recently released. Are there any other issues which need to be addressed to ensure availability of sufficient Microwave backhaul capacity for the growth of broadband in the country?

Response - No Comments

Q4. The pricing of Domestic Leased Circuits (DLC) have been reviewed in July 2014. Apart from pricing, are there any other issues which can improve availability of DLC?

Response - No Comments

Q5. What are the specific reasons that ISPs are proactively not connecting with NIXI? What measures are required so that all ISPs are connected to the NIXI?

Response - No Comments

Q6. Would the hosting of content within the country help in reduction of the cost of broadband to a subscriber? If yes, what measures are required to encourage content service providers to host content in the data centre situated within India?

Response - No Comments

Q7. Are PSUs ideal choices for implementing the National Optical Fibre Network (NOFN) project?

Response :

The way BBNL has gone to implement NOFN project is definitely questionable. If they were to give it to a PSU to implement it they should have chosen TCIL who has the National and International experience of implementing such projects. BSNL, Railtel, PGCIL have got their networks done by private Contractors and that too in small geographical areas at a time. Any way Results have shown that it was a wrong decision. Immediate Corrective measures have to be taken to retrieve the situation. DOT if it desires the project can be salvaged.

Q8. Should awarding of EPC turnkey contracts to private sector parties through International Competitive Bidding (ICB) be considered for the NOFN project?

Response - No Comments

Q9. Are there any ways in which infrastructure development costs can be reduced? Is it possible to piggyback on the existing private sector access networks so as to minimize costs in reaching remote rural locations?

Response :

The urban areas generally have a high penetration of broadband. The main issue is in the semi urban areas and rural areas. The cost of infrastructure to connect the last 10-20% of the population escalates by almost 10-20 times. Even the most developed nations that have a good fiber footprint still use satellite as a medium of communication. Every administration in the world have taken the initiative of deploying Ka Band based satellites either on their own or through private investment. There are over 1.5 Million satellite terminals in the most wired nation USA. This shows that all of these technologies complement each other. So in the long term Ka band is a must for broadband penetration in the sem-urban and rural areas.

In the short term VSAT based broadband distribution is very much doable and cost-effective in sem-urban and rural areas. As far as the satellite capacity is concerned an artificial scarcity exists as a result of Government policy to allow only Department of Space/Antrix Corporation as the contracting agency. Foreign satellite providers have plenty of satellite bandwidth, which is a perishable commodity for them, yet unable to sell capacity as a result of the canalizing role of DoS/Antrix Corporation. If the VSAT service providers are allowed to buy bandwidth directly from satellite providers, this capacity crunch would immediately be taken care of and that can result in availability of satellite backhauls for wi-fi based distribution.

While, satellite CPE is expensive for a consumer, either a USO funding or a backhaul use for wi-fi are the alternate mechanisms to reduce the cost to the ultimate consumer.

The VSAT service providers have creatively reduced the cost of the bandwidth as in satellite the same bandwidth can be rotated across different times of a day to different applications. Enterprise usage such as banks, evening usage such as internet distribution, education and night time usage such as digital cinema has effectively rotated the same bit to serve multiple customers. This has

effectively reduced the cost/bit for distribution of broadband. Satellite is one of the technologies that can effectively provide bandwidth on demand and does not lock-up bandwidth on any leg of the network. This needs to be factored into any plan that is made for use of satellite as a broadband distribution mechanism or backhaul mechanism. Satellite has the quickest deployment time in all of the technologies available.

Q10. What can the private sector do to reduce delivery costs? Please provide specific examples.

Response - No Comments

Q11. What are the major issues in obtaining right of way for laying optical fibre? What are the applicable charges/ constraints imposed by various bodies who grant permission of right of way? In your opinion what is the feasible solution?

Response - No Comments

Q12. Should the Government consider framing guidelines to mandate compulsory deployment of duct space for fibre/ telecommunications cables and space for telecommunication towers in all major physical infrastructure construction projects such as building or upgrading highways, inner-city metros, railways or sewer networks?

Response - No Comments

Q13. What are the impediments to the provision of Broadband by Cable operators? Please suggest measures (including policy changes) to be taken for promoting broadband through the cable network.

Response - No Comments

Q14. What measures are required to reduce the cost and create a proper eco system for deployment of FTTH in the access network?

Response - No Comments

Q15. Are there any regulatory issues in providing internet facility through Wi-Fi Hotspots? What are the reasons that installation of Wi-Fi hotspots has not picked up in the country? What type of business model needs to be adopted to create more Wi-Fi hotspots?

Response - No Comments

Q16. What are other spectrum bands which can be unlicensed for usage of Wi-Fi technology or any other technology for provision of broadband?

Response - No Comments

Q17. How much spectrum will be required in the immediate future and in the long term to meet the target of broadband penetration? What initiatives are required to make available the required spectrum?

Response - No Comments

Q18. Are there any other spectrum bands apart from the ones mentioned in Chapter-2 to be identified for provision of wireless broadband services?

Response - No Comments

Q19. What are the measures required to encourage Government agencies to surrender spectrum occupied by them in IMT bands?

Response - No Comments

Q20. What should be the time frame for auctioning the spectrum in 700 MHz band?

Response - No Comments

Q21. Do you agree with the demand side issues discussed in Chapter 5 and Chapter 6? How these issues can be addressed? Please also indicate any other demand side issues which are not covered in the CP.

Response - No Comments

Q22. Please give your comments on any related matter, not covered above.