VSAI Response to TRAI Consultation Paper on 'Provision of Cellular backhaul connectivity via Satellite through VSAT under Commercial VSAT CUG Service Authorization'

Q1. Keeping in view the connectivity requirements in remote and difficult areas, should the Commercial VSAT CUG service provider be permitted to provide backhaul connectivity for mobile services and Wi-Fi hotspots via Satellite? Please justify your answer.

VSAI Response

VSAI supports the initiative that Commercial VSAT CUG Service Provider should be permitted to provide cellular backhaul as well as Wifi backhaul via satellites in remote and inaccessible areas where deployment of terrestrial technologies is techno-economically unfeasible. VSAI wishes to point out that Wifi backhaul is already permitted under the Commercial VSAT CUG authorization under the Unified License.

Digital India requires broadband connectivity across the length and breadth of the country. While terrestrial connectivity (Mobile Broadband) is feasible & economically viable to deploy in urban areas, however when it comes to rural and remote areas, It is in such areas that Broadband through Satellite serves as a 'messiah '. as it does not have to overcome the challenges associated with Right of Way and the huge costs associated with roll out of terrestrial technologies. Given the growing broadband demand over the inaccessible areas like the north-east, the islands, other niche areas, remote and rural & remote regions, which cannot be economically served by competitive terrestrial technologies , satellite broadband would be the most cost effective solution.

Q2. Whether the scope of Commercial VSAT CUG Service Authorization be enhanced under both Unified License and UL(VNO) license to enable the provision of the said backhaul connectivity? Please justify your answer.

VSAI Response

VSAI is of the view that scope of Commercial VSAT CUG Authorisation should be enhanced under both UL & UL (VNO) license for providing the cellular & Wifi backhaul, thereby validating the maxim of permitting sharing of active infrastructure.

Q3. Should the licensee having authorization for both Commercial VSAT CUG and NLD services be allowed to share VSAT Hub & VSAT terminals for the purpose of providing authorized services? Please justify your answer.

VSAI Response

VSAI supports the initiative of infrastructure sharing as it helps provide optimal utilisation of resources, better productivity, reduction in costs and overall increase in efficiency. Passive infrastructure sharing is already permitted for IP1s and active infrastructure sharing is already permitted.

For the purpose of providing authorised services, existing resources (VSAT Hub & VSAT terminals) of a licensee holding both the VSAT CUG & NLD authorisation must be permitted to be shared and not kept in independent silos, as at present.

Necessary Rationalisation of the SUC must be done to ensure that the services are enabled/facilitated and not restricted, as at present. Also, with the advent of Hight Throughput Satellite (HTS), it is not economically viable to have gateways separately for VSAT, NLD or for that matter other services. The same goes for the upcoming LEO/MEO constellations as well. So, it is prudent that resources be effectively shared among licenses. Also, we need to cater to a scenario where the gateways are operated by one service provider and the terminals/networks are operated by another service provider. Even today for the GSAT-11 program, Department of Space intends to operate the gateways and provide capacity to many service providers. This needs to be adequately addressed as far the licensing goes.

Q4. Whether the licensee should be permitted to share its own active and passive infrastructure for providing various services authorized to it under the other service authorization of UL and/ or other licenses? [In other words, whether clause 4.3 of Chapter -VIII (Access Service authorization) be made applicable for all other authorizations also] Is there a need to impose any restrictions? Please enumerate and justify your answer.

VSAI Response

VSAI supports the approach wherein a licensee should be permitted to use its own infrastructure (both active & passive) in a shareable mode for providing various services authorised to it. Other incumbents offering similar services should also be permitted to do the same, so that the regulation is applicable to all.

Q5. Whether formula-based spectrum charging mechanism for VSAT services in NLD/Access license is adequate and appropriate? If not, whether spectrum charging for VSAT services in NLD/Access service license should be made on AGR basis instead of

existing formula basis mechanism? Whether it will require accounting/ revenue separation for satellite based VSAT services under NLD/Access license? Please elaborate and provide proper justification.

VSAI Response

VSAI is of the opinion that SUC must be rationalised. This should be in line with existing TRAI Recommendations of 2017 and in accordance with the NDCP guidelines for rationalisation of levies & spectrum charges.

Also, we support the move to migrate SUC for VSAT services with NLD auth from formula based to AGR based. The current formula wherein the spectrum charges are directly proportional to the number of VSATs with same number of carriers and bandwidth is quite restrictive for the growth of Satellite based services in India as it tends to penalise spectrum sharing, instead of promoting it, as per current policy. If at all WPC needs to be adequately covered for their administrative efforts, then it should be based on a fixed fee per location which is in the order of Rs. 500 or Rs. 1000 per annum. rather than multiplying the spectrum by the number of VSATs. This formula-based approach is more than 90 times than that of the AGR based charging and such a high cost of administrative makes satellite based backhauls unviable. Secondly, the formula-based charging is an administrative nightmare. Every time even if a carrier is expanded or shrunk, it triggers a revision in the Decision Letter & WOL issued by WPC. As spectrum payment under the formula-based scheme is paid annually, reconciling any changes becomes extremely difficult.

Q6. Please give your comments on any related matter not covered in this Consultation paper.

VSAI Response

1) Time Delay in Getting Administrative Approvals

The first-time approval of a network should be done through the apex committee. However, the apex committee should act as a single-window for the entire set of approvals obtained by the licensees. Various formats can be prescribed for individual processing and the licensees can be made to make a consolidated application covering all the aspects of licensing and WPC/SACFA. As with the NLD license and the UASL license for satellite operations any additional augmentation of bandwidth should be dealt with by NOCC and WPC only. SACFA/WPC charges can be combined with the license fee and a demand can be put up together on a yearly basis eliminating the need for multiple demands by the licensing cell and WPC. The process of adding of sites or bandwidth has to be executed in similar time

frames as that of the commercial services. While the captive licenses use these services for more important and mission critical applications that involve citizen services to national security, the extraordinary delay in time taken and the number of multiple administrative agencies to which one has to approach, defeats the whole purpose.

- 2) We request Hon'ble Authority to kindly consider review of an important clause that exists in the current CUG license pertaining to the **restriction of PSTN connectivity for all CUG users**
- 3) Provision of gateway services by HTS operators, LEO/MEO operators need to be addressed adequately.

More and more networks are becoming hybrid in nature. Any enterprise opting for a WAN mixes and matches media for completing the network. Satellite is one portion of the network. Satellite services are niche in nature and are typically provided only by select service providers. However, the current regulations disallow resale of such services by other telecom service providers and as a result does not allow the aggregation of both terrestrial and satellite services as a single offering to an enterprise such as a bank.