TRAI Page 1 of 4

Recommendations of the Telecom Regulatory Authority of India (TRAI)

on

Receive Only Very Small Aperture Terminals (VSATs)

1.0 Background

The capability of VSAT technology to deliver host of services over a very large area in a multicast mode, directly from the satellite provides it with a unique advantage over other existing technologies. The broadband multicast capability of VSAT technology can be used to provide innovative applications such as Tele-Medicine, Newspapers-on-line, Market rates and Tele-education even in the most remote areas of our country. It can act as an important tool for bridging the digital divide. Because of its popularity and affordability, it is important that Service providers be encouraged to invest in these areas and provide such services. The use of Receive only VSAT terminals is a cost effective means for the operators to provide such services.

In its wide interaction with various stakeholders, suggestions were made to TRAI that 'Receive only VSATs' can provide a useful means to spread services such as Tele-education, Tele-Medicine, Information (newspaper on-line) and social education to the remote areas in the country. The TRAI held meetings with the Service Provider and other VSAT operators (who are also planning to provide these services) to understand the applications intended and requirements thereof. In view of the fact that there is an existing VSAT license, the need for having a separate category of license for Receive Only Categories has been considered by the Authority carefully.

1.1 Need for a separate category of license

After detailed discussions and interaction with the prospective service providers, the Authority has come to the conclusion that there is need for a separate category of license for 'Receive only VSATs'. The existing VSAT services are two way, when compared to Receive only VSAT and levy of identical entry fee and license fee is likely to be disadvantageous for service providers who want to provide these services only. Such service providers will obviously not be in a position to compete effectively with those who provide two-way VSAT services. Moreover, the services which are intended to be offered through Receive only VSATs will fall mostly in the areas of information, education, health and social services. These necessarily need to be low cost services in order to gain mass popularity, which will only be possible if the relative license fee is kept low.

TRAI Page 2 of 4

In light of the above, the Telecom Regulatory Authority of India, in exercise of its powers under the Clause 11 (1) (a) recommends to the government suo-motu to consider having a separate category of license for "Receive Only VSAT Service". The recommendations on various terms and conditions are as under:

1.2 Recommendations on the terms & conditions of the license:

1. Scope of Services and maximum data rate

The tele-services that 'Receive only VSAT Service infrastructure' can provide will depend upon the limitation on bandwidth. A bandwidth of 512 Kbps is generally sufficient for wide band applications like video conferencing, Tele-education and Tele-Medicine and was recommended by the Authority for two-way VSAT applications. However, keeping in view the demand for new broadband applications, a maximum bandwidth of 2 Mbps per downlink be permitted, for Receive only VSAT category.

2. Type of License

In this context we would like to make the point that in our view licenses for services such as 'Receive only VSATs' should be given freely. Actually licensing of such activities could be done best by way of class licenses, instead of by individual licenses as is being done in most other cases. This approach will help in introducing administrative simplicity and encourage quicker roll out of these services. A class license establishes a set of general conditions, which are widely publicised among the class of service providers / companies concerned. Any service provider / company may participate in the activities under the class license provided that they comply with the terms and conditions in this category of license.

3. Period of license

The license for Receive only VSATs be granted for a period of ten years in the beginning and be extended after carrying out a review of license fee based on profitability and roll out obligations met.

4. Number of licenses

The number of licensees that can be granted license for up linking will depend upon the spectrum availability. Assuming that each licensee may utilise a 2 Mbps channel, transponder allocation can be carried out suitably on a first come first serve basis.

5. Entry Fees

TRAI Page 3 of 4

Receive only VSAT is a new service, currently in a nascent stage and efforts will have to be made to create a market for these services. Further, these services will need to be promoted to encourage roll out, especially in the rural /remote areas. Therefore, the entry barrier to this new market should be kept as low as possible. Still to keep non-serious players out and to encourage the service providers to offer these services, TRAI recommends an entry fee of Rs 5 Lakhs.

6. Roll Out Obligation

The intention behind encouraging these services is to encourage provision of Tele-education, Tele-Medicine, Assistance to school level education and social education, especially in the rural / remote areas. The licensee may start service using his own hub / hub hired from VSAT Service providers/ hub hired from infrastructure provider, within a period of one year of grant of license. In addition, a performance bank guarantee of Rs 2 lakhs may be taken from the service providers to be encashed if the roll out obligations is not met.

7. Sharing of Infrastructure

A number of VSAT Service providers have already set up the hubs, which are not utilised fully. Further, there are also infrastructure providers who can provide VSAT uplink facilities. In order to economise on the cost of providing service and to encourage innovation, Receive only VSAT Service Providers be allowed to lease / hire uplink streams of nX2 Mbps capacity from VSAT Service Providers and Infrastructure Providers to provide this service.

8. License Fees

To encourage their roll out in rural areas, a nominal license fee amounting to 5% of its Adjusted Gross revenue is recommended for the first three years. This would go towards Universal Service Contribution and may be reviewed after this period.

9. Transponder and WPC Charges

The transponder and WPC Charges as applicable for using space segment and frequencies shall be applicable. However, to promote "Receive only VSATs" especially for social applications like Tele-education, Tele- medicine etc., it is recommended that WPC charges for "Receive only VSAT" terminals be waived off.

10. Interconnection with other networks

TRAI Page 4 of 4

The services that need to be provided via Receive only VSAT would essentially be directly for a closed group of users and therefore, interconnection of the hub with any other public or private network except that of other licensees of the same category should normally not be permitted. However, the Service Providers should be permitted to have leased lines connecting to the content providers on the transmit side provided the terminal at the content provider end is standalone. Interconnection to other public telecom networks should not be permitted except Internet, which may be permitted for access to content on 'case to case basis'.

11. Monitoring and Security Conditions

The Monitoring and Security considerations as applicable to VSAT may also be made applicable to Receive only VSAT Service Providers.