

Taking Strides

"The newly introduced DVB-S2-based technology delivers significant bandwidth efficiency gains to commercial and government organizations."

On the Indian market

The VSAT industry in India has grown at around 20 percent CAGR with the current market size valued at approximately Rs. 750 crore, and an installed base of over 122,400 terminals as of March 2010.

On Tatas's presence in VSAT market

Tatanet's VSAT base grew by 4184 VSATs to a total of 12,574 VSATs in FY09-10 as against 8390 in FY08-09. This made for a 49 percent growth in the last fiscal.

On key demand verticals

Key drivers of VSAT growth in India have been BFSI, Common Service Center programs (CSC) in rural areas, telecom, energy, education and health sector. Along with these, interactive distance education, telemedicine, digital signage/cinema etc. Will drive VSAT growth in the next 2-3 years. The extended C (Ex-C) band remains the preferred band for critical interactive applications like stock broking and commodity trading; as this band is immune to rain conditions or rain fade. On the other hand, Ku band is the preferred technology for ATM, e-governance and other applications requiring lower initial investment and cost of CPE equipment. VSATs will continue to be used extensively in defence applications and the oil and gas segment due to connectivity requirements in remote locations, tough terrains and harsh conditions.

Market trends

With MPLS players getting aggressive with reach in tier-II and III cities, VSAT has transformed from being the only available means for connectivity, to its present complimentary role in supporting the more prevalent terrestrial solutions.

Technology trends

VSAT industry has been witnessing technological changes driven by the demand to reduce the cost of bandwidth and realized by innovations in hardware technologies. Data compression techniques, packet-size optimization, spectrum-efficient modulation with adaptive coding and feature-rich network management systems have helped optimize the cost of bandwidth. The newly introduced DVB-S2-based technology delivers significant bandwidth efficiency gains to commercial and government organizations.

On key challenges

Satellite bandwidth availability and cost, both pose a challenge to the industry, affecting speedy growth. A high initial investment required in procuring bandwidth has created entry barriers in this segment, and also adversely affects scalability. VSAT is poised to play a far greater role in bridging the digital divide by addressing the remote rural segments. It is possible to leverage the existing VSAT infrastructure and serve imminent needs like Internet, cellular backhaul, backup for PoPs of telcos/broadband service providers etc. with the help of minor changes in the satellite distribution framework/guidelines.

On your green initiatives



Tatanet has been at the forefront of exploring alternative sources of energy in VSAT.

Since the power requirement for VSATs is low, solar power, wind turbine-based system and hybrid systems are being considered for VSAT applications. SCADA applications, use of VSAT in island and other remote locations use these alternate energy sources for powering VSATs.



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