

On the Fast Track

Banking and finance rocked the VSAT industry in FY12 with steadfast deployments



Highlights

- Banking and Finance have been the major growth drivers in FY12
- Rural Penetration for CSCs APDRPs is already gaining grounds
- Panchayat connectivity, RRBs, ATM Digital Cinema and Signage, shall drive the growth for VSAT industry
- On-the-move mobility applications for voice and video are growing
- Enhanced VSAT CPEs for security, routing and multi-service integration, dual hubs and adoption of Ka Band are new key trends

VSAT deployments in FY12 showed prominent growth taking overall revenue for this industry to ₹500 crore. The industry registered close to 6% growth while showing prominent developments last year. These include, first use of Ka-band spectrum (18-28 Ghz), on-the-move mobility applications for voice and video, large scale adoption for ATMs by white label and managed service providers, enhanced VSAT CPEs for security, routing, and multi-service integration business continuity through dual Hubs.

Market Scan

First in the lead is Hughes Communications. The company registered a whop-

ping 18.4% growth with total revenue clocking ₹167 crore for FY12. Hughes bagged an order to provide network connectivity for police stations across 400 locations in Jharkhand. It also provided satellite based 'receive only terminals' (rots) network for Edusat project of the Government of Punjab.

State Bank of India gave Hughes an order for setting up 2,000 sites recently. Hughes also bagged the contract for Jaipur Vidyut Vitran Nigam (Jaipur Discom) in Rajasthan under which Hughes will provide broadband satellite services connecting 825 locations.

The second contract was awarded for the 5 utility companies in Karnataka (BESCOM, CESCO, MESCOM, GESCOM, and HESCOM) to deploy a network of 713

satellite terminals where Hughes is the secondary network bandwidth service provider.

The mandate for Hughes across both states is to expand the R-APDRP solutions platform to urban as well as rural areas. The Rajasthan and the Karnataka agreements have been signed on for 3 years and 5 years, respectively.

Also, Hughes has received approximately 5,000 orders from January 2011 till now for setting up VSAT terminals of 'Brown Label' ATMs' service providers across the country.

Second is Bharti airtel. Even though the company witnessed flat growth in VSAT with ₹107 crore in FY12 as compared to ₹95 crore in FY11, Bharti airtel has deployed VSATs (13,000+) for Gu-

Top VSAT Players in Revenue Terms (FY 2011-12 in crore)

Players	FY11-12	FY10-11	Change (%)
Hughes Communications	167	141	18.4
Bharti airtel	107	95	12.6
Tatanet	84	77	9.1
HCL Comnet	78	83	-6.0
Essel Shyam	28	35	-20.0
BSNL	21	20	5.0
Others	15	20	-25.0
Total	500	471	6.2

Others include: Infotel Satcom,GNFC

V&D Estimates

jarat for its E-gram project. In addition to large statewide deployments, it has also installed services for large private and public sector banks for their branch connectivity and for carrying critical core banking applications.

In FY12 airtel focused to further build around available infrastructure by deploying technologies like Gilat Skyedge2.

Tatanet deployed 129 VSAT stations as part of the optimum seismological network for Indian National Center for Ocean Information Services (INCOIS). Tatanet's revenue clocked ₹84 crore showing a growth of 9.1% in FY12. The company has bagged an order for 3,000 VSATs from Wipro to be deployed as part of the financial inclusion project managed by this nodal agency (NABARD).

Also, Tatanet installed connectivity for close to 4,000 ATMs managed by service providers like Prizm Payments, Tata Communications Banking Infrastructure (TCBIL), Euronet, FIS, and AGS.

Essel Shyam, even though with not much addition to the VSAT deployments, has bagged a few projects to its credit in FY12. It deployed a VSAT network for North Eastern Electric Power Corporation (NEEPCO) project and for deep water resources (ONGC). The company showed a degrowth of 20% last year.

Growth Drivers

Banking and finance have been the major growth drivers with applications—ATM and core banking—driving numbers. Key projects have been NABARD where system integrators namely, Wipro, C&A-Edge undertook to roll out about 5,000 VSATs for rural branches of cooperative banks.

Last year PSU banks went slow on ATM deployment due to a decision of

MoF to consolidate the ATM procurement across all PSU banks. These state-specific tenders are expected to provide a major fillip to the VSAT industry, with a significant portion of the 60,000+ numbers being deployed on VSAT in the current year (FY13).

Beyond the above, multi cast has been the major driver for VSAT sales. Thus, projects leveraging on this one feed beam to 'unlimited' locations at a flat annualized cost has enabled applications like digital cinema, distance learning to leverage VSAT networks.

On the manufacturing and distribution front, VSATs are increasingly being used as back-up medium for business continuity.

The oil & gas sector has been a major driver of bandwidth sales for VSAT service providers. Tatanet runs a Earth station based on i-Direct technology which is the leading platform for this sector.

The VSAT connectivity space has been dominated by institutional financial inclusion projects. Reaching out to the unserved and underserved at a reliable but an economical cost, leads to VSAT as the chosen mode of connectivity.

Deployments such as VPN & internet services in different flavors, varying from pooled bandwidth to bandwidth-on-demand, is gaining popularity. Availability of VAI (value added internet) with applications like media, videoconferencing, tele-education, medicine presents an interesting proposition for VSAT industry in the consumer/SOHO segments.

Accelerated VSAT as a product, which is something new in the market, was built to kill the slowness of applications on VSAT.

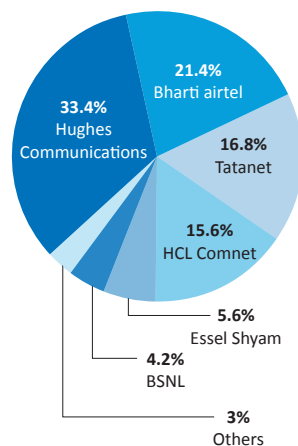
Going forward, bandwidth-on-demand and value added services of airtel will contribute and drive the demand for VSAT. Also, with the increasing thrust on internet penetration in India, we can look forward to similar trends in the future.

Innovation at its Peak

Many new innovations in VSAT industry were seen in the last year. These included the use of smaller antenna for easier VSAT terminal deployment, use

Market Share

Total Market Size: ₹500 crore



V&D Estimates

Top VSAT Players in Number Terms (FY 2011-12)

Players	FY11-12	FY10-11	Change (%)
Hughes Communications	55,803	44,500	25.4
Bharti airtel	46,895	43,912	6.8
HCL Comnet	23,922	25,427	-5.9
Tatanet	20,884	16,100	29.7
BSNL	9,269	8,200	13.0
Essel Shyam	2,743	2,728	0.5
Others	3,047	1,980	53.9
Total	162,563	140,867	15.4
Others include: Infotel Satcom, GNFC			

V&D Estimates

of enhanced CPEs for better security, throughput and triple-play integration, use of latest coding for higher bandwidth, mobile VSATs for use in strategic areas like police, railways, defense, multiple warehouses for faster deliveries, and installation tools integrated on mobile phones and iPads.

Even though terrestrial links have brought down the cost of bandwidth, there are several areas where shared bandwidth leads to lesser cost compared to terrestrial bandwidth. These areas are e-learning, rural communication market, banking, oil & gas exploration, e-governance, and healthcare.

The technical modifications required are those technologies which have a very strong QOS capability and reduce the idle bandwidth on the users' CUG bandwidth hired by the customer. At the same time they should also take care that innovative technology better suitable for a particular kind of application is used. These technologies are slowly coming into the market and being accepted by the users.

Hiccups

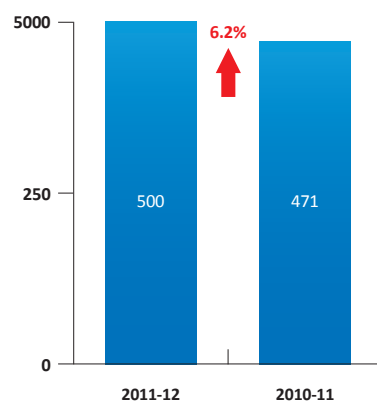
Most of the issues being faced by the industry are a result of government processes or policies. These include availability of spectrum from ISRO (Ku, Ext-C band), severe crunch in getting

transponders from ISRO to the industry, latest Ka-band satellites not being available in the country, continuation of the obsolete 'Closed User Group' definition for VSAT services, etc.

USO Fund is also not being given to VSAT technology where natural use is for rural services. Other issues include permitting 'open skies' for free access to global satellite transponders, permitting smaller antenna size (0.74 m) for Ku-band as per international norm, and reduction of revenue share/service taxes for services in rural areas.

Market Size (in ₹ crore)

Revenue (FY 2011-12)



V&D Estimates

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Key Trends

As mentioned earlier also, addressing various challenges with innovative technologies in VSAT industry is bringing down the cost of ownership and improved bandwidth on the given spectrum. The state of technologies which will enable this are:

- **Ka Band:** Ka band can be considered the future. It will have very high bandwidth over VSATs, whose drastically reduced prices will make VSAT a competition to the terrestrial service providers
- **Carrier in Channel Multiple Access:** This is a bandwidth saving technology which exploits the excess power available with the satellites and reuses the bandwidth again, which effectively is twice the bandwidth that has been leased
- **Improved Encoders for Broadcast and DTH Markets:** The latest encoders have greatly reduced the bandwidth required over the air. This effectively means better quality of video transmitted with less bandwidth
- **SCPC Return with DVB-S2:** This type of combination is suitable for high bandwidth requirement and also real-time applications, and still be able to reduce the total cost of ownership.

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