Threats and Opportunities for Teleports and VSAT Service Providers

In the traditional FSS VSAT or enterprise teleport service market, service providers can shop for and lease bandwidth from a satellite operator and manage their own hub and network using their own selection of ground equipment from a wide variety of sources.

"The change in ecosystem with high throughput satellites means changes in the value-chain, and changes for the suppliers in that chain," says Doron Elinav, of Gilat, which is a VSAT terminal supplier for SES' SBBS consumer service in Europe, O3b, Optus, RT Comm, among its HTS/Ka-Band customers."

Doron Elinav

For example, in Europe with its KA-Sat service, Eutelsat has moved down the value chain by also providing hub services and selling mbps directly to ISPs, bypassing traditional teleport and VSAT service providers in the process. "So the VSAT service provider has less flexibility to choose ground segment," according to Gilat's Elinav. "The service provider loses flexibility and value is transferred to the satellite operator."

"...No one model fits all, say industry players. And the growing variety of business models evolving around the world, depending on the target applications, region, and technology, are creating new options for more players to get involved…"

Another issue is spot beams. With conventional satellites, wide area beams allow uplinks from a broad geographic area, providing a lot of flexibility for where an uplink teleport can be located. But with a Ka-Band system, beams are tightly focused on smaller "cell" areas, and only a few primary ground hubs may be able to access the system.

"The role of independent teleport operator, which is a relatively large industry, will decline in this scenario," say Elinav "because they provide less value, and unless their teleport is in the feeder beam to the gateway they have no play towards the Ka-Band satellite."

David Bettinger

On the other hand, this can also make for surprising teleport opportunities. Encompass Digital was awarded a contract to provide teleport services for Inmarsat's Global Xpress® system from Lino Lakes, Minnesota, hardly a hub for national, much less international telecommunications traffic exchange.

"In the North American Hughes and ViaSat model, satellite operators own the ground gateways and only run one waveform on all the capacity. They are 'closed systems,' or what we call a completely vertically integrated play, directly serving the end user," says David Bettinger, CTO of VSAT technology supplier iDirect, which is involved in several HTS programs' ground networks. "Most satellites to date have been launched for consumer services, but now we are seeing what I think is the inflection point in our market, with operators aiming to support high end services," says iDirect's Bettinger.

Intelsat's EPIC^{NG} program is an example, with its support for the existing service provider ecosystem and value chain. "We are working with the ecosystem of modem, antenna and other manufacturers to they can roll out the enhancement to take full advantage of the system's performance and flexibility in the future so customer will enjoy major improvements in cost and performance,' says Intelsat's Bruno Fromont.

"We are primarily interested in business-to-business. Our initial customers are cruise ships, oil and gas, and maritime enterprise users, so reliability is very important and the positioning is very different from a ViaSat or Echostar/Hughes type consumer systems."

Other examples of HTS systems providing flexibility to work with traditional service provider channels are YahSat and Avanti.

Bruno Fromont

UK-based Ka-Band satellite operator Avanti offers raw Ka-band space segment, bundled IP teleport and space services, as well as broadband retail solutions. Avanti launched Europe's first Ka-Band HTS satellite, HYLAS 1 in November 2010, providing two-way coverage across Europe, and its second satellite, HYLAS 2, launched in August 2012, extending coverage to the Middle East and Africa. Middle Eastern operator YahSat offers similar flexibility for operators to lease space segment, or bundled services.

No one model fits all, say industry players. And the growing variety of business models evolving around the world, depending on the target applications, region, and technology, are creating new options for more players to get involved.