BCom Building "Global Area Networks" With ViaSat VSATs

A CUSTOMER CASE STUDY

Bcom, a satellite services provider based in Beirut, Lebanon, is a company that is solidly behind satellite networking as a great alternative to terrestrial. Michel Skaf, Bcom director, calls his vision of satellite communications "Global Area Networks." He feels that satellite builds on regular Wide Area Networks, with additional reach that only VSAT brings to the equation. Plus it can provides customers what he calls "topology on demand" with a lot of flexibility in network configuration compared to hard-wired, fixed terrestrial infrastructure.

"Customers keep all the features, refinement and sophistication of terrestrial services, and get a **real** private network, not what the terrestrial world calls a virtual private network," said Skaf.

Skaf also wants to assure customers that satellite is not an expensive or unaffordable alternative. Rather than simply design a satellite network, Bcom works with customers to do a full business plan that incorporates the network.

"Most people think it's more expensive to have their own network, but we've proven that, though there is more capital cost up front, in a one- to two-year time frame you'll get your money back," said Skaf. "And that's just the numbers. It doesn't even account for the improvement in the productivity of the people."

Skaf feels that the market in his part of the world is just now opening up, with lots of room for growth.

One new Bcom application is a network connecting sites maintained by the United Nations High Commissioner for Refugees (UNHCR). The mission of the UNHCR is "to lead and coordinate international action for the worldwide protection of refugees and the resolution of refugee problems, with the primary purpose of safeguarding the rights and well-being of refugees."

The UNHCR network is being implemented with a Skylinx telecommunications network using Demand Assigned Multiple Access to reduce satellite bandwidth consumption. Though DAMA technology is well known, Bcom discovered that not all

1

DAMA networks are the same. The ViaSat network for UNHCR replaces another system that was not working.

The new Bcom network helps the UNHCR manage the movement of people caused by man-made or natural catastrophes, be it anything from climate changes to political turmoil. The network, due to be completed in May 2001, will connect several field sites with HCR branch offices in Kosovo, Albania, and Macedonia using 14 Skylinx remote terminals and a network management "hub" in Geneva. Antennas at the remote sites are 1.2 to 1.4 meters, with a 2.4 meter dish in Geneva.

The hub in this case is not a central processing point for the network, but rather the monitor and control interface. In DAMA mode, it sets up circuits on-demand between any of the other sites in a full mesh architecture. The NMS can be located where the network operators or central operations are, and does not have to be at one of the network sites.

Bcom is operating this network on space segment provided by Eutelsat, a Paris, France based satellite owner and operator. The UNHCR network is using Ku-band transponder space on Eutelsat W-3.