



Coordination of response

Frederick Morris is General Manager of the Vipersat Network Products Group for Comtech EF Data. Helen Jameson speaks to him about disaster recovery and the role of satellite communications.

Question: Many thanks for speaking with us today. Would you kindly introduce yourself and Comtech EF Data to our Readers?

Frederick Morris: I am Frederick Morris, General Manager of the Vipersat Network Products Group for Comtech EF Data. In this role, I oversee product/program management, operations and development for the new group.

Previously, I held the position of Vice President of Strategic Accounts. I have also held various senior business development and technical marketing positions. Prior to joining Comtech EF Data, I was Vice President of Product Management and Development at Intelsat. Previous to Intelsat, I held the position of Vice President of Product Management and Sales Support Engineering at Verestar. I also held senior level positions in product management and business development at SES AMERICOM, Viacast Networks, SES ASTRA and Hughes Network Systems.

Question: The role of satellite communications in the disaster recovery context has increased substantially. Why is this? What does satellite offer to first responders that no other technology can?

FM: A satellite-based solution does not have to wait for a cable, fibre, or tower to be repaired to provide communications to the outside world, or even locally. To establish this, there are quick-deploy equipment configurations that can be rapidly delivered to the disaster site. This has proven to be success-

ful in many locations across the planet; a satellite communications platform is part of the standard package delivered by non-governmental and other relief organisations.

Question: Can you please tell us about the different types of solutions that Comtech EF Data offers in the event of a natural or man-made disaster?

FM: Comtech serves as an equipment provider, typically with our modems and RF equipment. This year, we have provided our CDM-700 modems to provide very high bandwidth links to aid in the restoration of communications due to multiple instances of cable outages. We have provided our equipment to service providers that in turn integrate the equipment either into the equipment to be used at the remote site, or at the service provider's teleport.

Question: The Asian tsunami is just one example of the increase in natural disasters we are witnessing in the Asian region. In terms of disaster recovery and business continuity, are you seeing a substantial rise in demand for your solutions in Asia?

FM: China has taken the lead in designing and deploying such networks. We have participated in two of these government-funded networks. They are extensive in size, being used by the larger government agencies for coordination of response to a disaster and as a communications resource to the disaster locale.

Question: Once Comtech EF Data is approached by a government agency or NGO for your services after a disaster has struck, how long does it take to deploy and what are the considerations that must be taken into account?

FM: Historically we have responded within hours, by pulling products either from our repair centres or from our distributors. We typically ship these to the requesting service provider or NGO for integration to their

network. There are companies that have stock of our equipment that are already configured in quick-deploy packages for remote sites. We also re-stock these companies very quickly.

Question: Comtech EF Data have entered into a collaboration agreement with RaySat in order to test interoperability. How vital is interoperability between different equipment in restoring communications in a disaster situation?

FM: Establishing interoperability between Comtech EF Data equipment, such as modems or RF, and autopoint antennas, is imperative to the provision of a successfully deployed communications solution. Similarly, IT gear needs to be vetted to ensure the success on the ground. The time to perform these tests is during a non-emergency situation. The experience of the Asian tsunami relief workers, and the hurricane relief workers in the US, attest to this. The assumption must be made that the conditions at the disaster site have been rendered to a more primitive state.

Question: What do you think the future holds in terms of satellite-based communications in disaster recovery? Are there any new trends and developments emerging?

FM: Progress in compression techniques for voice and video encoding, packet compression for modem transmission, bandwidth management technology, as well as availability of higher power solid state RF equipment, means more bandwidth (throughput) is now available using small antenna sizes (1.2 m). These address two forces at play with disaster recovery and business continuity remote sites; the ever increasing demand for more voice lines, more Internet bandwidth and video, and the pressure to set up the remote gear as quickly as possible, which is arguably easier with a small antenna.

Question: Looking forward to the next twelve months, what will Comtech EF Data be working on with regard to disaster recovery solutions?

FM: We will continue to develop our Carrier-in-Carrier (based on Applied Signal Technology's DoubleTalk™, which uses the patented "Adaptive Cancellation" technology) and dynamic bandwidth management (Vipersat) products. We will work to continue deployment of these products with our service provider customers. At the same time, we continue to work with complementary technology partners to ensure robust solutions for this market. For instance, we have a popular configuration in what we refer to as a flyway hub, which is a start-up Vipersat Management System, modems, and customer specified third-party equipment installed in a ruggedised case. ■

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