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Issue 7: From the Guest Editors

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Issue 7: From the Guest Editor



During the past 15 years, the international satellite communications industry has been developing and refining network solutions such that today, there are more than one million so-called Very Small Aperture Terminal (VSAT) systems installed and operating in more than 120 countries.

Practically speaking, this level of deployment means that economies of scale are now being realised that enable the cost effective use of such systems and services for a broader range of applications - IP-based narrow- and broadband solutions that apply directly to universal access and sustainable development in even the most inhospitable locations.

This trend is not theoretical. International telecom services are already facilitating the creation of a global economy, where VSAT-based systems are used extensively in the developed nations to reduce costs, increase efficiency, and improve productivity.

Likewise, less developed countries (LDCs) are also turning to VSAT-based solutions which - being distance independent - make it possible to link the providers of raw materials to agents, to shippers, to importers, to retailers and, finally, to consumers in widely-separated geographic areas.

As retail demand increases (or decreases) each participant in the supply chain is able to instantly communicate that more or less supply is needed. This minimizes spoilage and enables surpluses to be diverted to alternative sources of demand, thus maximizing the economic potential of any given nation.

Indeed, the benefits of VSAT-based communications are being realized in every sector of activity, both private and public. From banks and stock exchanges to schools, hospitals, and rural telecenters, VSATs are also being seized upon to elevate economic, educational, and health standards.

In turn, higher economic and social standards attract foreign investment, which creates employment opportunities, which leads to increased exports, which yields stronger hard-currency earnings.

With the advent of higher functionality and lower costs, VSAT services can now support a broader range of domestic and international communications objectives than ever before. A snap-shot of typical services includes:

- Internet Via Satellite
- Distance Learning
- Rural Telecommunications
- Telemedicine
- Disaster Relief
- Government Closed User Groups
- National and Multi-national Networks
- Broadband Data Communications
- Multicast VSAT Services
- Intergovernmental and Corporate Applications
- PSTN Infrastructure Extension
- News Distribution Services

The advantage to end users of such VSAT-based solutions is that vendors can provide an inexpensive, single communications platform serving an entire region or the world. Global demand for this level of connectivity has enabled VSAT technology to rise from being a niche technology capable of providing a small competitive advantage to professional users to a mainstream telecommunications service platform used by many of the world's largest corporations, governments, and personal users in the mass marketplace.