



### Satellite Communications: one industry, one thousand solutions



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**If a picture is worth 1,000 words**, this year's edition of the *GVF Membership Directory* is worth volumes. The more than 200 GVF-Member companies included in these pages derive from scores of nations in every major region of the world, where they stand at the communications vanguard, delivering fixed and mobile satellite solutions for — potentially — everyone in the world.

That's no exaggeration. Billions of individuals are already connected to the latest news, entertainment, and culture via satellite broadcasting. More than one million subscribers have begun receiving satellite-based broadband access, and millions more will soon be reached. Governments, meanwhile, are increasingly relying upon satellite networks to elevate social standards through distance education, telemedicine, e-governance, and basic connectivity to bridge digital, economic and geographic divides.

Further, these applications build upon decades of mission-critical communications provided to the private enterprise sector, where nearly every form of human endeavour is being enabled via satellite: oil & gas, mining, shipping, banking, stock exchanges, manufacturing, construction, air-traffic control, news gathering, weather monitoring, retail, franchising, cable, wireless extension, pharmaceuticals, agriculture, humanitarian efforts, disaster response, and much more.

The socio-economic impact of any one of these applications is immeasurable. Take, for example, disaster response. Earlier this year, immediately after Haiti's devastating earthquake destroyed lives, buildings and infrastructure, satellite communications were instrumental in helping to re-establish contact and to begin the process of disaster response.

From the UN aid agencies to non-government humanitarian organisations, and from the military responders to local communications companies, satellites made it possible to save untold numbers of Haitian citizens... and set the stage for longer-term rebuilding of the country.

#### The next frontier

Is that to suggest that satellite services are now available to everyone, everywhere?

No, not quite. For a start, there are still billions of unserved individuals who live in developing nations where history, natural resources and geography have conspired against them, thwarting the communications sectors' best efforts to provide solutions. But that's beginning to change, too, thanks to several key trends.

First, most governments of the world have begun permitting competitively provided communications, including strategic liberalisation of satellite services. This has eliminated the malaise of monopolists and given rise to a new cadre of local and international entrepreneurial enterprises that are reaching beyond the large cities to address smaller non-urban markets.

At the same time, the satellite industry's recent successes in providing mass-market broadband solutions in Asia, North America and Europe is driving new technology enhancements, as well as economies of scale in production. These gains are enabling more cost-effective approaches that can be passed on to serve individuals in emerging economies.

Some of these solutions draw upon increasing use of satellite communications in tandem with complementary terrestrial systems, including VSAT delivery of last-mile connectivity for fibre, as well as satellite backhaul for wireless voice and broadband data services, including WiFi, WiMAX and, soon, LTE.

Other market forces are contributing. To a significant extent, IT and ICT products are approaching market saturation in the developed economies or, at least, sales-growth rates have been levelling off.

As a consequence, manufacturers of computer equipment and communications terminals are looking further afield for new customers, while content providers are trying to reach new eyeballs.

This is translating into greater availability of low-cost laptops (e.g. one laptop per child, Intel's ClassMate, etc.), as well as software innovations and new leverage from purveyors of online services (Google's recent investment in the satellite sector is one example.)

The "Green" movement, meanwhile, is driving new demand for alternative power sources — such as solar — and this is setting the stage for crucial component cost reductions that will mitigate the problem of inadequate access to energy in remote and poor areas.

Governments, meanwhile, have been moving to facilitate private-sector efforts to reach markets where return-on-investment timelines are more challenging than in the major cities.

A growing number of nations have established universal service funds where, according to World Bank estimates, billions of dollars are now deposited.

The intended use for these funds is to facilitate delivery of communications to underserved areas.

These and numerous other commercial, technological and political factors are, for the first time, bringing the possibility of sustainable satellite-enabled communications within reach of those billions who, until now, have had little or no hope of realising the empowering advantages of ICT access.

So hold on to this copy of the *2010 GVF Membership Directory*. The innovative leaders named in these pages are going to help change the world. ●

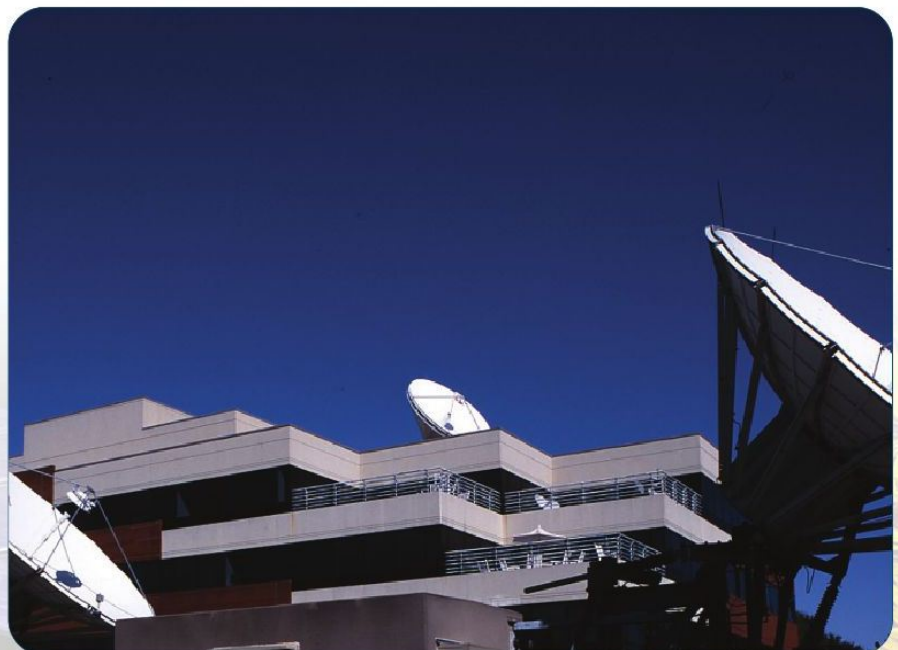


Photo courtesy of Spacenet.