

integration in wireless and satellite projects as well. We have provided many turnkey projects around the globe, including in Africa. Some of these also include a wireless component. This can be trivial, such as connecting a Wi-Fi access point behind a VSAT, or more complex, such as integrating WiMAX or mesh Wi-Fi, which we have done as well.”



Sathish Amara,  
Regional director  
of Africa,  
iDirect

iDirect currently has more than 40 service provider partners across the continent and claims to be the “dominant player in Eastern Africa”. It has an expanding presence in Northern Africa, and it has added partners in Angola, Zimbabwe,

Namibia, Nigeria, and other countries. This growth has been driven by several major trends, as its regional director, Sathish Amara, explains: “First, high-speed satellite IP connectivity has become a primary option for core communications infrastructure. As the diverse nations that make up Africa continue to modernise, terrestrial fibre and wireless networks simply cannot reach across the continent’s vast geographies. And terrestrial infrastructure cannot be built out fast enough. So a wide range of organisations are turning to satellite networks. Some may find that surprising given traditional views of satellite communications as a very specialised application. But in the past several years, the technology has gone through a major transformation.”

Amara says that in nearly every way, satellite can match terrestrial networks in speed, reliability, and quality of service. He adds that in places like Africa, it delivers several unique benefits. “Satellite networks can be implemented quickly and easily. Satellite networks can reach every single city, town, village and person, and support any IP application. One of the most significant developments that our partners are leading in Africa is the integration of terrestrial and satellite networks to provide seamless IP coverage for multi-national enterprises. And satellite technology has other critical roles to play in Africa, helping advance emergency response communications, maritime connectivity, distance learning, telemedicine and many other applications.”

Citing an industry report by Informa, Amara says that although mobile phones account for 90 per cent of all telecoms in Africa, less than 40 per cent of the

continent’s population has access to mobile connectivity. “The main problem is that mobile networks cannot be affordably extended into the villages and towns where many people live and do business. iDirect has developed a solution that can extend the reach of mobile networks anywhere. We use a satellite link to connect BTS sites to remote areas, where iDirect routers on site provide local access points. Traffic is routed from the BTS site to the village and then back to the core network. What’s novel here isn’t necessarily using satellite as a backhaul transport solution. That’s been possible for some time, but it hasn’t been affordable using an older form of satellite connectivity that requires a dedicated link to every village. The cost of a dedicated link outweighs the revenue a single village can supply. iDirect’s technology platform enables mobile operators to pool local traffic across many villages onto a shared, bandwidth-efficient TDMA network. This significantly reduces the cost of transporting mobile traffic over satellite.

“Frost and Sullivan projects mobile operators throughout Africa may need to rely on satellite to deploy as much as a 100 per cent of their cellular network outside city centres given the high demand for cellular service coupled with underdeveloped terrestrial infrastructure. This represents a huge opportunity for our partners in Africa.”



Eyal Copitt,  
SVP Sales Africa,  
Spacecom

In 2009, Spacecom was readying its first excursion into Africa by preparing financing, signing agreements with new clients, and moving a satellite towards Africa.

2010, according to its senior vice president Eyal Copitt, is the year in which it will concentrate on penetrating the continent’s market. “In January 2010, we began operation of the *AMOS-5i*, our first satellite serving the African market. This satellite, at 17°E, offers a pan-African C-band beam connecting Europe and the Middle East alongside two Ku-band regional beams. It precedes *AMOS-5* that is scheduled to launch and commence services in mid-2011.”

*AMOS-5i* is said to be an “interim solution” until *AMOS-5* is launched. The latter will also be located at 17°E and will be a prime carrier of broadcast and data services in Africa. Copitt says: “*AMOS-5i* catalyses and expedites our business development efforts on the continent enabling us to already position Spacecom as an attractive source of C-band and Ku-

band capacity for a variety of African and African-related businesses, including telecoms, cellular operators, broadcasters, governments and others.

In 2006, Spacecom decided that the communications market in Africa was evolving and growing and that it made strategic sense to begin working on providing a solution for the continent.

“Basically, growth of the wireless market, alongside that of others, enabled *AMOS-5i* to come online some 18 months earlier than our planned entry into the market with the *AMOS-5*. We have also seen the operation of more fibre in Africa meaning that more content can be brought to the continent and can be locally elaborated and distributed. This enables a greater focus at the regional and local level for programming and thus deepens local communications business operations.”

Copitt says that the challenges in Africa are the same as around the world – with the most prevalent challenge being financing for new business operations. “If during the past eighteen months the world recession slowed down growth in Africa, presently we are seeing a resurgence in business operations. More television operators are opening new services, cellular penetration is increasing around the continent, and operators are seeking out the best methods of transmission. And that means using satellites that offer superb service, attractive rates and provide greater service coverage.”

Over the next twelve months, Spacecom plans to focus on the construction and launch timetable for *AMOS-5*, and on providing the best services via its *AMOS-5i* satellite. The opportunities clearly exist. “We are seeing business from cellular backhaul traffic as well as data communications for internet. The video market, especially advanced television applications are also gaining in Africa, and HDTV is making its appearance with a big push from the 2010 World Cup.”

“Operators throughout Africa may need to rely on satellite to deploy as much as 100 per cent of their cellular network outside city centres”