



Communications is essential

For those working in professions that take them to remote or hostile locations, satellite technology helps them to keep in touch, to keep safe and to transmit all-important data to where it's needed.

Meeting the demands for voice and data transmission in industry is challenging. With man's resources running low, companies are forced to deploy resources further and further a-field to discover more. Companies that are engaged in industries such as oil and gas exploration and drilling, mining, construction, shipping and forestry all have their own specific requirements that must be met in order to keep their teams in touch with company headquarters. That connection is vitally important as those in charge must know the exact location of their workers for health and safety reasons and must also have constant access to the data that is transmitted to them from the remote sites.

The huge increase in use of the Internet and email is not just isolated to land – the demand for the services we use at home and

in the office are a necessity in the remote industry market. Whether you are enjoying a cruise on the Mediterranean or are a trawlerman in the North Sea, access to the communications that you are accustomed to is of paramount importance whether it be for contacting loved ones or headquarters or for entertainment purposes. Workers at sea or in other remote locations now expect to be able to access the same services as they do on land. When fishermen or workers on oil rigs are far away from home, sometimes for months on end, communication with the mainland, with family and friends, is crucial and is vitally important for a more contented workforce.

There is only one way to communicate effectively in these circumstances and that is via satellite.

Industry at sea

VSAT services have, and continue to prove themselves to be the ideal means of connectivity at sea. Contending with hostile weather conditions, rough seas and high winds calls for a specific kind of VSAT that is ruggedised, stabilised and, above all is reliable. Container ships, fishing vessels, military ships and oil and gas platforms all require constant, always-on communications with the mainland via voice, data, fax, email and navigation systems. Perhaps the most significant point on satellite communications is that they can be deployed anywhere, even in the middle of an ocean.

Crews working in the oil and gas industry have a particularly demanding and risky job. For these dedicated workers there is an essential need to have excellent communications not least for safety reasons but for business and welfare as well. Companies are developing specific products and services that are tailored for this very challenging environment.

The upstream oil and gas industry increasingly relies on satellite communications for their bandwidth needs, as well as for reliable backup services on their offshore platforms. In addition, the maritime industry has seen increased use of IP bandwidth and, hence, a move towards subscription-based VSAT broadband services.

Mining and construction

Industries such as mining, construction and forestry, although not located out at sea, are also often set up in remote and hostile areas and have their own unique requirements. These industries are also fraught with danger and the communications required must be available no matter how remote a site is. Nine times out of ten there will be no telecommunications infrastructure and no protection for terrestrial lines. Therefore satellite be-

comes the only option. Once again, efficiency, reliability, security and safety come at the top of the list. Workers must have instant access to headquarters and other mining sites but also to customers and suppliers in order to strike deals immediately and make requests for equipment. In these situations, portable mobile satellite services are used so that communications may be available to workers at all times. Fixed satellite phones can be set up at multiple sites to create a communications network. Satellite phones can eliminate the slow and expensive method of sending large files and other statistical data necessary to the operations being carried out. The phone may be used to capture data and to send and receive emails and digital faxes. This may all be completed in real time using a single format over Internet or remote LAN access. Satellite phones may also be used for location purposes and can assist in building up a site layout.

In addition, morale of these isolated workers is kept high as they are able to keep in daily contact with friends and family whilst spending long periods away from home.

SCADA – effectively delivered by satellite

Satellite provides an ideal and cost effective means of delivering SCADA (Supervisory Control and Data Acquisition) applications that collect information and then transfer it back to a central control site or main computer for analysis. This is a vital application that is required for the majority of the industries mentioned here. SCADA applications only utilise a small amount of bandwidth and therefore, satellite provides a perfect method of transmission. SCADA is an ideal tool for monitoring dams, reservoirs, oil and gas pipelines, exploration and drilling and the management of industrial facilities.

In situations where there is no reliable infrastructure and where conditions are harsh and locations remote, satellite is the perfect solution to all communications problems. Easily deployed and cost-effective to run, they provide back-up or a full range of services including voice, data, video, email, fax, VoIP and conference calls – all of which are key to running a successful site whether that is at sea or on land. Whether you are a geologist, an engineer, an inspector, a maintenance person, a oil rig worker or an executive at head office, you are in touch. Data can be quickly analysed making decisions easier to make. At all points down the chain, every link is informed what is happening and why and where. The satellite technology is effectively an extension of the head office. The distance between the site and headquarters becomes much less of an issue and every element of the operation may be closely monitored and controlled. ●

