

Increase efficiency and productivity of Oil & Gas operations



As demand for energy grows, oil and gas companies must access new resources in increasingly efficient ways. Specialising in the creation of end-to-end multi-service network infrastructure, Datasat provides managed VSAT, wireless and fibre connectivity to drilling contractors, operators and service companies.

With the exception of the recent development of Shale Gas exploitation, most natural resource recovery is taking place in increasingly remote and hostile environments. As cost of operations rises, companies must ensure that their sites run at maximum efficiency if productivity and profitability are to be achieved.

This requires continuous and high performance network access. In addition, as the new generation of business and operational applications become increasingly based around video and rich media, the network must be able to accommodate the real time transfer and prioritisation of the correct data to allow improved decision making and increasingly automated remote operations.

All of this has to be achieved using communications technology that will operate seamlessly in extreme temperature and weather conditions. Network infrastructure that keeps maintenance to a minimum. Datasat designs and builds remote network infrastructure that meets the business, operational and welfare needs of Oil & Gas sites - no matter how remote or harsh the environment.

> Key Features

- End-to-end network – based on correct blend of satellite, wireless and fibre technologies – to meet each remote location
- Highest levels of reliability, availability and security to enable continuous operations – whether manned or unmanned – almost anywhere in the world
- Rugged vibration-tested climate-proof military standard equipment developed for challenging outdoor environments
- Enables employee, contractor and enterprise traffic to share the same network, effectively and securely segregating confidential or mission-critical 'network traffic.
- Shared and dynamic bandwidth allocation to cost-effectively deliver performance to corporate and productivity applications on the remote site
- A single multi-service QoS-driven infrastructure maximises productivity and asset value while reducing costs and downtime
- Network optimised for HD video and audio service delivery to laptops and mobile devices for security and welfare applications
- Most advanced communications solutions delivered via privately owned infrastructure and managed from its UK-based NOC

Multi-service networks

Employing unique IP layer intelligence, with fine-grained policy management, Datasat's system enables network managers to implement different levels of security for different users, devices, organisations or user groups. This means multiple public and private networks can operate over the same network infrastructure without impacting the integrity or performance of the network, and without compromising the security or performance of critical or confidential traffic flows.

Multiple user communities can share the infrastructure in a defined geographic area. Network traffic can be ring-fenced for guest, contractor and employee traffic.

HD Video & Audio

With network SLAs to guarantee mission-critical traffic, the same infrastructure can be deployed to provide telecommunications, business applications, productivity and security systems. With high bandwidth infrastructure accommodating speeds up to 300Mbps, the same network that handles operational and business services will also handle the latest IP based video surveillance and monitoring applications across the entire site.

Rapid deploy networks

With all exploration, the ability to establish communications quickly and deploy equipment is essential as the project develops. Rapid deploy solutions from Datasat enable a VSAT connection to be deployed and operational in as little as 15 minutes. The network is pre-tested prior to installation to ensure immediate operation. By combining satellite with wireless connectivity, these rapid deploy solutions can quickly establish a hotspot to enable the remote personnel to roam securely within the designated area.

Contact us today with your communications requirements on **+44 (0)118 934 9199** or email us at **sales@datasat.com**

Serving the entire Oil & Gas sector

Datasat provides a range of services for all key areas of Oil & Gas exploration and production:

Land Drilling

Land drilling operations have different communications requirements. Initially, remote personnel need to communicate with experts at in-country offices or corporate headquarters. As the site moves from exploration to production, the multi-tenant nature of operations – with operators, contractors and service companies – requires a communications infrastructure to deliver a full range of network services – business, operational, security and entertainment – effectively and cost-efficiently. Datasat provides the correct infrastructure for each stage of the E&P process.

Offshore

Offshore drilling often takes place in the harshest environments on earth. These remote sites need all the communications services expected onshore or at corporate headquarters. As well as providing high performance and available connectivity to operational, business and infotainment systems, Datasat networks are extremely robust and reliable to deliver continuous operations. Combining satellite and wireless systems, the network intelligently allocates bandwidth to ensure that the correct level of access is available when required.

Unmanned Drilling

Datasat provides the communications networks to enable the effective management and protection of unmanned drilling operations – regardless the remoteness of the location. Networks optimised for rich media allow the integration of video with traditional SCADA based monitoring systems.

Maritime Services

Datasat offer a range of Maritime communications services from bespoke VSAT satellite systems to a complete end-to-end network solution for all voice, data, video and security applications aboard the vessel. Operational systems integrate seamlessly with crew welfare services over the same network infrastructure.

Shale Gas Exploitation

As shale gas deposits often occur close to human populations, there is an emphasis of establishing a highly safe and low impact drilling operation. Datasat provides a range of rapidly deployed network infrastructure services to facilitate shale gas exploration. The emphasis is placed on delivering a single secure infrastructure that can be moved and re-deployed in a matter of hours.