In order to increase business efficiency and maximise revenue potential, mining organisations need to establish full business communications on new sites in an extremely timely and cost-effective manner.

At the same time, the breadth and data complexity of mining communications requirements places an increasing burden on the remote communications infrastructure. A large mining operator turned to Datasat Communications when establishing a new mining site in West Africa.

The Challenge
It is becoming more and more challenging to discover and exploit new mining opportunities. The relative scarcity of resource is driving organisations to operate in increasingly remote environments. A large mining operator turned to Datasat Communications when establishing a new mining site in West Africa.

The company had three key requirements for its remote communications infrastructure. It had to be installed and operational within a very keen timeframe. It had to allow the company to make the most economic use of the available resources. Finally, the site had to function as an extension of its corporate network. Workers on site had to have high speed access to its essential business systems, especially SAP.

"A completed operational network was achieved within six weeks of placement of initial order. This included the initial site survey, build, installation and testing."

Key Benefits

- Design, build and installation of network within six weeks
- Highly robust VSAT network
- Voice, data and voice capabilities up to 15Mps
- High speed, secure access to business applications, especially SAP
- Remotely managed through the Datasat Network Operations Centre
- Flexible bandwidth allocated on a dynamic basis
- 99.98% network availability
The Solution
Given the remote location and the imminent timeframe, a satellite-based network infrastructure offered the optimum approach for the company. Key considerations had to be given to system availability and reliability. The network had to be always-on and accessible when and where people needed it. This required a high performance and flexible architecture where bandwidth allocation could be achieved in a dynamic fashion to meet workload requirements at peak times.

In addition, system installation and operation had to be efficient and cost-effective.

The company approached Datasat Communications to design and implement a remote communications infrastructure for the site and integrate it with the company’s corporate network and its headquarters in the UK. We worked in partnership with the mining company to precisely model requirements and produce a system that delivered the best satellite coverage in a way that allowed the site to make the most cost-effective use of flexible bandwidth allocation.

The system created was based on a highly available, C-band satellite network with VSAT terminals on the site remotely managed from our Network Operations Centre (NOC). The network allowed the company to use an IP-based architecture to deliver voice, data and video services. It could deliver high speed access to its business systems to people on site while enabling the real-time sharing of information between the site and headquarters for improved decision-making.

By taking advantage of the range of NOC services from Datasat Communications, the mining organisation received 24x7 remote management of its VSAT infrastructure. The approach of Datasat Communications to ensure that the NOC is staffed with engineers with personal experience of the network meant that potential issues could be spotted and addressed before they became problems – a major part of delivering a highly available service.

The Outcome
A completed operational network was achieved within six weeks of placement of initial order. This included the initial site survey, build, installation and testing. The VSAT infrastructure delivered a high speed, highly available platform for the company’s voice and data services.

Its flexible bandwidth allocation gave the company a network capable of 15Mbps downstream to multiple sites across the area of operations and 5Mbps upstream to the corporate headquarters, or 5Mbps downstream and 15Mbps upstream or any balance of the two. Importantly, allocation could be changed quickly and flexibly to meet the exact requirements of the organisation.

This approach delivered a highly cost-effective provision of service that enabled impressive performance for the company’s business systems. It was able to deliver DSL-like speeds for its SAP system in a highly remote area.

This was backed by the highest Quality of Service, underpinned by our Service Level Agreement to guarantee 99.98% availability. The company benefited from a highly reliable, high performance remote communications network that could be quickly and cost-effectively installed and was flexible enough to accommodate the exacting, bandwidth-hungry requirements of a modern mining operation. Datasat, staffed with engineers with personal experience of the network meant that potential issues could be spotted and addressed before they became problems – a major part of delivering a highly available service.

Contact us today with your communications requirements on +44 (0)1707 665 320 or email us at sales@datasat.com