Voice & Data Networks for Oil & Gas Companies

KazTransOil - Kazakhstan National Oil Pipeline Operator

"We needed an always-on manageable communication network that was highly reliable, could be deployed quickly and was optimized to guarantee uninterrupted operations despite the rugged terrain and the harsh weather conditions of Central Asia. Gilat's VSAT technology provides us with a reliable communication infrastructure for both data and voice, for all of our sites, even those in the most remote areas."

Mr. Askar Sultanovich Smankulov
Deputy General Director Kaztransoil

The Client

KazTransOil, the national oil transport company, exports 80% of oil products produced in Kazakhstan via pipelines, rail and sea. The company operates a 6,500 km long pipeline network throughout the vast territory of Kazakhstan. Including the head offices located in Astana, there are 6,700 employees employed at the 10 regional centers and at the 55 service sites (pump stations, communication centers) dispersed along the pipeline.

Kazakhstan, home to some of the world's harshest terrain and most unforgiving weather conditions, challenges the establishment of a modern reliable communication infrastructure. The remote sites situated along the pipeline are located in extremely isolated areas where terrestrial communications infrastructure simply does not exist.

To ensure efficient operations, KazTransOil needed to replace the VSAT network previously installed with a more advanced and cost effective solution. This search for a more reliable, manageable and terrestrially independent communication backbone led KazTransOil to choose Gilat's FaraWay VSAT platform as their prime telecommunications solution.
Gilat’s FaraWay platform provides KazTransOil with a modern and reliable infrastructure, high performance and availability as well as low maintenance costs. The network includes a Hub at KazTransOil’s head office and 65 remote sites spread along the oil pipeline.

The FaraWay VSATs installed within the Company’s protected areas, support voice, fax and high-speed data communications for ERP, SCADA, Internet and video-conferencing applications throughout the enterprise. The network enables high-rate data transmission between the remote sites and the headquarters and full mesh voice between the remote locations. The full mesh topology provides single-hop connections between the service sites, saving space segment and reducing satellite delay to a minimum.

Gilat’s fully redundant centralized network management system allows KazTransOil to monitor and control the remote terminals from the company’s head office, a significant advantage considering the very distant isolated areas in which the sites are located.

KazTransOil benefited from a comprehensive solution provided by Gilat including total project management, turnkey installation of all remote sites and hub equipment, as well as training for network operations and field maintenance.

The Future

In the future, KazTransOil looks toward extending its pipelines and expanding its VSAT network with more remote sites and a back-up hub (geographic redundancy).

The network has already been extended to include all sites located along the 7,000 km gas pipeline network of KazTransG as, Kazakhstan’s national gas transporter, bringing the total number of network sites to 110.

The FaraWay network is designed for easy expansion, allowing KazTransOil to include additional sites in the future with minimal time and expense.