

We help Verbundnetz Gas manage  
their 7298 km long pipeline network.  
**What can we do for you?**



[www.tsat.no](http://www.tsat.no)

## THE CHALLENGE

Verbundnetz Gas AG (VNG) based in Leipzig, Germany, was a monopolist supplier of Russian gas in the old German Democratic Republic. Today, the company is a privatized gas trading, transmission and distribution company with a 7298 km long pipeline network extending all over eastern Germany. The company has a 16% share of the German gas market. Most of its pipeline infrastructure is running through scarcely populated areas.

## THE SELECTION

Since the VNG SCADA system is in continuous operation, the communications solutions had to provide an always on non-metered service. This precluded the use of GSM and VSAT shared hub solutions. After reviewing the available options VNG settled on TSAT 2000, which was deployed in 1994. Now, 10 years later, VNG decided to perform a technological upgrade of their communications infrastructure. Dipl. Ing. Ingo Gatzke was charged with managing this project. After performing a detailed review of available options in the marketplace, VNG concluded that an upgrade to the new TSAT 2150 would be the most cost effective. The implementation was initiated in the fall of 2004, and the upgrade will be completed by the middle of 2005.

## THE SOLUTION

A TSAT network with a multiple redundant HUB configuration and approximately 60 remote terminals. The ABB Spider SCADA system is running the RP571 protocol. The front end processor is set up for multi-drop connectivity with 3 to 4 RTU's per port. Each port is polling independently. The data rate is 2400bps.

## THE BENEFIT

With the deployed solution, VNG is able to utilize the pipeline more efficiently without compromising safety, at reduced cost.

**How can we improve your bottom line?**