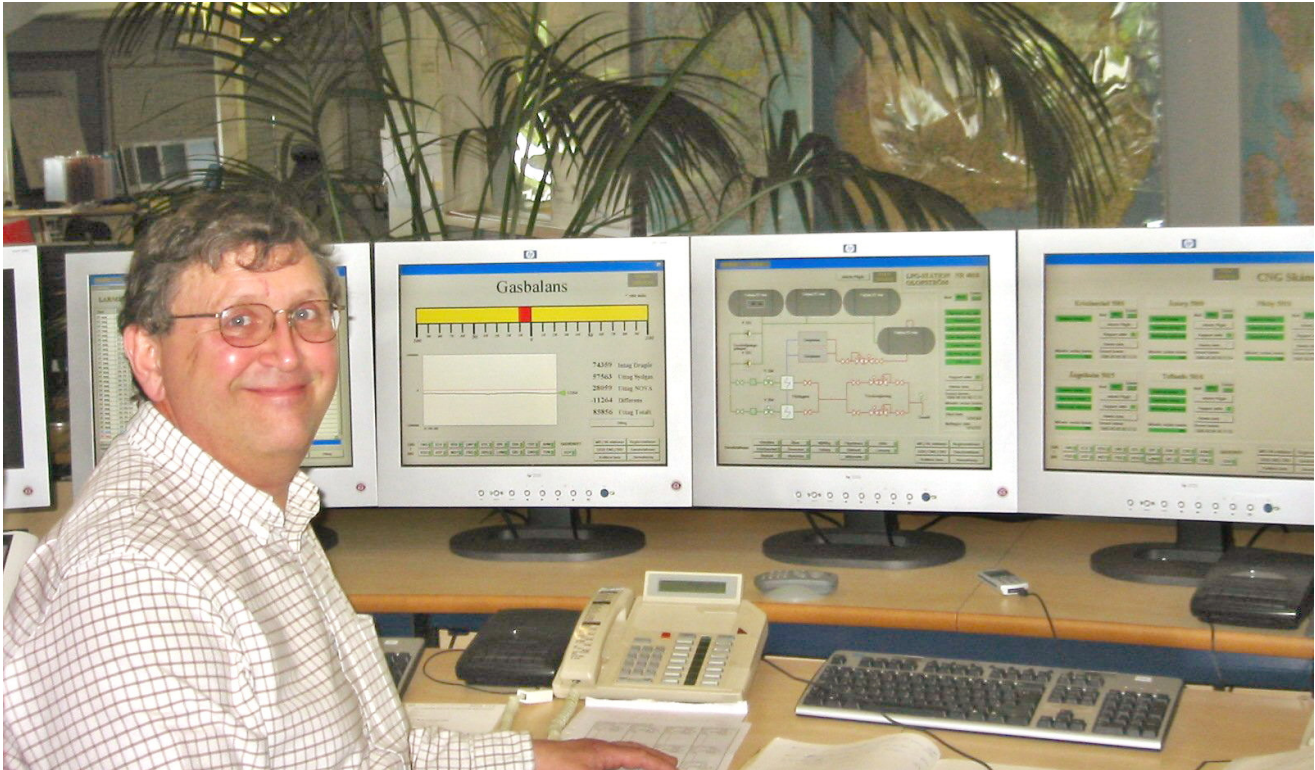


Signalix telemetry modules chosen by Sydkraft Gas in Malmö for communication with gas installations in Sweden

Sydkraft Gas AB's main office in Malmö decided to use a large number of Signalix MT-101 GSM/GPRS telemetry modules for communication with the company's various gas installations placed across the provinces of Skåne, Halland and Småland.

The installations consist of gasol-cisterns in several sizes varying from 53 to 21 tons, and secure the supply of gas for over mainly industrial installations.



Supervising engineer Göran Persson, the engineer responsible for the project says: I am exceptionally satisfied with the telemetry modules from Signalix. They fulfilled all the expectations Sydkraft Gas's engineers.

Test procedures before decision

Supervising engineer Göran Persson says that the decision to use Signalix GSM/GPRS telemetry modules was made after a lengthy investigation and a long test period. Sydkraft Gas AB representatives paid a visit to the module manufacturing site and hired a consulting company that had been testing Signalix modules for almost a year in various installations. The investigation were to prove that the solution, besides fulfilling technical requirements, is reliable, easy to maintain and superior to the telecommunication system currently in use and other offered solutions, in both economy and security aspects

Extra high demands on security

Besides reliability, an extraordinary emphasis was put on access security. No one was to be able to intercept or disturb the communication, between the company's gas installations and the monitoring center at Sydkraft Gas AB's main office in Malmö. Sydkraft concern has always had very high standards in that matter. The solution we have chosen satisfies our demands. Hacker and virus attacks in industrial and technical environments are a significant threat that should not be ignored.

Natural gas from Denmark

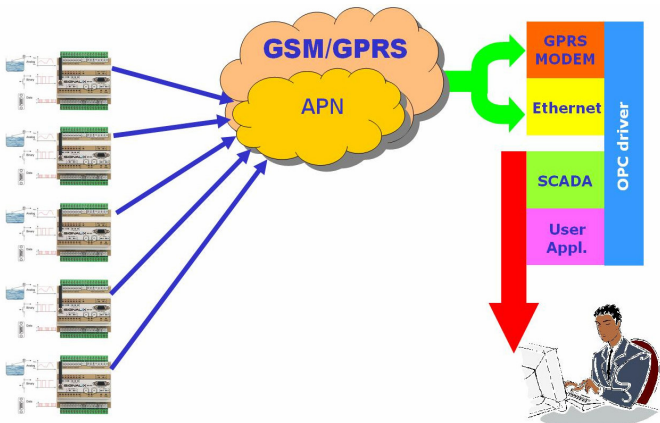
Sydkraft Gas AB has since 1984 had a contract for the supply of gas from the North Sea. The gas, that Sydkraft Gas receives, goes to Sweden via a pipeline across Denmark, via Dragør on Sjælland and under Øresund to Sydkraft Gas's installations in Sweden.

Approximately 3.2 million m³ gas flows from Denmark to Sweden daily. The pressure in the pipeline is about 60 bar. It is monitored closely from Sydkraft Gas's central control room, as depicted above.

Sydkraft Gas closely monitors daily consumption in order to keep constant pressure in the pipeline. Engineer Göran Persson says that a mere 1° Celsius temperature drop means a variation of 100.000 m³ in daily consumption.

Sydkraft's own wireless network

In order to achieve high security in its communication, Sydkraft Gas decided to establish its own wireless network in cooperation with Vodafone.



The modules can communicate with the control station and with each other within the APN subnet. The user can monitor and control the system from any place in the world where there is GSM/GPRS coverage.

A so-called APN (Access Point Name – a subnet in GPRS network) can service app. 65.000 individual telemetry modules, each with its own static IP address.

That ensures 100 % control and communication with every module in the network.

Every module is password protected and communicates only with predefined IP addresses belonging to its own network.

Full control of installations

Sydkraft Gas monitors the state of many installations and the volume of gas in cisterns. The monitoring center in Malmö receives alarms on any event occurring at different installations. The status of all or only a few selected gas installations or selected parameters can be read instantaneously.

MT-101 modules give Sydkraft Gas a precise record of how many bytes of data are sent and received each day. This is an important factor when it comes to calculating which parameters one wants to read from different locations as well as the future expansion of installations and number of measuring points.

A magnificent solution

Supervising engineer Göran Persson says: I am exceptionally satisfied with the telemetry modules from Signalix. They fulfilled all the expectations that Sydkraft Gas's engineers had hoped for and were promised to get at the user seminar at Signalix in Copenhagen.

Göran Persson is quite sure that Sydkraft will expand the number of Signalix telemetry modules in its APN network in the nearest future.

The access security preventing unauthorized entry and system reliability of Vodafone's GSM/GPRS network were a paramount factor in Sydkraft Gas' decision making. According to Göran Persson, the Signalix modules fulfill the requirements Sydkraft Gas have defined for their monitoring and control system.