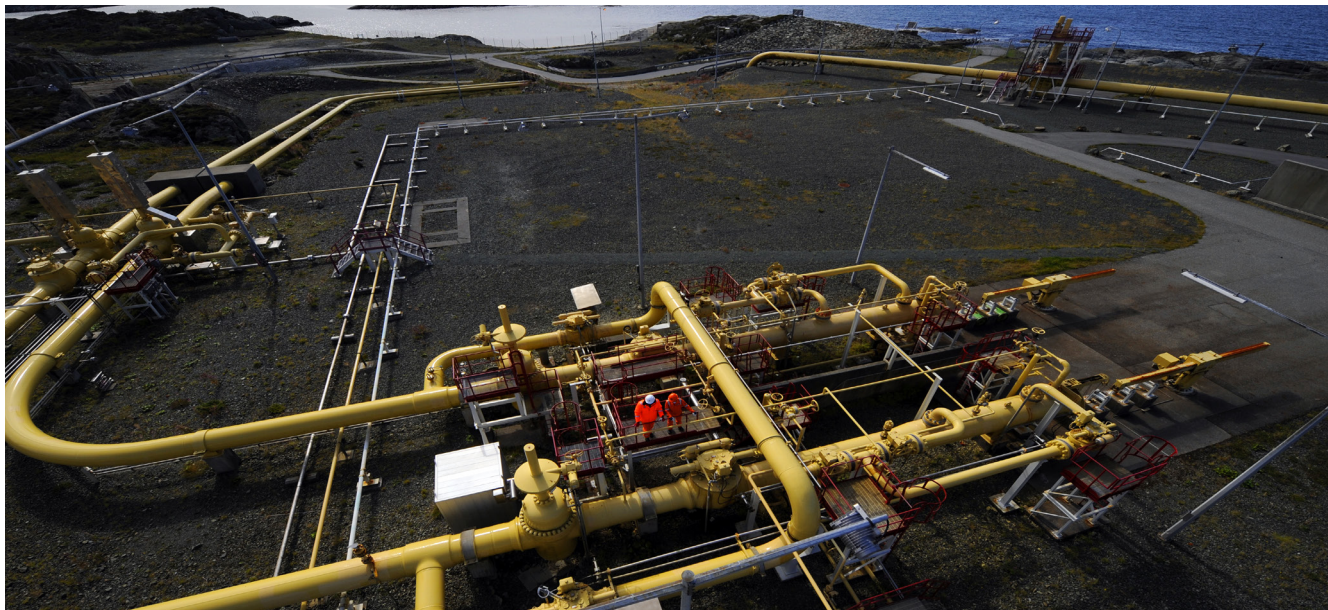


GASSCO PUTS TRUST IN TETRA

TETRA NETWORK INCREASES SAFETY AND IMPROVES COMMUNICATIONS AT GAS TERMINALS



With safety being a top priority at its gas metering and receiving terminals, Gassco has chosen to deploy a TETRA network which will provide robust and reliable communications between operators and maintenance staff at its plants in northern Germany. ATEX-approved TETRA terminals with a ‘man down’ feature and SafeMobile’s realtime GPS tracking solution enable workers to keep in contact throughout the plants, enhancing security and efficiency.

Gassco Norway owns some 7975 kilometres of gas pipelines and is responsible for the safe and efficient transportation of gas from the North Sea to Europe. Its subsidiary, Gassco Emden, operates three landing stations in Emden and Dornum. Gas quality and volume is checked at the Europipe metering station (EMS) at Emden, which is remotely operated from the control room at the Europipe receiving facilities (ERF) 48 kilometres away in Dornum.

When it arrives at Dornum, the gas pressure is reduced, then it is heated and metered before it enters the downstream distribution network.

BENEFITS

Control rooms are noisy work environments and in the past Gassco personnel struggled to hear communications clearly. The TETRA ATEX approved terminal’s voice compression technology provides superior audio quality and suppresses background noise to prevent transmissions from being misheard.

The ‘man down’ feature provides personnel with additional reassurance that they can automatically call for help in an emergency situation and the ability to pinpoint personnel using GPS locationing will make it easy to find staff and can also increase efficiency.

Gassco also plan to make use of the TETRA system’s short data service for their electronic work permit system.

- Reliable voice and data communications
- Integrated Man Down and GPS locationing
- ATEX approved radios for hazardous environments
- Increased channel capacity and audio quality

BENEFICIARY INFO

GASSCO AS

INDUSTRY

OIL & GAS

LOCATION

GERMANY

LOCAL PARTNER

FSN NEERMOOR

APPLICATION PARTNER

SAFEMOBILE

CHALLENGE

Gassco needed to expand the functionality of its existing analogue two-way radio system to be able to pinpoint the location of personnel and improve safety by automatically alerting the operations centre should a member of staff be injured and unable to respond.

It also required an increased number of communication channels to accommodate operators inside and outside its plants as well as to co-ordinate different maintenance teams more efficiently. This is particularly important during shut-down periods when multiple work groups need to collaborate. In addition, the company wanted a dedicated emergency channel which could intercept all communications and broadcast a message to users simultaneously if an incident occurred.

While the gas plants at Emden and Dornum function independently, personnel work across both sites and the operation centres at each site need to be able to maintain and control both plants. Thus, both locations needed to be connected onto a central network.

The potentially explosive nature of gas distribution plants necessitates stringent safety regulations and this meant that communication devices had to comply with the required levels of protection for safe operation near hazardous materials.

“THE GPS LOCATION APPLICATION IS PARTICULARLY USEFUL DURING WEEKENDS WHEN THERE ARE ONLY TWO OPERATORS WORKING – ONE INSIDE AND ONE OUTSIDE THE PLANT. PREVIOUSLY, IF A MEMBER OF STAFF WAS LOST IN THE PLANT, WE HAD GREAT DIFFICULTY IN LOCATING THEM.

THE INTENTION IS TO USE THE SYSTEM TO SEND A TEXT MESSAGE TO THE OUTSIDE OPERATOR TO CHECK WHETHER ANY GAS HAS LEAKED INSIDE THE PLANT. THE OPERATOR CAN THEN SIMPLY PRESS A BUTTON ON HIS RADIO TO CONFIRM WHETHER IT’S FREE OF GAS”

Frank Tabbert, Process and ICT Professional, Gassco Germany

SOLUTIONS IMPLEMENTED BY AIR

- TETRA System with TETRA Base stations
- ATEX approved terminals
- SafeMobile GPS Locationing
- Dispatcher

AIRadio Deutschland and local reseller partner FSN Neermoor proposed a TETRA system, which would allow Gassco to make a smooth transition to a digital radio network that could provide business-critical voice communications and short data services simultaneously. A web-based network management interface and ease of deployment allows for the simple operation of the TETRA system, minimising disruptions and making it easier for users to adapt to the new technology.

Two lightweight TETRA base stations have been installed to provide best-in-class receiver sensitivity for optimum radio coverage while their compact size lowered installation costs. The TETRA systems

at Emden and Dornum are connected via a local area network to a central switch which enables the operation centers at both locations to control each site. A dispatcher desktop solution from Carlss facilitates the remote control of the radio terminals. The TETRA terminals comply with international safety standards ATEX and IECEx and have been designed to operate intuitively and by users wearing gloves, ensuring Gassco’s operators and maintenance teams can communicate safely even in hazardous areas.

Protection of personnel is further enhanced by the integrated “man down” feature- which activates an emergency alert based on motion detection and incline angle threshold settings. The terminals also have a GPS receiver which, combined with SafeMobile’s GPS-based AVL localisation application, enables the precise location of personnel to be identified on site maps.



ABOUT AIR

AIR is a premier technology company distributing wireless products and solutions for an array of vertical markets. American International Radio is recognized as the Largest Motorola Distributor in EMEA. We are a System Integrator providing Professional Communication Solutions by developing software and hardware, customized Mobility & IT applications and solutions, and enhancing the functionality of standard products.