

The Products:



case study



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Honeywell Security and Gas Extremadura Transportista use Galaxy Dimension to protect gas installations.

The Client

Gas Extremadura Transportista SL is dedicated to transporting piped gas to the autonomous community of Extremadura. It is a subsidiary of the Gas Extremadura Group with its share capital held mainly by local businesses and shareholders. Gas Extremadura Group is responsible for distributing natural gas to 15 cities in the Extremadura region and has 680,000 metres of distribution network supplying 60,000 service points. Gas Extremadura Transportista currently has a network of 92,120 metres of transport gas pipeline and expects to reach 180,000 metres in 2012.

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The Situation

Gas pipelines are used to transport fuel gases on a large scale, fulfilling a very important role in today's economy.

Natural gas is one of the most versatile, clean and economic forms of energy today, used domestically as well as in trade and industry. It is fundamental in improving the quality of life of thousands of families and making businesses more competitive. Natural gas is used in homes to provide hot water, heating and air conditioning as well as many basic tasks in family life. In trade and industry, used as industrial gas, it can be used in any process to generate heat or cold, thermal and electrical energy and as a fuel in production processes.

The protection of the installations that form part of the gas transportation and distribution network is therefore a high security concern not only because of the risk of theft and loss, but also due to the volatile and flammable nature of gas itself. Natural gas is fundamental for industries and households and so its supply has to be guaranteed and protected.

For safety reasons, standards in all countries stipulate that valves are located at set intervals along any pipeline which can quickly shut off the gas supply should

an incident occur to allow management and maintenance of the gas transportation network. Therefore, along the whole network controlled by Gas Extremadura Transportista S.L. there are various installations called valve positions. Connection aerials for different villages are installed in these locations, since remote control and monitoring are vital for these infrastructures.

The Solution

Luis Carrillo Pérez, Technical Director of Gas Extremadura Transportista, identified the need to improve control and remote monitoring of valve installations on the pipelines and appointed Seguridad Ceres SA as its security partner to manage this.

Pablo de Toro, Technical Director of Seguridad Ceres SA, is responsible for the project. Seguridad Ceres was able to leverage the synergies and the knowledge of the specialist gas sector offered to them by Gas Extremadura Transportista to achieve the difficult task.

The systems in the project are not themselves complex in terms of the number of zones, but because of the fact that the valves are widely dispersed in rural areas which do not have pre-existing telephone lines or other communications.

Added to this is the inherent danger of the gas that the security system is protecting. With Gas Extremadura's advice, Seguridad Ceres decided to use equipment with IP connectivity which would allow bi-directional and remote control and also provide large streams of technical information remotely. Honeywell's Galaxy Dimension security system was the most suitable solution for this type of installation.

Galaxy Dimension's remote diagnostics function provides a lot of technical information, and was therefore a key element in the choice of solution. It optimises the use of remote technical assistance services avoiding unnecessary site visits to these remote locations. Thus it saves money and can also ensure a better service to the client for any eventuality that may arise.

Through a bi-directional Ethernet communication module integrated with the Galaxy Dimension platform, notifications of any incidents are sent to a private alarm exchange using 3G links through a router installed in each valve position.

The Alarm Receiving Centre (ARC) not only receives and controls alarms, but also continuously monitors communications with each installation, thus not only controlling events but also providing accurate information on



Pipelines network between Jerez de los Caballeros and Zafra, in the Badajoz region

communication breakdowns at any point in the gas pipeline.

The above photograph shows part of one of the pipelines and its valve installations, the line between Jerez de los Caballeros and Zafra in the Province of Badajoz.

The remote diagnostics function of Galaxy Dimension's Remote Servicing Suite (RSS) software facilitates both on site and remote maintenance as it provides ample technical information on each of the points that make up the security system.

So it's possible to perfectly plan the maintenance routine as the data can identify which critical points need attention. And, if there is a technical incident Seguridad Ceres staff will also arrive at the installation site fully informed and aware of the actual part that needs to be replaced or adjusted. Both of these benefits provided by the security solution save time and money.

The advantages

Natural gas is a basic and strategic commodity requiring constant supply,

therefore the risk of any interruption to its routine supply, by either intruders accessing the plant or a technical fault, could be disastrous. Using Galaxy Dimension, these risks are minimised.

In the first phase of the project, seven valve positions have been protected, and this number will increase as the pipeline network expands. The security provided by Honeywell equipment in these first seven valves means that Gas Extremadura Transportista knows exactly what is happening at any moment in its installations, and has the assurance that it can remotely control each monitored point, and receive all the information necessary to monitor the valve positions.

Ceres, our partner of choice

Seguridad Ceres SA, with a regional origin but present throughout the national territory, has the Ministry of the Interior authorisations for the installation and maintenance of systems, provision of monitoring services, transport and distribution of explosives as well as providing security consultancy. Seguridad Ceres distinguishes itself as a company which places emphasis on the training of its staff, engaging in society and the environment, and participating in gender equality programmes.

Seguridad Ceres has worked with Honeywell Security Group for many years and offers its clients great experience and expertise in installing and maintaining Honeywell security solutions.

In the picture (from left to right):

Juan José Nadales,
South Spain and Portugal Honeywell Security Group sales leader

Luis Carrillo Pérez,
Technical Director Gas Extremadura Transportista

Pablo de Toro Cruz,
Technical Director Seguridad Ceres

Jose Luis Aquino,
South Spain Sales Manager ADI Global Distribution



"Seguridad Ceres SA is an ideal partner due to its local origins, nationwide network and experience in managing complex security system projects."

Luis Carrillo Pérez,
Technical Director Gas Extremadura Transportista

