

# Optimizing natural gas transport ABB upgrades control systems of compressor stations with minimal downtime

“The partnership with ABB service specialists has convinced us to count on ABB in the future as well,” says Bernhard Book, Project Leader for Gasunie Deutschland.

Gasunie Deutschland, a long-distance pipeline operator of natural gas, needed to have its aging control systems updated. After 19 years, six ABB Contrinsic P and one Advant System were scheduled for an upgrade to ensure continued reliable operation of Gasunie’s seven compressor stations. The migration was scheduled in two phases starting with the operator level and controllers first and then the I/O level.

“The Freelance System is ideally suited for our applications,” says Book. It’s very important for the natural gas transporter to maintain high availability and to minimize downtime. The up-to-date package developed by ABB for Contrinsic P offered optimal conditions for a step-by-step upgrade with the shortest possible downtimes.

## Managing multiple projects

ABB and Gasunie worked together on developing the first concepts of the modernization. First experiences were gathered with the successful upgrade at a station in Ganderkesee, where a Contrinsic P was successfully migrated to a newer version. In 2008, the first of the more complex compressor stations were put on schedule at four different locations in Northern Germany. “It was actually quite challenging for us as the projects were running parallel at times and each plant uses at least four to eight different AC 800F controllers,” says Peter Balodis, Project Leader for ABB.

A total of 13 turbines and compressors are directly operated with the ABB controllers. The complex applications of the old systems were converted, optimized and finally tested together with the customer. At one station, the complete machinery of a compressor had to be renewed and all four stations received new cooling systems. “Our team was able to perform the work at all locations within the agreed time frame,” says Balodis. All systems went online according to schedule. This year, two additional Gasunie compressor stations will receive an upgrade of the I/O level.



2PAA105522D0007 USCS 1753

Gasunie also benefits from ABB’s new location in Oldenburg, Germany. “This shortens the distance between us,” says Bernhard Book. “Our personnel has already taken advantage of the training courses at the ABB University.” But Book is especially praiseful to point out the 20-year long teamwork with ABB’s service team from Hannover, Germany, who not only maintains the control equipment but is also familiar with the process engineering of compressor stations.

In the meantime, ABB implemented a similar solution for another Gasunie station. An AC 800M controller was temporarily commissioned as a gateway for the Advant system at the Rysum location.

## About Gasunie

The N.V. Nederlandse Gasunie is headquartered in Groningen, Netherlands, and a natural gas infrastructure and transport company. It owns the Dutch natural gas transport network and has an extensive network in Northern Germany, which makes it one of the largest gas networks in Europe. The total length of the pipeline system is more than 15,000 kilometers with an annual transport volume of about 125 billion cubic meters.