

Digital Transformation of Value Chain Processes in Marketing, Handling and Billing

Transport system operators usually employ individual IT systems with different data models for marketing, handling and billing processes. As a result, interfaces need to be set up to connect those systems. New European market requirements demand a much higher degree of interaction between the various value chain processes and systems. German natural gas TSO terranets bw relies on an integrated capacity marketing system for the digitalisation and automation of its core processes.

Based on an open tender for a new capacity marketing system with integrated handling and billing components, terranets bw decided that Sopra Steria's innovative approach was the best match for its requirements. A consolidated system was implemented that integrates the three core processes seamlessly based on a redundancy-free and consistent data model. Complex interfaces between capacity marketing, nomination management and billing systems are a thing of the past.

Key points



Capacity marketing with the European Capacity Platform PRISMA



Digitalisation of business transactions in capacity management, such as bookings, returns, marketed returns, handling of overnominations



Auction calendar for all auction and product types with automated product creation



_ Determination and application of renomination restrictions including remarketing



 Nomination processing including bottleneck checks and bottleneck resolution

- _ Active and passive matching; delivery schedule management
- Compliance with ENTSOG TP, DVGW and REMIT data transparency obligations



Portal for access to transparency data, submission of nomination data and internal bookings in self service



_ Intelligent monitoring of nomination management and market communication

Challenge

Germany-based terranets bw is operating 2,000 km of gas pipelines and state-of-the-art high-pressure gas facilities. Today, more than two thirds of all cities and communities in the state of Baden-Württemberg and parts of Switzerland, Vorarlberg and the Principality of Liechtenstein are connected to the terranets bw gas system.



The harmonisation of capacity marketing and transport handling processes in Europe has yielded new market requirements:

- _ Capacity marketing around the clock 24/7 intraday capacity auctions and interruptible capacity auctions
- _Closer link between handling and marketing via renomination restrictions and UIOLI
- Stricter data transparency obligations comprehensive and permanent data transfer on a European level with ENTSOG TP and REMIT

As a result, new requirements emerge when it comes to digitalisation and automation of core processes. Processes are increasingly dependent on each other and processes must fit a tight schedule. As a result, the number of interfaces between transport capacity marketing and handling systems must be reduced. An efficient overall process therefore requires a consolidated system solution that can conduct the individual tasks. terranets bw was looking for a standard software solution for efficient monitoring and management of automated business processes. The system integration was to be achieved in a relatively short period while all operational systems continued to be live.

How we worked together

Close and competent collaboration ensured that the project was carried out successfully. A number of possible solutions were identified using a highly dynamic approach. Based on these solutions, terranets bw and Sopra Steria have developed an innovative overall solution. Sopra Steria offers consulting, products and services from a single source. This enables an efficient and practical solution that terranets bw can rely on in highly dynamic national and European regulatory environments.

Results and benefits

The GAS-X Grid system is now the central solution for capacity marketing, nomination and delivery schedule management as well as transport billing at terranets bw. GAS-X Grid is the second software solution by Sopra Steria that was implemented successfully at terranets bw, the energy data management system GAS-X GDM being the first. GAS-X Grid replaces three separate systems for marketing, handling and billing and, as a result, reduces the number of IT systems and interfaces, thus reducing costs significantly. The system operates in a 24/7 mode as part of a high availability system approach. The closed process chain is highly automated and spans from capacity booking to transport customer invoicing, from balancing group declarations to the delivery schedule for network control. The GAS-X system provides the tools for terranets bw to tackle the dynamic energy sector. Sopra Steria can now provide a complete solution portfolio for transport system operators. Marketing, handling and invoicing processes can be managed with an integrated all-in-one solution that is based on a consistent data model. Complex interfaces between capacity marketing, transport nomination and billing systems are a thing of the past.

gas-x^{)®}

About Sopra Steria

As a leading European management and technology consulting company with 46,000 employees in 25 countries, Sopra Steria supports its clients in driving the digital transformation and achieving concrete and sustainable results. Sopra Steria offers comprehensive end-to-end solutions including consulting, digitalisation and software development that make large companies and government agencies more competitive and efficient - based on in-depth industry expertise, innovative technologies and a collaborative approach. The company puts people at the centre of its activities to take advantage of the vast potential of digital technologies and creating a positive future for its customers.

Sopra Steria SE

Hans-Henny-Jahnn-Weg 29 DE-22085 Hamburg gas-x.de@soprasteria.com www.gasx.soprasteria.de/en

"The innovative GAS-X system gives us the tools to tackle the requirements of a dynamic energy sector."



Andreas Schlund,

Project Manager, terranets bw