



## Networked Communication at the Market Partner Level

**NetConnect Germany has chosen the inubit BPM-Suite as the central process platform for communication and data exchange with the market partners of its market area. The universal platform connects all systems and consolidates the work processes of distributed teams. Automated error checks have significantly reduced the amount of manual work and minimized the general error rate in data transfers.**



**NetConnect  
Germany**

simply gas

### About NetConnect Germany:

NetConnect Germany is the company for executing the extended market area cooperation between the grid companies bayernets GmbH, Eni Gas Transport Deutschland S.p.A., Open Grid Europe GmbH, GRTgaz Deutschland GmbH, GVS Netz GmbH and Thyssengas GmbH for the entire market area of NetConnect Germany (NCG).

The business areas of the company (settlement area management, operation of a virtual trading point, control energy management and online provision of data, including billing and control energy data) are designed for grid operators as well as those responsible for settlement areas.

### Requirements

To handle the market communication in the context of market area cooperation, a universal communication and process platform that enables all persons involved to collaborate across teams was to be introduced:

- ▶ System connection of all partners spread across the country, consolidation of their activities using workflows
- ▶ Standard software that can be adjusted to rapidly changing BNetzA (German Federal Network Agency) requirements and market conditions even after operation has commenced

### Approach

For NCG, the inubit BPM-Suite offered a universal platform for handling all market communication that serves both the perspective of the person responsible for the market area as well as the market partners:

- ▶ All relevant market information available on one platform
- ▶ Automatic, qualified error logs that include relevance and schema checks as well as logical and semantic checks during data transfer
- ▶ Human workflows for selective staff integration

### Results Achieved

By choosing inubit, NCG has decided for a supplier that combines powerful technology with the flexibility required for implementing projects for the energy market:

- ▶ Handling the entire market communication of approx. 40,000 data records per day and roughly 520 distribution network operators on one platform
- ▶ Easy extensibility for data volume increases of 10 percent per month and new BNetzA requirements
- ▶ Accelerated check processes and decreasing error rates during data transfer thanks to check routines and automatic error logs

The founding of NCG as the company responsible for facilitating extended market area cooperation has produced the by far largest natural gas market area in Germany. Together, the transmission networks of all cooperation partners have an overall length of about 14,800 kilometers and cover a market area extending from the North Sea to the Alps and from the Oder river to the Rhine river. When the cooperation started in 2008, about 10,000 data records were received from approx. 350 distribution network operators. The data volume has now increased to approx. 40,000 data records from 520 distribution network operators, increasing by approx. 10 percent per month.

### Powerful Integration. Short Implementation Times.

In light of the growing market area, the correspondingly rising data volume at NCG's virtual trading point and the increasing complexity of communication relationships between the partners, the requirements for the communication platform to be introduced were clear: What was needed was a solution that integrates all the systems of the cooperation partners spread across the whole country, uses workflows to consolidate their activities on one platform and thus enables collaboration between teams. Such a communication platform should integrate all existing applications (for example, MTS.CM, GAS-X-Portal, smarttech), be open for the integration of further systems, enable the exchange of all communication messages from distribution network operators to those responsible for market areas as well as those responsible for settlement area billing while controlling the entire process flow.

The special challenge in this project was the late implementation of the regulatory requirements while under time pressure due to the statutorily defined implementation deadlines. Under these conditions it was absolutely necessary to introduce tried and tested standard software that is flexible enough to be adapted to quickly changing requirements and market conditions. Since BNetzA requirements change constantly, NCG has to be able to adapt the solution in use without too much effort even after operation has commenced.

### Flexible Adaptability of the Software

Short implementation times, powerful integration and data processing performance: These were the requirements according to which NCG chose the inubit BPM-Suite, which was the only comprehensive process platform on the market that met all the requirements.



“Workflow control makes work much easier for the users because they no longer have to collect the information required for processing the processes from a number of different sources. To achieve the highest level of automation possible, validation and plausibility check workflows have also been implemented. In addition, escalation mechanisms support punctual processing, especially for critical processes.”

*Barbara Schröder, NetConnect Germany*

However, NCG and inubit staff also quickly got along on a personal level: Right from the start, there was a lively exchange to determine the requirements, prioritize them and implement them as quickly as possible. NCG staff were also trained in the use of the inubit BPM-Suite to enable them to modify the system themselves. “These days we make most adjustments ourselves. For larger scale projects, however, we still stick to the process of elaborating and implementing requirements together with inubit, which has turned out to be very pleasant and efficient for NCG staff,” reflects Barbara Schröder, who has become an expert user of the inubit BPM-Suite.

### Distributed Information Displayed in Bundled Form

By using the inubit BPM-Suite as the central process platform, NCG staff profit from the fact that they no longer have to search a number of sources for the required information. All the information is now formatted uniformly and can be found at one point. All relevant information for market partner communication has been stored so that responses can be generated directly from the platform whenever questions arise in the context of routine monitoring. It is also possible to branch directly from the application interface to send and

received messages and visualize their content on monitors. The inubit BPM-Suite thus provides NCG staff with the answer to the question: Who has sent me what, with what content and when?

### Automatic Qualified Error Logs

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Beyond consolidating the market partners on one platform, the BPM software also functions as a central monitoring portal to ensure smooth process flows and reduce the relatively high error rates in the transfer of data from the market partners to NCG. To do so, automatically generated, qualified error logs were introduced, which take into account a relevance and schema check, a logical check and a semantic check.

Such an error log has the advantage that incorrect messages are highlighted in an automatically generated PDF file and returned to the market partner, with the effect that error-prone and time-consuming manual checks are no longer required. Especially the checking of the grammar and content of messages proved to be a particular challenge that NCG and inubit tackled together. They produced a set of rules that enables a high level of automation and significantly reduces NCG's work required for verification in data management.

In the context of automatic processing, staff can actively intervene by using human workflows when necessary. Thanks to exact information about the source of the error, market partners can quickly track down specific errors in their own system and make appropriate changes. Most of the errors that occur during data transfer are thus eliminated step-by-step.

### Partner Communication in One Place

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NCG has achieved a lot since cooperation started in 2008. The market area is growing continuously, the data volume is increasing by 10 percent a month, and there are always new BNetzA requirements that must be met. "With inubit, we've chosen a provider that combines powerful technology with the flexibility in the implementation of projects that is required in the energy market," notes a satisfied Andreas Manderfeld, Head of Data Management, Settlement Area Management and Quality Assurance at NCG. "The creation of check routines in the context of daily data communication, the high level of automation and the possibility of quickly adapting the system are the main benefits of using the inubit BPM-Suite for NCG." By introducing the auto-

matic error log, we not only managed to reduce the amount of manual work required, but also lowered the overall error rate to one percent – a level that enables an almost error-free data exchange.

In addition, the inubit BPM-Suite has facilitated the daily work of key users: Visualized workflows enable them to get an overview of the contexts and responsibilities as well as the market area and to quickly familiarize themselves with the use of the software.

Last but not least, the portal allows NCG to present itself as a competent entity responsible for the market area. In particular in presentations for visitors, the system interface enables a clear visualization of the process environment of the entity responsible for the market area.

What's next? A look at future projects shows that NCG can imagine many scenarios for using the inubit BPM-Suite: For example, they are planning to make the monitoring function available for mobile devices such as the iPhone. In the context of a joint workshop in April 2011, initial ideas and requirements for that were defined; these will probably be introduced as an NCG pilot project in the second half of the year.