

# Highly exciting



## 50Hertz takes care of operation, maintenance, planning and expansion ...

... of the 380/220-kilovolt transmission grid in northern and eastern Germany. This grid covers an area of 109,000 km<sup>2</sup> and has a length of around 9,750 km, which is roughly equivalent to the distance between Berlin and Rio de Janeiro. It ensures the grid integration of around half of all wind turbines installed in Germany.

50Hertz thus ensures a secure power supply for more than 18 million people - 24 hours a day, 7 days a week, 365 days a year.

### Transmission Control Center (TCC)

The heart of 50Hertz is the *Transmission Control Center* in Neuhagen near Berlin. A lot of information comes together in this control center, and it is from here that the engineers and foremen control and regulate the 9,750-kilometer transmission grid. The employees monitor system security, the frequency in the grid and ensure the optimal integration of wind energy. In this way, the risk of grid bottlenecks is minimized.

### DAKS informs and alerts

In the near future, alarms will be processed much faster and more reliably via a central internal alarm server.

The project was launched in 2010 under the leadership of Mr. Ey (FI department) and Mr. Göbel (TSC department). "The requirements for the new alarm server were extremely diverse. Among other things, they included the easiest possible integration into the existing telecommunications infrastructure and the ability to map the very complex emergency plans on it. After all, these should not have to be changed with the introduction of the new system," explains Mr. Göbel.



After a thorough examination, the decision was finally made in favor of the DAKS alarm server. The focus was not only on the question of pure technical feasibility,

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The market stability of the provider and the high availability of the server were also decisive criteria in the selection of DAKS.

### Planning and introduction

After six months of planning and preparation, the DAKS server is now running in test mode.

The existing emergency plans served as a template and were updated to the latest version as part of the implementation. The updated workflows were then transferred to the server's processes for telephonic communication.

### Growing requirements

In the future, more and more tasks will be incorporated into the alerting and communication process. For example, the DACSs will also take on routine tasks.

The system can detect faults from the control system and automatically notify service technicians by phone, e-mail or text message.

### DAKS goes online

The DAKS is scheduled to go into regular operation before mid-2012. Before then, everything will be checked down to the smallest detail. Mr. Göbel concludes: "We invest a lot of time and money in safety. But this is the only way we can meet the demands that are placed on us."

### Safe and reliable supply

The internal electricity market would be inconceivable without an efficient transmission grid. In a European comparison, Germany is at the forefront when it comes to security of supply. 50Hertz has an important role to play here. As a kind of interface between generation and consumption, the company represents a competence center for the extra-high voltage grid. This is because the balance between generation and consumption is continuously regulated here and sufficient reserves are kept available to compensate for deviations at any time.

Because our slogan is also our corporate philosophy:

**"We take care of you -  
safely and reliably."**

*Have we aroused your interest? Please  
get in touch with us:*

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