

# Maximum tension



## 50HERTZ IS RESPONSIBLE FOR 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 wealth of information converges at this control center, from where engineers and technicians control and regulate the 9,750-kilometer transmission grid.

Employees monitor system security and grid frequency and ensure optimal integration of wind energy. This minimizes the risk of grid congestion. Employees monitor system security and network frequency and ensure optimal integration of wind energy. This minimizes the risk of network bottlenecks.

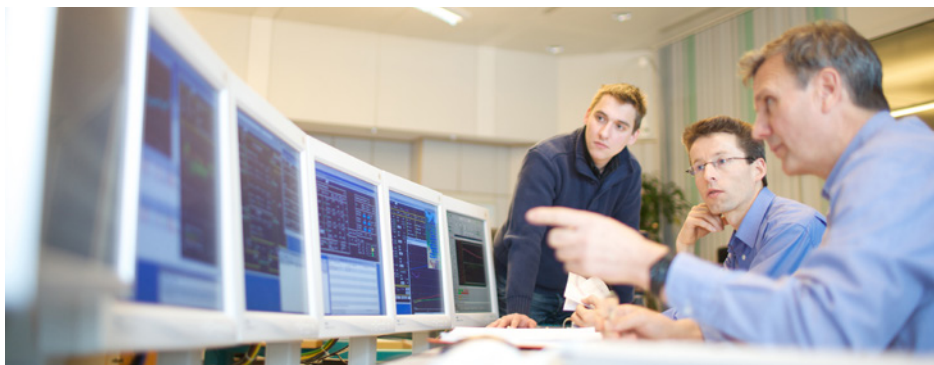
### DAKS informs and alerts

Soon, alerts will be processed much faster and more reliably via a central internal alert 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 alert server were extremely diverse. They included, among other things, the ability to integrate as easily as possible into the existing telecommunications infrastructure and the option of mapping the highly complex emergency plans onto it. After all, these should not have to be changed specifically with the introduction of the new system,“ explains Mr. Göbel.



## Reliable power supply for more than 18 million people



After thorough testing, the decision was finally made in favor of the DAKS alarm server. The focus was not only on pure technical feasibility; the market stability of the provider and the high availability of the server were also decisive criteria in the selection of DAKS.

### Planning and implementation

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 during implementation. The updated workflows were then implemented in the server's telephone processes.

### Growing demands

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

They will receive faults from the control system and automatically notify service technicians by phone, email, or text message.

### DAKS goes online

The DAKS is scheduled to go into regular operation before the middle of 2012. Before that, 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 placed on us.

### Secure and reliable supply

Without a high-performance transmission grid, the internal electricity market would be inconceivable. Germany ranks at the top in Europe in terms of security of supply.

50Hertz plays an important role in this regard. Acting as an interface between generation and consumption, the company is a center of excellence for the extra-high voltage grid. This is because it continuously regulates the balance between generation and consumption, while maintaining sufficient reserves to compensate for deviations at any time.

Because our slogan is also our corporate philosophy:

**„We supply you – safely and reliably.“**

*Have we sparked your interest?  
Get in touch with us:*



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