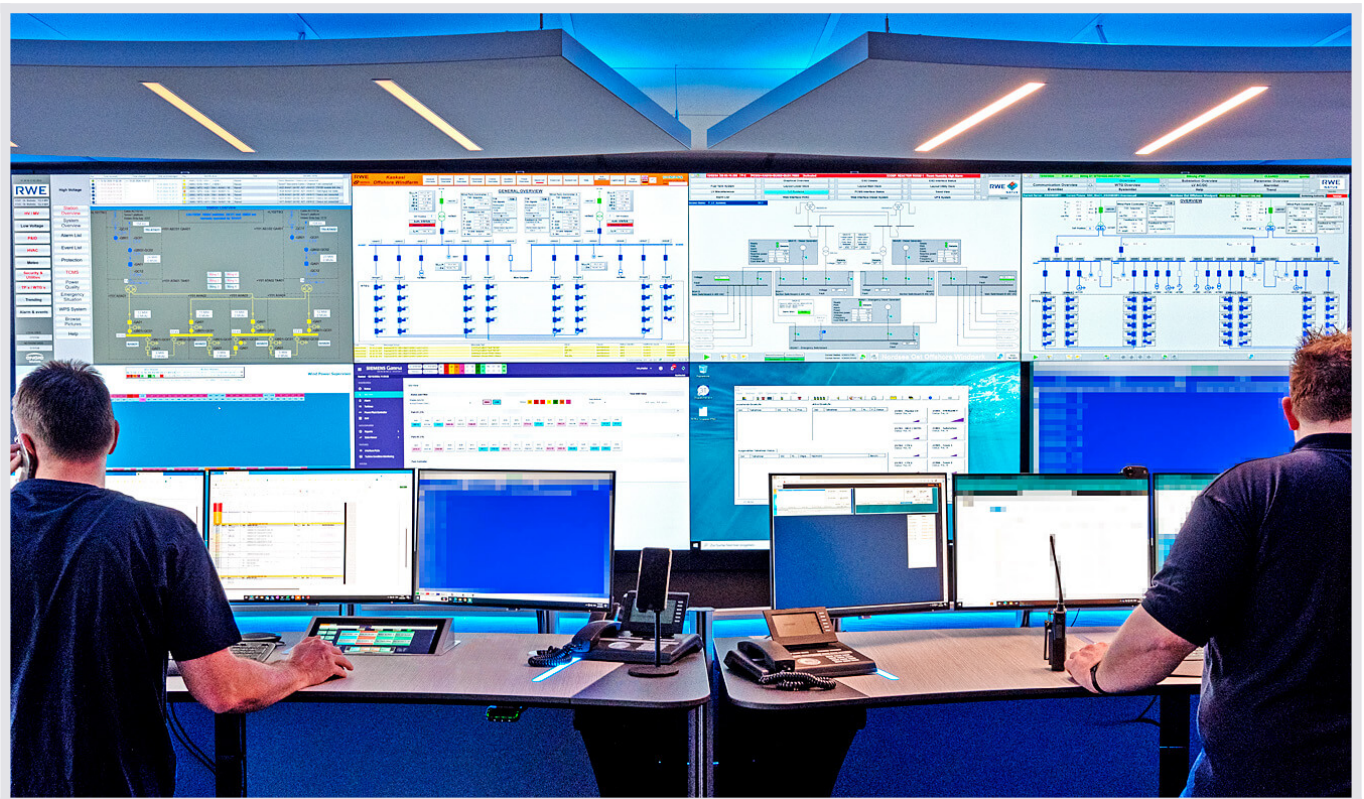Client:

RWE

Kategorie: Switch room, Critical infrastructures.

Wind energy: Innovative monitoring optimizes work in the control room

JST control center: Modern monitoring elements pave the way for the <u>management of renewable energy generation</u> in the connected wind farms. <u>User-friendly control room technology</u> is the focus of the innovative control room concept that JST has implemented for RWE Offshore Wind on Heligoland.

An outpost in the middle of the German Bight. A place where the term "harvest" has nothing to do with grain or vegetables. Wind is "harvested" off the coast of Heligoland. The RWE wind farms produce renewable energy for hundreds of thousands of German households and thus play a key role in the generation of green electricity from wind energy. Provided that operation runs smoothly.

At some point we would have run out of space

In order to ensure the smooth control of turbines and transformer stations, the control room at Heligoland's southern harbor was extensively renovated. The control station, which was originally tasked with monitoring a single wind farm, now supervises up to five wind farms at peak times. "The old setup was inflexible," recalls project manager (external) Niclas Kampe, "if a new wind farm with five systems was added, five new

screens also had to be installed. Each operator had several keyboards and mice in front of them. We couldn't go on like this. We would have simply run out of space at some point."

JST wins public tender

Following an extensive competitive tender process, where RWE considered a range of industry leading providers, there was a winner. The control room experts from JST − Jungmann Systemtechnik®, based in northern Germany, not only won the tender, "you also get the feeling that we are dealing with a very innovative company. The geographical proximity also played into our hands," explains Sebastian Schirmel, technical project manager at RWE.

Components facilitate work in the control room

Already at the beginning of the project, the users from the control room had the opportunity to get up close and personal with the JST technologies: "During a visit to the JST control room simulator, our operators were able to experience directly what is possible with Jungmann technology. We saw how the functionalities of the individual components support and facilitate work on the island in a meaningful way; for example, through optimized alarm management with PixelDetection®. That was very informative," says Sebastian Schirmel.

Essential criterion: user-friendliness

Whether TeamView on the new DisplayWall, the intuitive user interface of the myGUI® user platform or the improved overview through self-selected dashboards with the CockpitView® software − at every point in the JST overall concept, the aim is to prepare information in such a way that the user is supported in his monitoring activities through an optimized overview and flexible access options. "With the KVM solution MultiConsoling®, we can flexibly connect all desired sources and thus save screens. The user-friendliness of JST clearly convinced us − that was a key criterion," recaps Sebastian Schirmel.

"A big gain" for ergonomics and comfort

Also ergonomics and comfort are highly relevant for shift work. The Stratos X11® control room console, the ergonomic bestseller among control room consoles, and the OPAL X11® acoustic ceiling sail with its dimmable circadian lighting therefore play a particularly important role for the technical project manager: "We have 24/7 monitoring here. The ceiling sails and the resulting lighting options are a great benefit, especially for the night shift."

Team gives "Thumbs up" for the new control room

Project manager and staff from the island give a clear "thumbs up" for the JST installation. "We are very satisfied overall," summarizes Niclas Kampe. In addition to the products and the actual implementation of

the control room, he mentions two other aspects that deserve positive feedback from the customer's point of view: Kampe and Schirmel rate the willingness to find solution-oriented answers to specific RWE corporate IT requirements and the ability to individually adapt service level agreements to current requirements as decisive benefits.

> **"An entire control room in a sea container! We are happy to take on new challenges. This also applies to the project on Helgoland, where a whole pile of administrative tasks had to be fulfilled - especially with regard to logistics and the necessary export licenses. Despite the rough North Sea conditions, everything went according to plan. The control room team from the island was able to rely on the coordinated detailed planning at all times."**

Rafael Paltian

Consultant, JST

REQUEST AN OFFER WITHOUT OBLIGATION

The components used in this project:

DisplayWall with special S-PVA panels for reliable 24/7 operation - optional with proactive alarm function

MultiConsoling® **System** – complete control room system for workplace, monitor wall and other systems

myGUI® **user interface** - in the intuitive 3D design of your control room for maximum user comfort

Stratos X11® **control room desk** – optional with height adjustment and proactive AlarmLight system

PixelDetection® – proactive alarm software to shorten response times

JST CockpitView® – dashboard function to compile the most important systems on one monitor

JST myLogin® - security concept with an automated sign-in and sign-out process

![JST Jungmann Systemtechnik logo]

Planning / 3D planning – architecture, ergonomics and technology from a single hand

OPAL X11® – acoustic ceiling sail – for optimization of sound level and lighting

JST CommandPad® – efficient system control at the touch of a finger

ControlRoom-Automation – secure and fast processing of alarms

JST GrabberVM® system – convenient integration of virtual machines

AlarmLight – safe, visual alarm detection

JST air quality sensor – continuously monitors indoor air quality

Audio system – for acoustic signals and alarms

PSM Proactive System Monitoring – monitoring of all devices based on permanent status and diagnostic data

Service level agreement – maximum availability for all processes

Other projects with a similar task
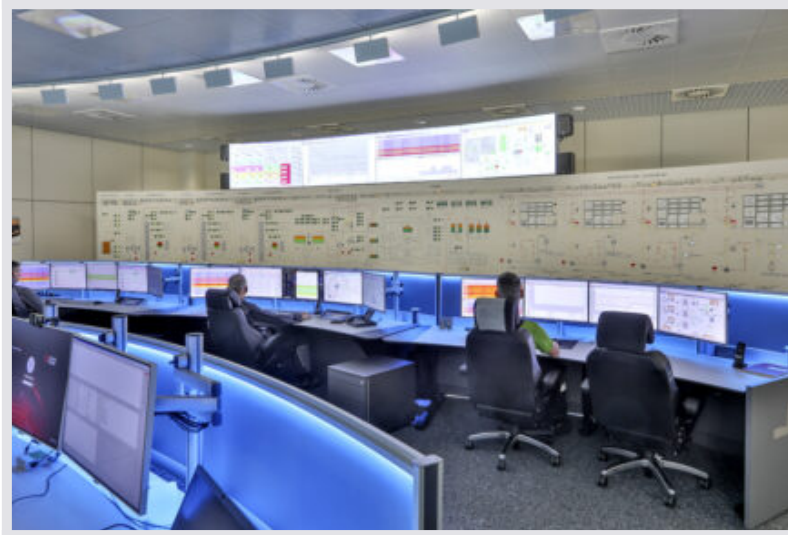

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