

EEMITS CREATES MULTI-PURPOSE COMMS SOLUTION FOR GE VERNOVA ON WORLD'S LARGEST OFFSHORE WIND PROJECT



Following a successful TRBOCALL demonstration, Eemits were selected as the partner of choice to deliver an ultra-reliable, multi-purpose radio system for use during the pre-installation and installation phase of turbines on the Dogger Bank wind farm.

THE CHALLENGE

The renewable energy arm of GE Vernova specialises in the construction and installation of wind turbines all over the world.

GE's award-winning Haliade-X turbines were selected for Dogger Bank and are currently housed at the Able Port in Seaton Carew, Hartlepool.

With a wingspan twice the size of the Angel of the North, the first of 277 turbines was made operational in October 2023, with the full wind farm expected to be completed in 2027.

The challenge was to create a radio system that would support the pre-assembly of turbines at the Able Port in Seaton Carew, help Wind Installation Vessels (WIV) communicate with onshore workers whilst onboarding turbines, and allow Service Operation Vessels (SOV) to communicate with technicians in the field and daughter craft.

Eemits recommended and installed a multi-purpose Capacity Plus system that utilised the latest in handheld radio technology - in the form of the Motorola Solutions R7.



PRODUCTIVITY
up



EFFICIENCY
raised



SAFETY
increased

THE SOLUTION

We installed our ultra-smart digital two-way radio solution - TRBOCALL – a modular platform comprising the following:



INFRASTRUCTURE

GE Vernova Opted For:

Capacity Plus

What is Capacity Plus?

Capacity Plus is a scalable, single-site digital trunking solution.

Over 1,000 radio users can share critical voice and data communication on the same system.

The Benefits:

Capacity Plus delivers two times the capacity of a MOTOTRBO digital conventional system, offers system-wide calling capability to communicate with all personnel at once, and trunks up to 16 digital talk paths (or channels).

With a centralised location of the Able Port that covers 126 acres, Capacity Plus was an ideal choice for reliable network infrastructure.

Solution at the Port (including WIVs)

Two antennas have been strategically placed on-site to achieve and maintain site-wide coverage, whilst also aiding the communication between Port and WIVs.

Solution for SOVs and technicians in the field

To aid reliable communication between SOVs and field technicians, a Motorola SLR5500 repeater was installed, along with a gain antenna.

THE SOLUTION

We installed our ultra-smart digital two-way radio solution - TRBOCALL – a modular platform comprising the following:



HARDWARE & ACCESSORIES

GE Vernova chose:

Motorola Solutions R7a radios

Motorola Solutions R7 Full-Keypad Radios

Handful of Motorola Solutions Desktop Radios - to facilitate Port and vessel communications



The Benefits:

The Motorola R7 is the latest in two-way radio technology. The device offers end users:

- Programmable loudness of up to 107 phons: perfect for situations when the environment makes it harder to hear
- Sleek and compact form factor: for ease of use and practicality in the field
- Rugged to MIL-STD 810: making it able to withstand repeated drops
- IP68 rating: excellent protection against water and dust exposure
- Up to 19-hour battery life: means workers will be able to last the full shift without recharging the device
- Multiple talk groups: GE have a range of teams that can talk all together or in selective groups. This includes channels for All Call, Pre-Assembly, EHS, Site Management, Lifting, Quality, Security, and Commissioning.



THE SOLUTION

We installed Eemits ultra-smart digital two-way radio solution - TRBOCALL – a modular platform comprising the following:



SERVICE WRAP

GE Verona chose

36-month Managed Service with:

Business Hours Reactive Maintenance

Preventive Maintenance

Business Hours Telephone Technical Support

Motorola R7 Series Enhanced Warranty - With Hardware Repair & Software Updates

OFCOM Licence Management

No price change during contract

The Benefits:

GE Verona benefit from expert engineering and dedicated aftersales care throughout the duration of their Managed Service.

Business Hours Reactive Maintenance

This includes a four-hour response time to on-site infrastructure failures. This covers ad-hoc equipment failure through fault identification and to carry out any repairs to restore equipment to a serviceable condition. No limit is placed on how many times we are asked to effect repairs and no additional charge is made for labour, or parts.

Preventive Maintenance

This involves an annual one-day site visit each full year when the cover is in place. The visit is arranged at a mutually suitable date to inspect and service the radio equipment where annual conformity certificates will be issued where appropriate.

Business Hours Telephone Technical Support

Our technical team is on hand to aid over the telephone to answer any questions, log any issues, or support with additional requirements.

Motorola R7 Series Enhanced Warranty - With Hardware Repair & Software Updates

This Includes two-way shipping, repairs, adjustments and restorations - if appropriate - of any covered products that malfunction while being used within the operational and environmental parameters specified by the manufacturer.

OFCOM Licence Management

We take care of the application process of applying for an OFCOM licence, which is required to legally operate their R7 radios.

Once the licence is applied for, we programme their radios to the right frequency and make sure any appropriate features or software are taken care of during the programming process.

At the time of licence renewal, we reach back out to GE to ensure their licence remains valid throughout the entire cycle of them using the radios.

WHAT THEY SAY ABOUT US:

SUMMARY

GE Vernova now has a multi-purpose Capacity Plus system in place for the pre-installation and installation of wind turbines for the world's largest offshore wind farm project.

Their team is equipped with the latest in radio technology to ensure workers are safe, productive, and operations are as efficient as possible.

Eemits innovative modular platform TRBOCALL - a unique combination of hardware, bespoke software applications and digital features - together create an ultra-smart two-way radio system. Combined with unrivalled wide area network coverage, our customers have the flexibility to build their own system with all, or a combination of infrastructure, hardware, software service wrap, features and accessories that suite their individual business needs.

EEMITS CLIENTS BENEFIT FROM:

Productivity increased by up to

40%

PER SITE

Efficiency raised by up to

1 hr

PER EMPLOYEE PER DAY

Safety increased for

100%

OF YOUR WORKFORCE VIA DIGITAL RADIO WHERE EVER THEIR LOCATION