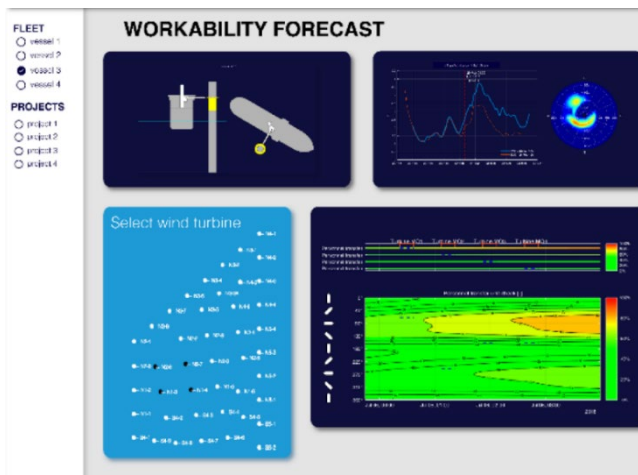
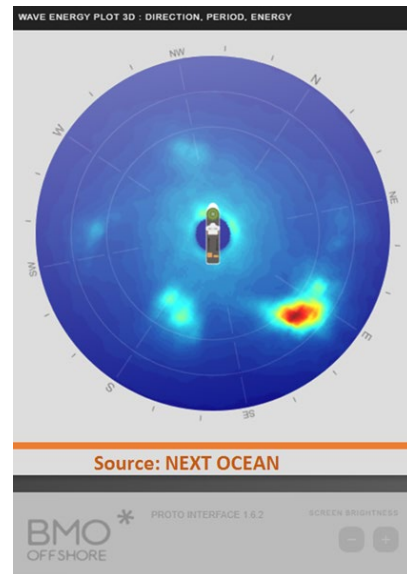




Data transparency and wave understanding

From day 1, Bibby Marine was committed to data transparency. BMO on behalf of Bibby developed their existing vessel motion technology into a fully automated and online Vessel Daily Report System – the Argos system. Therefore it has the benefit that all actions of the vessel and vessel crew are automatically recorded and timestamped against vessel motion data and met/metocean data. The output of this system has been welcomed by the vessel crew and clients alike, who have seen a reduction in the need for manual recording especially at critical times and the development of value driven interactions on vessel performance.



Not satisfied, Bibby Marine are working with BMO, and NextOcean are now using the data generated in combination with the ships radar to further advance the understanding of the wave climate and its interactions with the vessel. Already identified is the ability for high energy long wavelength waves to be hidden by short wavelength visible waves, which can therefore lead to the sub optimal vessel heading selection. This area of understanding is now a great focus of Bibby Marine.

Digital Twin Onshore to Offshore Migration

Having developed a Digital Twin solution to underpin the complete vessel design, Bibby Marine are now at the stage of developing the technology to enable it to move from an onshore to offshore environment. This with the goal of allowing it to assist the crew in their decision making in near real time, improving vessel safety. The developed solution has added MO4Offshore to the existing BMO Offshore, Next Ocean and Damen Digital partnership, all within one system.

The outcome is a full digital twin solution that takes many parameters into consideration and provides the crew with response forecasts for the vessel. Proven algorithms are used to identify weather windows when access via the gangway should be possible. This advice being generated in seconds.

The system is currently awaiting installation on the BWM1 and Horizon vessels and therefore will benefit from real time use ahead of any future tenders.