



# O&M VESSEL SELECTION – A KEY DECISION

**It is often exciting to be involved in a young industry, and that is certainly so in the case of the specialist vessel industry which has developed to support renewable energy generation by offshore windfarms.**

The offshore wind industry will continue to develop and mature for many years to come, and offshore windfarm operators will maintain the search for new ways to increase the efficiency of their windfarms whilst seeking to reduce operational costs.

For an offshore windfarm to be efficient, all its turbines must be in service when the wind blows, and this requires regular preventative maintenance and the speedy rectification of breakdowns. Transporting turbine technicians, and spare parts and

equipment, to the windfarm as quickly and safely as possible is therefore an essential element of the operations and maintenance (O&M) process.

## FACTORS AFFECTING THE CHOICE OF VESSEL

The choice of vessels to support O&M is a key decision for all offshore windfarm businesses; it is affected by two main factors – the length of the journey out to

the site from the windfarm base, and the model of turbine maintenance used – and is becoming ever more selective.

Leo Hambro, the Commercial Director of Tidal Transit explains: *“With windfarms situated at varying distance from the UK coast, from just 1.6 kilometres (Blyth Offshore) to 23 kilometres (Greater Gabbard), and the development of Dudgeon at 32 kilometres offshore and the Dogger Bank development even further out to sea in the pipeline, it*

*follows that the type of vessel needed to access the windfarms differs greatly from site to site.*

*“Importantly, operators will strive to minimise the cost of transportation and the amount of travel time that impacts on the working day.”*

The second factor affecting choice of vessel is the maintenance model undertaken by operators. Emergency repairs apart, the maintenance model can vary from a daily operation to block maintenance, either of which can involve technicians on site for prolonged periods. Efficient maintenance for turbines which are further offshore will be enhanced by larger accommodation vessels; the management team at the Dudgeon Offshore Windfarm has chosen to use an SOV (Support Offshore Vessel) and over the next few years the industry will doubtless be very interested to hear of its experiences.

## VESSEL OF CHOICE

There is a growing number of companies contracting vessels to the UK offshore windfarm industry. Tidal Transit, based in North Norfolk, was established in 2010 specifically to provide purpose-designed Personnel Transfer Vessels (PTVs) to enable offshore windfarm developers and operators to transport technicians, tools and equipment to their places of work quickly and easily on a daily basis. Its fleet of vessels, which can accommodate 12 passengers and a crew of 4 in comfort, all have a fully equipped galley, comfortable beds, bathrooms and internet access, and can stay at sea for several days at a time as recent trips to the Dogger Bank met-mast recently proved. Since the company took delivery of its first PTV in 2011, its vessels have been in constant demand.

## GAME CHANGER

Conscious that ‘one size doesn’t always fit all’ Tidal Transit came to the conclusion that a larger, faster vessel capable of reaching the more distant sites quickly and efficiently was likely to be of appeal to some windfarm operators.

*“With this mind, we starting working with Norwegian ship builder Umoe Mondal, and in late January 2016 we became the ship operator for the WaveCraft vessel, Umoe Firmus,” commented Leo. “For a number of offshore windfarms, we firmly believe this could be a ‘game changing’ vessel.”*

## A NEW GENERATION

The WaveCraft is a next generation Surface Effect Ship (SES) with a small draught created by air cushions between its twin hulls. These provide the vessel

with easy access to most ports, a high speed of 40 knots and a low fuel consumption that gives it a range of over 700 nautical miles. An added advantage of the WaveCraft is that management of the air cushions allows smoother and safer transfer from vessel to turbine in wave heights of up to 2.5 metres, giving technicians access to their place of work in what might otherwise be an impossibly dangerous situation.

Leo further explained “Different situations call for different solutions, and we acknowledge the need for diverse vessels within the offshore wind energy industry. We are therefore operating Umoe Firmus alongside our existing fleet of PTVs.”

Umoe Firmus has recently completed its first 6 month charter contract with Statkraft at Sheringham Shoal Offshore Windfarm, and Leo Hambro is confident that it will be playing an integral role in the development and operation of offshore windfarms for many years to come. “Our plans for the development and growth of Tidal Transit will ensure that we are always able to offer the right vessel for the job.” Leo added.

“THE CHOICE OF VESSELS TO SUPPORT O&M IS A KEY DECISION FOR ALL OFFSHORE WINDFARM BUSINESSES”

## SHERINGHAM SHOAL OFFSHORE WINDFARM

Russ Hill, Marine and Logistics Manager at the Sheringham Shoal Offshore Windfarm commented: *“We are very proud to have been the first UK offshore windfarm to charter a WaveCraft vessel, and have been impressed by its capabilities. As a vessel that can operate successfully in rough weather conditions and high sea-states, it provides an ideal solution where a windfarm’s O&M model dictates that turbine technicians go offshore every day.”*

## Tidal Transit



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