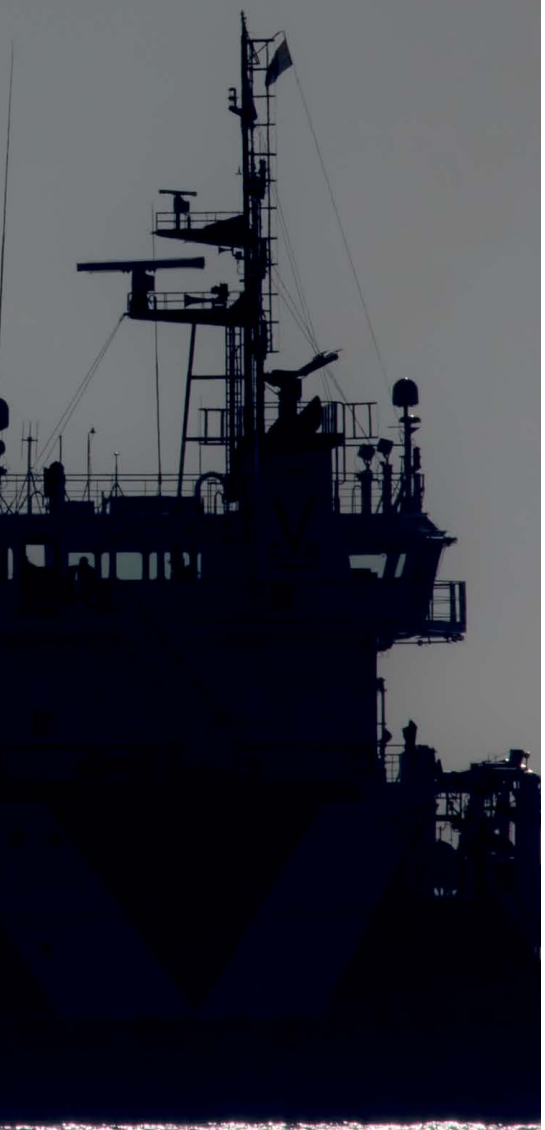
How independent real-time ocean insights support offshore wind insurance



Miros is a technology company that specialises in measuring the ocean surface. With over 35 years of experience engineering dry-mounted, radar-based sensors robust enough to weather the harsh and unpredictable conditions of the North Sea, the company develops innovative solutions for real-time, local environmental monitoring for the global offshore and maritime industry. By making essential data available to all relevant stakeholders, Miros continues to develop its long track record of enhancing the safety, performance, and efficiency of offshore operations worldwide, including those related to both floating and fixed offshore wind installations.

In the run up to their latest series of webinars for the offshore wind market, Miros' renewables lead and former offshore wind underwriter, Robert Bates, was joined by veteran offshore operations specialist, Andy Readyhough, for a conversation about risk allocation, contract disputes and the shifting sands of offshore wind insurance.

Robert Bates: When it comes to claims in offshore wind, we know that significant wave height (Hs), waiting on weather, and standby charges play a major role, but exactly how big of an issue are the related contractual disputes between contractors and their employers?

Andy Readyhough: It depends where the risk lies within the contractual structure. At the moment, developers likely have a stronger hand in the formation of contracts, and this enables them to de-risk things as much as they can. So, they'll likely mitigate any standby or delay fees that would otherwise be to their account. Instead, they'll push the weather risk to the contractor who would, potentially, have to submit a proposal that includes weather from the get-go.

A few years ago, it was the other way round. Contractors would present weather-exclusive proposals where any delays received a downtime rate because nobody knew what the weather was going to be doing.

These days, of course, the developers can access all kinds of weather information. They provide relevant data to the contractor about the site and simply ask how much downtime they expect to rack up over the course of the contract. Based on the answer from the contractor, developers can decide if they want to pay for it up front, or otherwise accept that they'll be charged as and when it happens along the way.

RB: So, in the end, who's paying for the downtime? The contractor or the developer? Or is it insured?

AR: Whoever claimed on the weather. But it will likely result in a dispute.

A marine warranty surveyor, appointed by the developer as an independent checking engineer as requirement of the project insurance, is there to make sure that as far as reasonably practicable, no claims need to be made on the project insurance. This includes assessing the weather working periods associated with critical tasks, to ensure that no adverse weather arises during the execution of those tasks that may damage the product as a result of vessel motion or deployment execution.

So, the marine warranty surveyor will monitor the performance of the contractors, and they'll be recording weather (including Hs), using whichever data sources (forecasts, buoys, radar sensors, etc.) are at their disposal. Weather is one of the things they'll be basing their decisions on when issuing certificates of approval for the execution of certain project tasks, and this certificate is what triggers insurance cover for each task. This means that the accuracy of the initial data is key, as once a certificate is issued, that's it, they generally don't get retracted.

Meanwhile, the developer's own onboard representatives also monitor vessel workability in the actual environmental conditions, and report back to the employer.

Then it's just a question of whether the vessel suffered downtime because of the weather, along with how the contract has been structured regarding where the risk lies for weather delays. If the vessel stops working below the specified Hs, the developer will say, 'You signed up saying the vessel could work in these conditions, so it's your cost alone, because you didn't operate in the contracted weather working conditions.'

RB: How common are claims? Are we talking every project, or one in ten?

AR: I'd say to a certain degree it's every project. During the construction phase alone, it may take one complete construction season just for the foundations, then they'll do the cables during another season, and so on, with weather playing a part throughout. It would be very unusual if there were no disputes about weather during any of those stages.

After that, it just depends how the dispute is remedied. Maybe the total amount of weather downtime is minimal, in which case it can just be factored into the end of contract closeout. If it's significant, however, then there might be issues regarding contractor performance.

RB: From contractor's perspective, what are the pros and cons of having independent data on Hs that can be relied on for contractual purposes?

AR: It's a bit like driving a car, if there's a black box installed, you get a reduced insurance premium as a young driver because there's more data available in the event of an accident. That data can prove whether you were within set terms (the speed limit, for example), or not, as well as whether you were covered by your insurance if not complying with the limits stipulated.

From one side, the contractor might not want to be told that the weather conditions are above the limit, because they might want to work. Meanwhile, the developer might insist in the contract that they want to see Hs taken into account so there can be no arguments about the workability of the vessel. At the same time, the insurance companies might say that it would make a project insurable if you have independent monitoring on board, as it means that you're not leaving judgements about workability to someone's personal interpretation of the data, or a less reliable data source.

That being said, we shouldn't forget that, ultimately, it's the vessel captain's responsibility to ensure the safe operation of the vessel, the safety of personnel onboard, and safety related to the environment in which the vessel is working. Hs monitoring at the vessel location would assist captains in their decision-making processes and help support safety across all these areas.

It would be good (if not best) practice to have reliable, repeatable monitoring offshore. It's in the interests of everyone – the developers, the contractors, and the insurance providers.

RB: I see, and what are the operating limits of most vessels?

AR: It depends on a few criteria. Crew transfer vessels will generally be looking at 1.5m Hs, whereas service operations vessels with motion compensated gangways, or cable vessels operating between turbines, those will be closer to 3m Hs.

Every offshore energy zone needs a wide range of vessels for support, construction, and many other roles, and each one will have its own weather working criteria. As the insurance industry continues to change – and do so rapidly – some areas are becoming uninsurable. Having good, independent monitoring could present a route to reversing that.

Additionally, the further offshore these operations go, the greater the challenge of workability and the impacts of weather. The emphasis on Hs will only become greater, in my opinion.

For more about risk and insurance in offshore wind, access our on-demand webinar on the topic by scanning the QR code below.

MIROS

www.miros-group.com

Robert Bates, Sales Executive Renewables, Miros

With a deep understanding of the many and varied risks associated with the offshore wind farm lifecycle, Robert Bates joined the Miros team in 2020. Robert's professional career is founded upon a specialised knowledge of the challenges facing the offshore wind market. This knowledge, garnered during his term at the world's largest renewable energy insurer, equips Robert with an acute appreciation for the benefits that Miros' portfolio of sensors offers the burgeoning offshore renewable industry.

Andy Readyhough, MD, Red Ensign Solutions

With more than three decades of experience in the field, master mariner and operations expert, Andy Readyhough, launched **Red Ensign Solutions** in 2017 to provide consultancy services for marine operations. Primarily active within the subsea power cable transmission, operations and maintenance, and offshore renewables sectors, Captain Readyhough's extensive experience ranges from initial involvement in offshore wind farm development in 2005, all the way through to present-day requirements for far-offshore windfarms and high voltage interconnector development.