



Asset sharing for a more flexible offshore workforce

We were thrilled that Jim Hededal Nielsen, CEO & Founder of DECK1, found time in his busy schedule to speak with us at PES. We wanted to hear his view on the challenge of securing qualified personnel to service offshore wind farms, as the industry will inevitably expand over the next decade. Working smarter and with more flexibility and even sharing assets could hold the key to success.

PES: A very warm welcome back to PES Wind Jim. By way of introduction would you like to start by giving a brief insight into who DECK1 are and what it is you do?

Jim Hededal Nielsen: We provide the offshore industry with a digital marketplace. As one of the managers from Siemens Gamesa Germany said regarding the

offshore wind industry: 'what got us here, will not take us there!'. New ways of thinking and operating are required to reach these ambitious goals.

For us in DECK1 we couldn't agree more. Inspections, services, repairs, new constructions, increasing cable network, etc, will still be required, just on a larger scale than today. To be able to accommodate this, new ways of thinking and operating need to materialize to be able keep a balance between demand and availability.

We believe that having a transparent and digital service like DECK1 is essential to create the opportunity to be smarter with your assets and more flexible with your workforce. To add value, we have a roadmap with operational and analytical services,

providing users with options to be smart about finding the optimizing solution while taking weather, availability, cost, CO, and more into account.

We believe it is essential that the industry find ways to be smarter with their assets and more



Jim Hededal Nielsen



flexible with their skilled workforce. If not, it will be challenging to continue expanding the industry at the predicted rate.

PES: Do you predict a sellers' market situation? Or do you think it will balance out with new technologies?

JHN: Yes. We attended a convention not too long ago, where large service companies were already having trouble finding and retaining qualified workers. The same was true with buyers of services that charter vessels for long haul, just to have them available, without actually utilizing them optimally. This leaves a vacuum.

A vacuum in an industry, which is competing with the oil and gas and onshore wind, for the same people and overlapping services. Moving towards a flexible service solution could prove a valuable strategic decision for many companies.

Using new technologies would add value in several areas. As a software provider, we have a solution where it is possible to find an asset or a service directly and quickly.

For example, carried out a demonstration of a drone versus manual inspection. By using drones, the new technology, an offshore wind farm could save 70,000€ on lost production, and save the world 420 ton of CO₂, reducing inspection time by nine days.

This is based on a realistic assumption on a German wind farm. By implementing the new technology, the same workforce will be able to work more efficiently.

We can help companies highlight cases like this, and if required, we can also help them in their search for these new technologies with DECK1.

PES: As I understand this, utilizing new technologies and flexible solutions is one suggestion to support the industry. But, do you think it is realistic to share assets between offshore wind farms?

JHN: Realistically it is possible, but it will not make sense in some places. Isolated or remote offshore wind farms are one example where it does not make sense. It needs to be a logistical dense area, like many areas in the UK, Germany, The Netherlands and alike.

If we split the logistical challenge into the manpower and transport assets, then I expect the lack of skilled personnel could require the need to establish a sort of technical 'SWAT team' that can be moved between sites within those same operators' wind farms. Even

having a pool of assets could be an option for larger O&Ms that then would be able to share these assets and 'SWAT-Teams' between sites in their own organization.

Being able to utilize multiple assets across different business sectors will be smart on many levels. As an example, the relatively routine shuttle with supply vessels in the offshore oil and gas sector could be repurposed in the same manner in offshore wind, supplying materials, while helicopters or CTVs move workers around between the wind turbines that need servicing. This is one of many options we think will be utilized in the future.

We see this as an important or even necessary development to keep the momentum going for the next 10 years.





Unfortunately, this is not a realistic option for many wind farm operators. Sharing a vessel across different wind farm owners will be challenged by company policies, competitions clauses, etc.

PES: What do you see as the biggest drivers for companies to start working as you describe?

JHN: One big driver is always money. Saving money on operations, enabling high revenue from the wind farm and being able to activate idle assets will always be a high priority.

 ${\rm CO_2}$ focus is another driver. Investors in offshore wind are driving another trend with their demand for green investments, ${\rm CO_2}$ monitoring and focus on digitalization. Large funds have declared in the last couple of months that they have new demands for future investments, which includes ${\rm CO_2}$ as a consequence of their investments. Money, ${\rm CO_2}$ and the rate of expansion are what I consider the biggest drivers.

Once the first movers have discovered smarter ways of operating, others will follow. It requires bigger players to take the lead and show responsibility, even though it is often challenged internally and requires months or even years to be approved and tested. They rarely have budget, or time to focus on this type of shift in operation, which is necessary for new models of transportation.

Saving money and reducing the total CO_2 footprint on large scale operations would be a big incentive for leading companies in the market to ensure their position, since the predicted lack of skilled personnel will drive cost on recruiting and retaining personnel, and consequently could result in delayed service campaigns or increased downtimes on wind turbines. But the first steps may be slow.

PES: Will you be able to provide this service through a platform like DECK1?

JHN: We can facilitate collaboration. We do

have a platform that makes it easy to find and negotiate even short charters. Before the end of December, we will also support asset sharing between business units for the larger companies internally, enabling smarter usage of their current assets without the individual stakeholder risking their position in their organization.

It will be a transparent solution that splits the cost fairly between the individual business units, and has a low threshold on many parameters.

We also provide an opportunity for smaller offshore wind farms to have the same opportunity for sharing services, on certain levels.

Sharing a seat on a vessel or a helicopter is not considered a viable solution yet, but sharing on a trip by trip basis is in many cases. Services such as drone inspection, helicopter emergency services etc. can easily be shared between individual wind

farms. Some of the functions are already happening in other business sectors today. We actually believe we have a unique solution in this regard, and would happily demonstrate this to all that are interested or considering moving to the new 'normal'.

Some large companies have similar sharing systems in place today. Either pooling assets between offshore wind farms internally or using service companies to provide this level of service and flexibility for them. We are making a digital version of it, leveling the playing field between all companies, but still enabling service companies and O&Ms to have operational control and execution.

The sharing and bundling functions in DECK1 can be used with many types of services. We are currently working with a couple of service companies to enhance the solution, so they can support larger O&Ms and reduce their administrative workload for future operations.

PES: Where do you see this going over the next one or two years?

JHN: With the immense focus on CO_2 reduction, Power2x development and general expansion of offshore wind, there will be a natural shift into new and innovative solutions, as other industries have experienced time and time again throughout history.

We believe that DECK1 has a role to play, by making a true digital solution available to all in this industry. This will enable efficient utilization of assets and flexible movement of workforces.

A skilled workforce, in the right location, at the right time, with the right tools will create great value for companies in the offshore industry. With a ten times increase in offshore capacity, this workforce will either have to be increased 10 times as well or utilized smarter. We enable the latter.

