Ampelmann floating wind W-type

Beyond the gangway: collaboration, innovation and integration in offshore logistics

From routine transfers on motion-compensated gangways to drones reshaping offshore logistics, Walk to Work (W2W) systems have become central to the growth of offshore wind. Once a technical add-on, they are now strategic assets that demand close collaboration with clients, continuous innovation in design and energy use and deeper integration into project-wide logistics. As offshore operations expand in scale and complexity, W2W is evolving from 'safe passage' to a driver of efficiency, sustainability and alignment across the entire supply chain.

Every day, an engineer, technician or offshore crew member steps from a motion-compensated gangway onto a transfer deck of a wind turbine, a routine that would have been impossible only two decades ago. These W2W systems have quietly transformed offshore operations, keeping personnel and cargo transfers safe and reliable in the world's most challenging seas.

The offshore wind sector has evolved from a few near-shore turbines to sprawling farms reaching tens of kilometres into the sea. As reliance on W2W solutions has grown, offshore access must adapt to meet rising expectations for safety, efficiency and sustainability.

To explore how these changes are impacting offshore access, we spoke to three members of Ampelmann's management team, the Director of Innovation, Global Operations and Structural Change, each offering a unique perspective on the challenges and opportunities in the offshore wind sector. Their insights reveal how collaboration, integration, and innovation are shaping the future of W2W.

Collaboration

Today, gangway systems are no longer just tools; they are critical cogs in the logistics of offshore wind. The growing reliance on W2W systems has reshaped how offshore operations are planned and executed, making close collaboration between access providers and clients more essential than ever.

As Daniel Verschoor, Director of Global Operations, explains, 'In the early days, there always used to be a secondary means of transferring passengers to and from a vessel, but now everybody is relying on the gangway to get people across. If it doesn't work, it directly results in downtime during the project. In this sense, we have become critical to the operation. Operations have become more common, more demanding, and more intense, in part because our systems are now also capable of lifting cargo. W2W now needs to be integrated much more within the wider project.'

At a macro level, the interconnectedness of the offshore wind supply chain carries significant implications for gangway providers. Despite recent setbacks in public perception, the long-term outlook for offshore wind remains strong. According to Boudewijn Visser, Director of Innovations, these short-term challenges only underscore the essential role that Walk-to-Work providers play in supporting the industry.

'While the long-term prospects for offshore wind are still on track, the cost of the entire supply chain has increased compared to just a few years ago. That's important because it highlights our responsibility, as part of that chain, to help reduce those costs.

'We can do that by continuously raising the bar for both operational and technical performance, without compromising on safety. And I believe we are making real progress by innovating and applying our expertise where it matters most.'

Innovation

Market dynamics and technological developments are prompting a re-evaluation of how offshore access providers engage with the wider supply chain. Collaboration now extends beyond project-level coordination, to innovation and design as well as long-term commitment to Environmental, Social and Governance (ESG) targets.

Visser highlights that there is an increasing drive, not just within Ampelmann, but also within the market to reduce fossil fuel emissions and pave a way towards the energy transition.

'It's why we're pushing electrical systems that have the same performance but consume 80% less energy. If you look at the vessel market, it's moving towards hybrid solutions, and even battery-powered vessels in the long run. Because these designs require stripping down all energy consumers, it has created an additional push to electrify our systems.'

The maturation of global offshore wind is simultaneously driving a greater and diverging need for sustainable access solutions. From tailored systems for 'mini SOVs and C/SOVs to electric gangways that are suited for specific sea conditions and landing heights, gangway providers need to be able to address distinct global challenges at an increasing pace.

'Modularity is the keyword here,' explains Visser. 'Like Lego-blocks we configure our systems together with our clients to get the

Daniel Verschoor

Boudewijn Visser

Ivar Boom

right setup for the job, wherever they might be. Our portfolio consists of a variety of systems suited for different conditions in the world, and we have different add-ons that enable our systems to hoist or, for example, provide continuous transfers. But what's important here is that they rely on the same underlying software. This allows our modules to lock into each other with ease, meaning we streamlined our design process so we can ensure our systems have a quicker time to market.'

To accommodate this broadening demand for access, Verschoor stresses that 'we really need clients who are eager to help us to continue to innovate. They are really valuable to us, but internally, we have also made an important change. We now have a project board that includes members of innovation, business development and operations. Structurally we have set it up to aim for the first safe transfer instead of the factory acceptance test (FAT). This streamlines how our systems enter the market.'

Integration

Innovation continues to drive considerable progress in offshore access, but as W2W systems have taken on a critical role in offshore wind logistics, there is potential to enhance their impact by integrating them more closely within broader operational processes.

Perhaps it is time to redefine the role of the gangway more generally. As Ivar Boom, Director of Structural Change, reveals, 'At Ampelmann we often point out that we are supplying a service. Our goal is to make offshore access as easy as crossing the street; to get people or cargo from point A to B in as safe a manner as possible. But perhaps we should be talking less about significant wave heights and more about workability, about hands-on-tool time, because that's essentially what we provide.'

W2W solutions are more than technical performance. When gangway systems are integrated into the shared logistics of vessel owners, subcontractors, and project teams, their role extends beyond individual transfers.

As Visser points out, 'By looking at the full scope and integrating and clearly communicating our processes to the client and the other subcontractors, we can also help with the logistics of the entire project. For instance, during mobilisation and project preparation we can assist with planning, vessel approaches, and our digital services can provide workability predictions so that scheduled work on each turbine and across the windfarm can be optimised on a daily to monthly basis.'

Ampelmann W-type

This is especially important because of the growing number of specialised roles currently present on vessels during offshore operations. 'Communication is still the number one challenge during offshore operations,' Verschoor argues. 'We really need to be much stricter here, literally; a single point of contact is essential. It is really important to keep paying attention to communication styles and protocols, because in the end that remains the most difficult part.'

Global satellite internet coverage has already contributed immensely to streamlining communication and the development of onsite 5G internet connections on offshore wind farms promises to have far-reaching effects. Verschoor points out that the difference between a well-connected offshore worksite and one without direct access to the internet is night and day. 'When you're fully connected, you can solve an issue in maybe one or two hours, but when you don't have it, it can take up to three days.'

'But it also allows us to provide better services', he adds, 'like finding immediate solutions to potential challenges that might arise. After all, planning is useless, but plans are critical. In addition to the technical uptime that we deliver, our project managers can quickly respond to, for example, different landing heights that we didn't come across during the project preparation. This broadens the uptime for the client beyond the gangway and smooths out the execution of the whole project.'

Beyond the gangway

As offshore logistics becomes more complex and interconnected, progress will equally depend on increasing cross-industry alignment between W2W providers. As the recently renewed IMCA guidelines for Walk to Work Operations (IMCA M 254) also pointed out, a central reporting tool for gangway incidents, standardised operator training, as well as factoring in 'the human limit into the design and operation of walk to work solutions' will be needed to set new standards for safety and efficiency in offshore access.

Looking ahead, the utilisation of UAVs (drones) in offshore logistics is also beginning to elevate the operational landscape to a new level. Just like the first W2W systems required 'a change in mindset,' Boom says, 'so Ampelmann's Cargo Drone Services are demanding a shift in thinking about offshore logistics, and about what it means to be an offshore access provider.'

Instigating deeper questions about the evolving nature of offshore access, Visser adds that 'we need to move beyond the gangway and treat the wind farm as a single logistic challenge. There are clear opportunities to optimise the entire supply chain together, so we get those costs down. Now especially, we need continuous discussions with our clients to ensure we can deliver the right solutions, protocols and technology to help our clients get the job done.'

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