

Acoustic Doppler Current Profiler technology to improve subsea installation and O&M data

Sonardyne is advancing subsea sensing technology to deliver higher-resolution metocean data for offshore wind. By enhancing Acoustic Doppler Current Profiler (ADCP) systems, they are enabling more accurate planning, installation and operation of wind farms.

Before

Sonardyne identified a growing need for higher-resolution metocean data to support Offshore Wind development, particularly in deeper and more complex environments. Existing ADCP technology lacked the precision required to fully understand turbulence and site conditions, limiting optimisation of turbine placement and subsea infrastructure. To address this, Sonardyne secured OWGP funding to enhance its ADCP Seabed Lander technology and integrate it with complementary systems.

During

Through the project, Sonardyne developed an enhanced ADCP solution, integrating subsea sensing with topside communications and LiDAR buoy systems to deliver a more complete dataset. A structured development programme covered system design, testing, integration and offshore deployment, ensuring the technology could deliver reliable, high-quality data. This approach enabled continuous refinement and de-risked the path to real-world application.

After

Sonardyne has successfully demonstrated its enhanced ADCP technology, delivering improved data accuracy and supporting better decision-making across offshore wind projects. The solution is now driving increased industry engagement, supporting revenue growth and strengthening Sonardyne's position as a key technology provider in the sector.

How does this help deliver the IGP?

- Improves data accuracy for offshore wind site assessment and design
- Supports optimisation of turbine placement and subsea infrastructure
- Reduces risk and cost through better-informed decision-making
- Strengthens UK leadership in subsea monitoring and sensing technologies

Better data means better decisions, unlocking more efficient, reliable offshore wind development.



£1.2m → £5m
offshore
wind revenue
growth



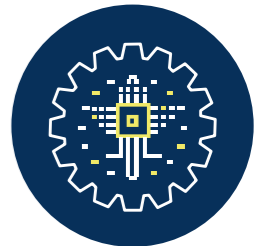
Dedicated
offshore wind
team established

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Funding and strategic support has accelerated our roadmap and enabled a complete end-to-end solution.

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Michael Ellis
Business Development Manager | Sonardyne
sonardyne.com



Next generation
installation and O&M

