SMART OPERATIONS & MAINTENANCE (O&M)

Challenge Background

Operations & Maintenance (O&M) activities make up somewhere between 25-50% of the lifetime costs associated with an offshore wind farm and therefore provide a huge opportunity for cost reduction through the innovation of products, services and processes.

Launch Academy 2024 is seeking innovative technologies and services that can in some way address, reduce and mitigate many of the costs associated with the operations and maintenance of offshore wind farms from installation to decommissioning throughout the UK. In particular, Launch Academy 2024 is seeking innovative technologies and solutions targeting ***Condition Monitoring***, ***Surface Coating & Protection*** and ***HSE***.

Examples of the types of innovations the Launch Academy 2024 programme is seeking to target through the **Smart O&M** theme include:

Condition Monitoring

- Torque Monitoring Solutions (Flanges, Bolts, other)
- Cable Monitoring Solutions (Fixed-Bottom & Dynamic Cables)
- Bird Strikes Monitoring Solutions

Surface Coating & Protection

- Marine Antifouling Solutions
- Advanced Coatings Technologies
- Novel Guano Cleaning Solutions
- Novel Coatings relevant to protection of Assets & Substations

HSE

- Drone Parts Delivery
- Novel Vessel Transfers Technologies
- Improved HSE on WTGs Solutions
- Improved HSE on Vessels Solutions

These solutions should look to improve upon existing O&M practices and processes – ultimately driving the sector to become **smarter, safer and greener**.

Please note that the list of examples given above is non-exhaustive and all innovations that contribute to improvements in O&M processes (including HSE), reductions in overall lifetime costs associated with O&M or provide additional data/insight into O&M activity and causes of failure are considered relevant.

Eligibility and Further Information

Eligibility	Entrants to this competition must be: • Established businesses, start-ups, SMEs (Small-Medium Enterprises) or individual entrepreneurs

	• UK-based or have the intention to set up a UK-base • Minimum of TRL (Technology Readiness Level) Four. See the link for further details on the TRL scale https://enspire.science/trl-scale-horizon-2020-erc-explained/
Assessment	Applications will be assessed on: • Applicability to the challenge • Innovativeness of the solution • Coherence of proposed business model and company vision • Feasibility and economic viability, including ability of the team to progress the solution • Development potential • Maturity of the solution • Ability to launch product and ease of implementation
IP & Commercial Route	• Existing background IP associated with a potential solution will remain with Launch Academy Applicant(s)/Participant(s). Where any new IP generation is envisaged during the Launch Academy programme, it will be subject to the mutual IP agreement of the Launch Academy Participant(s) and Launch Academy Sponsors if jointly developed. If new IP is developed solely by the Participant then it will remain with the Participant. • Where necessary, a non-disclosure agreement (NDA) may be signed to uphold confidentiality in the engagement between the Launch Academy Participant(s) and Launch Academy Sponsors. • ORE Catapult do not take any share of IP ownership or enter commercial ventures through the Launch Academy programme.
Timescales	• **Application Window Opens**: 1st of November 2023 • **Application Deadline**: 8th of December 2023 • **Applications Assessment**: 8th December – January 5th • **Shortlisted Applicants Invited to Pitch**: January 8th • **Pitch Stage**: January 29th – February 9th • **Selection and Notification of Successful Applicants**: 14th of February 2024 • **Programme Start**: March 2024 • **Graduation**: November 2024