

Clean Transport Accelerator: Maritime

Partner Profiles

June 2026



Challenge 1:

Optimisation of sea-going fleet operations

How might we enable better insight into current fleet operations to solve future challenges related to emissions, predictive maintenance and/or duty cycles?

We are seeking innovative solutions that offer:

- Management and filtering of the flow of data to improve relevance
- Improved data insights & analysis on existing vessel operations & emissions
- Optimisation of duty cycles for reduced emissions
- Predictive maintenance of existing vessels
- Insights into future fleet operations, including but not limited to – retrofittable clean technologies or clean autonomy

Organisation description

Serco brings together the right people, the right technology and the right partners to create innovative solutions that make positive impact and address some of the most urgent and complex challenges facing the modern world. With a primary focus on serving governments around the world, Serco's operations in the UK span defence, space, healthcare, justice and migration, transport and citizen services.

Across the maritime sector, Serco operates, supports, and maintains more than 1,000 ships and small craft at more than 30 locations worldwide, from small support boats to the newest generation of icebreakers and the most complex submarines. For over 20 years, Serco has also provided maritime Maintenance, Repair, and Operations (MRO) support services to the Royal Navy in the UK. We have vast experience in delivering challenging and delicate maritime support operations to the Royal Navy and other UK government departments.

Motivation to become a Programme Partner

We have been a Programme Partner on the Accelerator for the past five years, and we believe the programme provides SMEs with an excellent platform from which to develop their technologies. We have a corporate responsibility to support our customers in achieving their net zero targets, and by facilitating the development of innovative technologies across the sectors we operate in, we have seen that this can have tangible impact in this space. We also greatly value the strategic relationships we have developed with SMEs on the programme, and we continue to work with a number of organisations from previous cohorts.

Testbed facilities and resources

We have previously partnered with 6 SMEs on trials throughout 5 iterations of the programme, and these trials have varied from feasibility studies to deployment of desk-based technologies. We believe we can provide great value to SMEs as a trial partner or from a business support perspective, and some of the resources we are able to provide include:

- Access to non-sensitive data from assets we operate across the UK on behalf of our customers
- Trialling of physical technology on assets we operate across the UK on behalf of our customers, in line with extant regulations and internal governance (customer approval required)
- Feasibility study support
- Extensive industry knowledge and maritime operations expertise
- Collaboration with a wider network of partners.

Procurement route

Whilst we are limited in being able to provide direct procurement opportunities due to the nature of the contracts we operate, we have previously partnered with SMEs post-programme on additional funding opportunities, such as the Clean Maritime Demonstration Competition (CMDCC). We are able to provide benefit in kind support, dependent upon the needs of both our business and our customer at any given time.



Challenge 2:

Scope 3 emissions tracking and reporting

How might we enable accurate and consistent capture of scope 3 emissions from entry to exit, including enabling third parties to capture and share their data more easily in alignment with the port?

We are seeking innovative solutions that offer:

- Accurate information capture or a framework for information capture from suppliers
- Inventory tracking & predictions on future emissions, which may be supported by AI or digital storage
- Digital tracking & integrated systems
- Better transparency and efficiency of scope 3 emissions tracking

Organisation description

The Port of Tyne is one of the UK's leading deep-sea trust ports and a key gateway for global trade, supporting critical supply chains across automotive, offshore energy, bulk, and container sectors. The Port plays a vital role in regional and national logistics infrastructure. We are recognised for our commitment to innovation, sustainability, and digital transformation, demonstrated through initiatives such as our 2050 Maritime Innovation Hub and Net Zero Port strategy. Most recently we won awards for innovation, environmental and sustainability as well as digital transformation highlighting our adoption of cutting-edge technologies to improve efficiency, safety, and environmental performance. Our collaborative approach and strong industry partnerships position us as an ideal partner for developing and scaling innovative solutions.

Motivation to become a Programme Partner

Our motivation to join the Clean Transport Accelerator programme is to collaborate with innovative partners to advance sustainable freight and logistics. As part of our ongoing digital transformation, we aim to enhance cargo flow, reduce emissions, and increase operational resilience. We are actively investing in automation and decarbonisation, and seek technologies that can support real-time decision-making, resource use and drive measurable carbon reductions. Through this programme, we aim to accelerate innovation, test scalable solutions and contribute to shaping a greener, smarter future.

Testbed facilities and resources

The Port of Tyne offers a unique, fully operational port environment for SMEs to develop, test, and scale innovative maritime clean tech solutions. Our estate includes diverse, real-world operations across warehousing, container, bulk, transport fleet, automotive, and cruise terminals, with multimodal connectivity via road, rail, and offshore access.

The Port can offer (subject to port policy) access to a private 5G network that provides fast, reliable, and secure connectivity across the entire estate. This creates a strong digital backbone for testing new technologies in a live operational environment, where consistent coverage and low latency are critical.

With this in place, SMEs can deploy and trial solutions in real-world conditions, benefiting from stable, high-performance connectivity that supports everything from autonomous systems to data-driven applications. It's a flexible and responsive environment where ideas can be tested, refined, and scaled with confidence.

SMEs will benefit from hands-on support through our on-site Innovation Hub, alongside technical expertise from our Innovation, IT, and Sustainability teams, and deep operational knowledge across port activities.

Procurement route

The Port of Tyne's procurement process is guided by six strategic themes aligned with our Tyne 2050 vision: cost and budget allocation, net zero and energy security, new business generation/cost saving, modernisation and efficiency, safety and security, and stakeholder benefit. We use an evaluation system to assess potential solutions against these priorities. For successful trials, SMEs must demonstrate how their solution addresses one or more of these themes. It must be noted working as partners will not guarantee a contract and a tender process may be required.



Portsmouth International Port (PIP)

Challenge 3:

Efficient use of excess clean energy

How might we enable the use of excess clean energy to improve utilisation of shore power assets and strengthen the commercial case for ports, whilst increasing access to low-carbon energy for third parties?

We are seeking innovative solutions that offer:

- Aggregation and management of third-party demand (e.g. construction, events, temporary high-power use)
- Deployment and trial of portable hardware solutions (e.g. battery systems) that can be utilised, shared and/or relocated by third parties
- Integration of software to support management, compliance and commercial pathways for energy redistribution in ports
- Future integration with wider systems

Organisation description

PIP is a landlord style, municipal cruise and ferry port. Our customers include major ferry operators such as Brittany Ferries, DFDS and major cruise lines like Virgin Voyages, Saga and Viking. We describe ourselves as a 'goldilocks port' for trials as we are big enough that we can provide real data, learning opportunities and mentorship whilst our site and relatively small team can make decisions on trials quickly with clear reporting lines and a wide overview. Our consumers include over two million passengers and 200,000 road freight movements whilst we handle more than 1500 vessels a year.

Motivation to become a Programme Partner

PIP has set innovation as part of its core mission so that we can provide a port that delivers for its owners, the residents of Portsmouth. This means that we have a focus around environment, society and governance beyond simple commercial needs. We have been involved in innovation programmes for many years, and we feel very strongly that all parties benefit from collaborative work with the wider aim of driving environment, transport and maritime forward for all.

Testbed facilities and resources

PIP can provide mentorship, data, physical locations and more.

Previous trials with Connected Places Catapult's accelerator SMEs have included product development, new use cases, links with wider organisations and industry bodies.

We have supported numerous trialists outside of these schemes too with projects under UKRI and CMDC coming to fruition and a partnership approach.

Procurement route

Procurement is generally through Portsmouth City Council's procurement and tendering process which can be found online. Public sector procurement means that there are limitations around direct contract awards although there are some exclusions.



Challenge 4:

Decarbonising shipyard manufacturing

How might we enable the use of decarbonisation technologies in vessel manufacturing and shipyard operations to reduce lifecycle emissions, lower energy demand, and deliver lower embodied carbon assets?

We are seeking innovative solutions that offer:

- Increasing use of low-carbon fuels or electricity to reduce reliance on fossil fuels in shipyard manufacturing
- Circular use of materials and/or energy within shipyard processes such as vessel building and repairs, or component manufacturing
- Optimisation of manufacturing processes to reduce energy demand
- Reduction of waste across shipyard operations
- Predictive maintenance of plant to improve efficiency and reduce energy use

Organisation description

The National Shipbuilding Office (NSO) is a strategic cross-government organisation hosted within the Ministry of Defence and funded by multiple government departments. It provides strategic oversight of all UK Government interests in shipbuilding.

The NSO works across government, industry, academia and devolved administrations to drive transformative change across the UK Shipbuilding Enterprise. Its mission is to enable a globally successful, innovative and sustainable sector that supports economic growth, strengthens national security and delivers long-term resilience.

The organisation focuses on improving productivity, supporting skills development and fostering innovation across both civil and defence shipbuilding, covering the full lifecycle from design and build through to maintenance and disposal.

Motivation to become a Programme Partner

The NSO seeks to partner with programmes that accelerate innovation and strengthen the UK's maritime and industrial capability.

As a cross-government body with strategic oversight of shipbuilding, we are committed to enabling collaboration between government, industry and academia to develop and scale innovative solutions.

Participation as a Programme Partner aligns directly with our objectives to de-risk innovation, support SMEs and non-traditional suppliers, and ensure emerging technologies can be tested, validated and transitioned into operational use in support of decarbonisation across the maritime sector.

Testbed facilities and resources

The NSO does not operate physical test facilities directly but may be able, through contacts, to provide contacts and introductions to shipyard owners and vessel operators who may be able to support trials.

Procurement route

Procurement will be delivered through established departmental routes.



Get involved

Ready to accelerate innovation in transport, built environment, or public services?

Connect with us:

 info@cp.catapult.org.uk

 cp.catapult.org.uk

 [@cpcatapult](https://www.linkedin.com/company/cpcatapult)

Connected Places Catapult is part of the UK's Catapult Network, connecting businesses with the UK's research and academic communities to accelerate innovation.