

ASSOCIATED BRITISH PORTS: HOW DIGITAL TWINS CAN KEEP BRITAIN TRADING

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WHO IS ABP?

ABP is the UK's leading and best-connected port owner and operator, with a network of 21 ports handling around a quarter of the UK's seaborne trade.



Ready for Tomorrow



ABP is investing in new state-of-the-art equipment and facilities across the group to enable its business and its customers' businesses to grow.

With digital twins development and implementation being a key focus area for ABP

INVESTMENT OF £2 BILLION IN SUSTAINABILITY



NET ZERO

We have a role to play in both reducing our own fuel and power consumption and in enabling the UK's energy transition to limit the impacts of climate change.



AIR QUALITY

We recognise that we have a responsibility, together with the shipping lines and inland-logistics providers using our ports, to outperform national ambient air quality objectives.



BIODIVERSITY

We will seek to drive a net positive biodiversity impact from our development projects and day-to-day operations, which we will be able to measure and value.



WASTE

Partnering with our employees, we want to limit the amount of waste we create, segregate and recycle as much as possible, and minimise the amount being incinerated or in landfills.



WATER

We are working to improve our water monitoring, reduce our consumption, and reuse it where possible.

INTERVENTION AREAS



Autonomous Asset Inspection

Utilise aerial, terrestrial, and marine robotics to find corrosion, simplify maintenance, and pinpoint asset locations for enhanced accuracy in intricate port settings

Energy Utilisation

Create energy systems for ports that minimise carbon footprint, boost energy independence, and improve safety to ensure sustainable and secure operations





Smart Discharge

Improve port operations by addressing product-specific requirements, ensuring safety, timely processes, minimal product handling, and coordinating with downstream transport for streamlined logistics.

Smart Shed

Optimise product storage duration, streamline in-and-out movements, and improve storage space usage to enhance port operations and maximise capacity management efficiently.

An isometric illustration of a smart port and city. The scene includes a harbor with two large purple and white cargo ships, a city with various buildings, roads with cars and buses, and a power plant with wind turbines. A network of glowing blue lines connects various points across the scene, representing a smart infrastructure or data network. The lines connect points on the ships, the city buildings, the roads, and the power plant. The background is a light blue sky with a few clouds.

Intelligent Boundaries

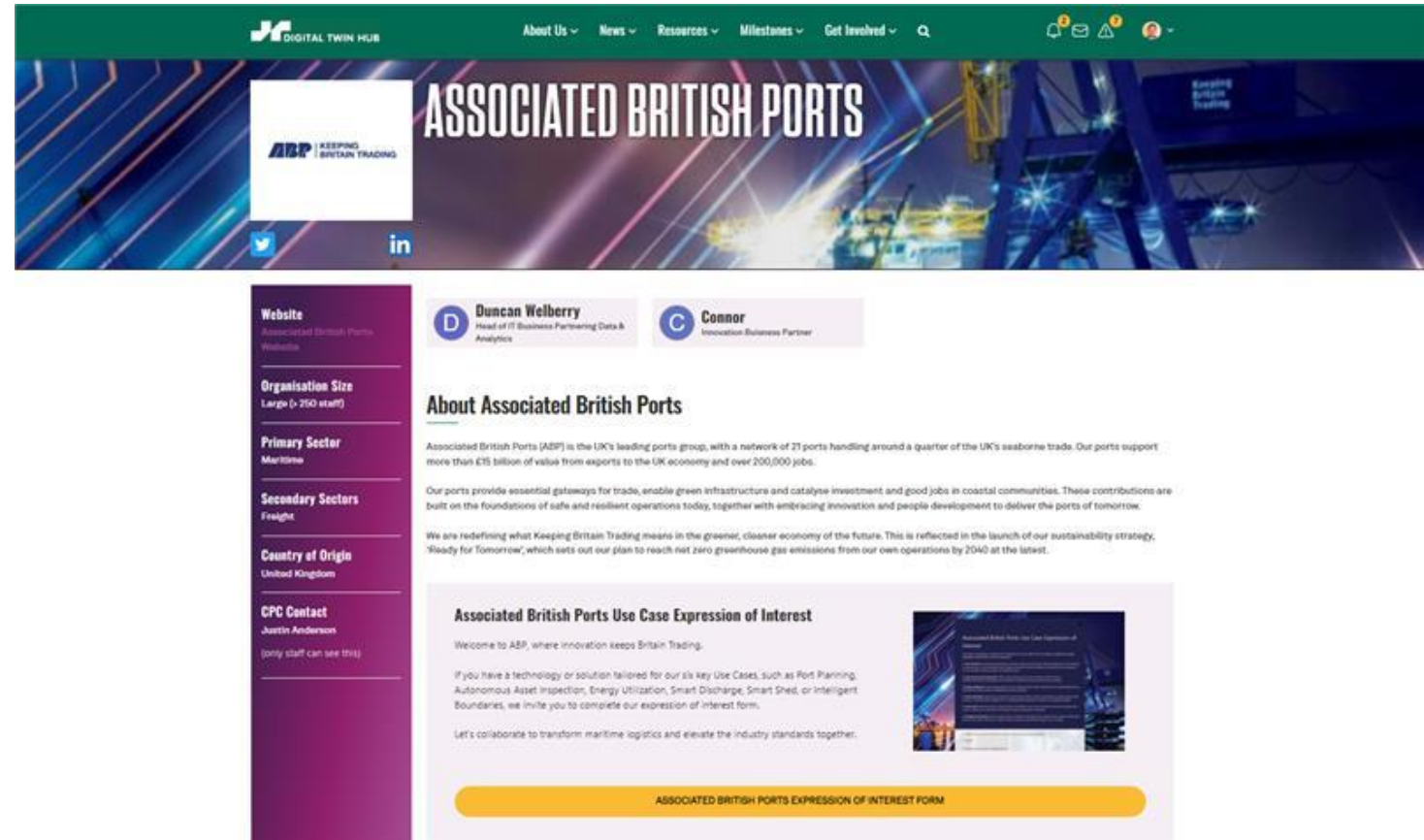
Spot potential threats, strengthen vulnerable areas, minimise theft, respond effectively to breaches, and adjust responses to uphold optimal security and operational integrity in port settings.

Port Planning

Incorporate urban design, real estate analysis, and advanced traffic management in Port Planning to optimise space use and envision future designs, focusing on efficient berthing and infrastructure development to accommodate evolving maritime and logistical needs.

CALL TO ACTIONS

We want support and guidance from the DT Hub Community. Go to the ABP Organisation Page to learn more about ABP and how you can join us in our transformation journey



THANK YOU

If you any questions, please complete the Slido or follow the link below:

<https://digitaltwinhub.co.uk/organisations/asset-owner/associated-british-ports-r83/>