

Searching for innovations to keep submarines clean

- DASA has launched a new Market Exploration: How Clean is your Hull?
- Launched on behalf of the Royal Navy
- This Market Exploration is seeking to find technical solutions to tackle unwanted biofouling on Royal Navy submarine hulls

[The Defence and Security Accelerator \(DASA\)](#) is pleased to launch a new Market Exploration on behalf of the [Royal Navy](#), called [How Clean is your Hull?](#) Our aim is to find novel solutions to the issue of bio-fouling on submarines, to help keep Britain's undersea fleet clean, covert, and capable.

Do you have an innovative solution? [Read the full Market Exploration now and submit your idea.](#)

The biofouling challenge and keeping hulls clean

Our Market Exploration seeks to find technical solutions to tackle unwanted biofouling, which is the accumulation of natural organisms on submerged surfaces (such as submarine and boat hulls) that may be detrimental to the overall function of the vessel.

DASA is searching for mechanical and/or chemical methods of cleaning, as well as novel ways of detecting and classifying different biological material.

We are looking for innovations that:

- can deal with complex hull geometry and the small surface areas of submarine structures
- do not damage or interfere with the purpose of acoustic tiles or sensor arrays
- are environmentally compliant and do not pose wider risk to the natural environment
- sit on the [Technology Readiness Level \(TRL\)](#) spectrum and mitigate the negative impact of bio-fouling on a submarine's signature and performance.

De-fouling could be undertaken when the submarine is at sea or docked in port. If your solution can be used while the submarine is at sea, it should be battery powered and no larger than 1.5m x 1m x 0.5m. It would be advantageous if solutions were easily transportable, allowing them to be used without complex base infrastructure support.

Key dates

The market exploration is currently open. The deadline to submit proposals is

16th November 2022.

Submit your innovation

Let us know if you have a novel solution that can effectively remove the biological material that accumulates on submarine hulls to help preserve the battle-winning edge of the submarine fleet, and support efforts to reduce the environmental impact of the Royal Navy.

[Read the full Market Exploration and submit your proposal.](#)