



Submarine Delivery Agency

Project CHARYBDIS Phase 1: Concept studies for uncrewed, persistent, deployable ASW surveillance systems

Date: 16/11/2022

Introduction

1. The Submarine Delivery Agency Autonomy Unit (SDA-AU) on behalf of Navy Develop are looking to commission numerous concept studies from different credible suppliers, targeting overall integrated uncrewed, persistent, deployable Anti-Submarine Warfare (ASW) Surveillance systems.

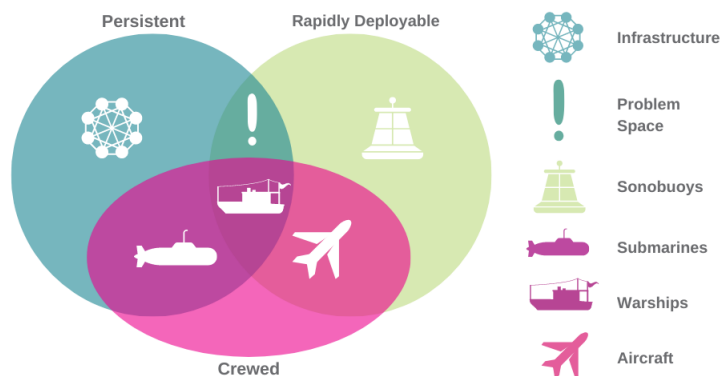


Figure 1: Indicative problem space of CHARYBDIS relative to in-service ASW systems

Context

2. The Royal Navy seeks to maximise their operational advantage over adversaries through increasing the number of effective Anti-Submarine Warfare (ASW) assets. As part of this, Project CHARYBDIS seeks to leverage advances in autonomy, robotics and machine learning to explore new solutions beyond the current mixture of fixed infrastructure, short-term sonobuoys and high-value crewed platforms. This procurement is one workstream of Phase 1 of project CHARYBDIS, which is part of the Royal Navy's Anti-Submarine Warfare (ASW) Spearhead. Phase 1 is focussing on identifying options and gathered the necessary evidence to inform potential future procurements. These would span the development, demonstration and procurement at scale of resulting systems. These future phases of CHARYBDIS are planned but not yet approved. These would be run as separate procurements. Participation in CHARYBDIS Phase 1 is not necessary for a supplier's eligibility (or advantageous to their evaluation) in any future phases.
3. This procurement is focussed on suppliers with the knowledge and capability to produce a beneficial scoping study covering the ASW surveillance capability provided by overall integrated systems. There is a separate technology market engagement workstream of CHARYBDIS (run by DASA), focussed on relevant subsystem technologies [<https://www.gov.uk/government/organisations/defence-and-security-accelerator>]. Suppliers are invited to participate in either (or both) of these workstreams. A third internal workstream will be used to baseline higher classification historic and ongoing projects.



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4. We are seeking to explore a range of system types to achieve the required capability, and welcome concepts at all maturity levels. While we are ideally seeking solutions which could be demonstrated (at full scale, in ocean conditions) by at least March 2026, we are also interested in systems which require more time than this.

Required capability

5. Project CHARYBDIS is focussed on capabilities to:

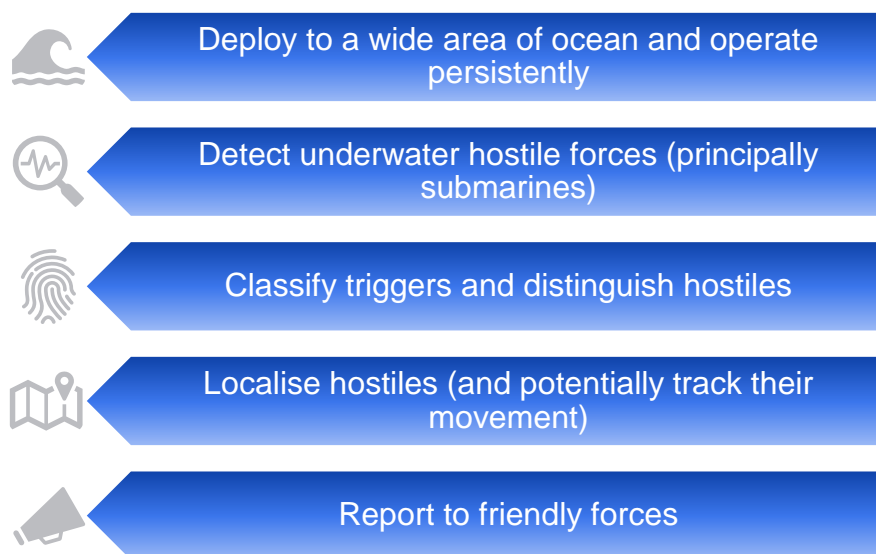


Figure 2: The five capability steps required from an overall CHARYBDIS solution

6. The intent is for CHARYBDIS to complement existing options, enabling benefits of Autonomy to be realised including: enhanced scale and quality of surveillance capability, reduced reliance on high value crewed assets, and reduced requirement for crew at sea with associated cost and risk benefits. Key challenges include achieving the required endurance, survivability, area of detection and time to deploy. Meeting the required capability is likely to necessitate significant innovation and development.

Scope of work and price

7. For this procurement we are seeking credible suppliers to write concept studies over approximately 8 weeks, for the firm funding of £50k (ex. VAT) per concept study. Concept study reports will identify the most promising concepts to achieve the requirement, explore the anticipated capability and identify the steps required to progress these concepts. They will also identify how the chosen concepts were down selected from considered options. Suppliers therefore have an opportunity to influence future direction and inform any potential future procurements. Our focus is on exploring a diverse range of innovative and ambitious options.



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8. For this work we have a total budget (across all suppliers) of £1.25m (ex. VAT). In the event that more than 25 suppliers qualify for this concept study, additional funding will be requested to enable all qualifying suppliers to be contracted.

Route to contract (including deadlines)

9. The intent of this procurement is to identify all suppliers who could provide a concept study to meet our purposes, and offer them each a contract (for the same firm price and scope of work). To achieve this the following steps will be followed:

- **Request**

Please ensure you are registered on the Defence Sourcing Portal (DSP). To request access to the DPQQ, please e-mail both addresses below to request access to the DPQQ pack:

- o Andrea Stockton (Andrea.Stockton102@mod.gov.uk) and
- o Gavin Tapsfield (Gavin.Tapsfield100@mod.gov.uk)

Access to the full DPQQ pack within DSP will then be provided to suitable suppliers. The Authority reserves the right to reject requests from suppliers who could not credibly participate in a UK defence procurement. The Authority will respond to requests within 48 hours, and generally far faster. **After 1700 on Wednesday 14th December 2022, any further requests will not be actioned by the Authority.**

All DPQQ documentation and any Intellectual Property Rights (IPR) in them shall remain the property of the Authority or other Third-Party owners and is released solely for the purposes of enabling you to respond to this DPQQ. Suppliers are not authorised to copy or disclose the DPQQ pack to anyone other than the team involved in responding without written approval from the Authority.

- **Qualification**

Upon receipt of the DPQQ pack, suppliers are to follow guidance to complete all instructions and questions within the DSP. **The deadline for qualification is 1700 on Friday 16th December 2022.** DSP will lock to prevent any later submissions.

- **Tendering**

There will be no 'Invitation to Tender (ITT)' or 'Invitation to Negotiate (ITN)' step.

- **Contract offer**

All qualifying suppliers will each be offered identical terms and conditions of contract, with the same scope of work, and the same firm price.

10. The issue of this DPQQ is not a commitment by the Authority to place a Contract. Neither does the issue of this DPQQ, or any response, create any implied Contract between the authority and any supplier and any such implied Contract is expressly excluded.