



BAE SYSTEMS

**Expression of Interest:
Provision of Non Destructive Examination
Services**

Hunter Class Frigate Program

Including:

Pre-qualification Requirements,

Scope of Work (High Level) and

Capability Questionnaire

ASC SHIPBUILDING – IN – CONFIDENCE

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Acronyms and Definitions

AIC	Australian Industry Capability
AUD	Australian Dollars
BAE	BAE Systems Australia Limited
D&P	Design and Productionisation
DISP	Defence Industry Security Program
DP	Dye Penetrant Inspection
EPA	Environment Protection Authority
EOI	Expressions Of Interest
EVMS	Earned Value Management Systems
FOC	First of Class
GCS-A	Global Combat Ship-Australia
HCFP	Hunter Class Frigate Program
NATA	National Association of Testing Authorities Australia
MPI	Magnetic Particle Inspection
NDE	Non Destructive Examination
OQE	Objective Quality Evidence
PPE	Personal Protective Equipment
RAP	Reconciliation Action Plan
RT	Radiographic Testing
SHE	Safety, Health and Environment
SOW	Scope of Work
T26	British Type 26 Global Combat Ship
UT	Ultrasonic Testing



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1. PREFACE

ASC Shipbuilding are seeking Expressions of Interest (EOI) to supply onsite and external Non Destructive Examination Services for the Hunter Class Frigate Program (HCFP).

ASC Shipbuilding has recently been contracted to design and build the Royal Australian Navy's (RAN) future frigates.

The ASC Shipbuilding Future Frigate offering, also known as the Hunter Class GCS-A (Global Combat Ship – Australia) is a variant of the British Type 26 GCS (T26).

Nine Hunter Class Frigates will be built at the ASC Shipbuilding Facility at the Osborne Naval Shipyard, Adelaide, SA.

The Hunter Class Program will require maximisation of local content in Australia.

Prior to commencing First of Class (FOC) in December 2022, ASC Shipbuilding will be undertaking a period of prototyping at Osborne, scheduled to commence in December 2020. This will involve building five blocks of increasing complexity within the ship design to test shipbuilding processes and systems.

The purpose of the Capability Questionnaire is to establish the feasibility of prospective industrial partners to provide Non Destructive Examination Services to ASC Shipbuilding across the HCFP in support of the Prototyping Design and Productionisation (D&P) phase and FOC. The information you provide within your EOI will be used to down select contractors to receive a formal Request for Tender.

2. PRE-QUALIFICATION REQUIREMENTS

Prospective contractors wishing to submit a response to ASC Shipbuilding's EOI are required to comply with the following to be considered compliant.

1. Acknowledge in writing that the information contained in the EOI documentation is proprietary to ASC Shipbuilding and is made available for the recipient on the express understanding that it is to be treated as confidential for information purposes only and that it may not be copied, used or disclosed to others in whole or in part for any purpose except as authorised in writing by BAE Systems.
2. Download and update as applicable the highlighted areas of ASC Shipbuilding Non-Disclosure Agreement (NDA). Contractors are required to provide a signed PDF copy of the completed NDA along with written confirmation that all clauses have been agreed in full. Any clauses not agreed in full are required to be confirmed in writing as part of the EOI response.

3. SCOPE OF WORK (High Level)

Contractors will be required to provide Non Destructive Examination services during both the Prototyping Design and Productionisation Stage (D&P), and First of Class (FOC). These services will need to comply with the high level scope of work detailed below ensuring services can be provided at both onsite and external locations.

ASC Shipbuilding plan to establish, deliver and integrate the products, processes and enabling services needed to achieve Prototyping activities, and to fulfil the outcomes of

the Hunter Class Frigate Program (HCFP) prior to commencing the full shipbuilding construction project.

The Prototyping phase of this program will be an integral part enabling the delivery of the Hunter Class Frigates (HCF). During the Prototyping phase, ASC Shipbuilding will be building five blocks which increase in complexity to ensure the culmination of systems, processes and production proficiency establishes quality products before First of Class (FOC) commences in December 2022.

ASC Shipbuilding has selected the following blocks in order to test the prototyping process: Blocks: 10, 16, 03, 04 and 05.



Figure 1. Prototyping Blocks Diagram

The strategy of Prototyping is to progressively establish, install and test the production system, develop the facilities, workforce, processes and systems, in order to provide confidence that the whole enterprise is ready to commence Ship Construction and de risk the HCFP.

As a result, all prototype blocks will be required to undertake various level of outfitting with specific level of completion being specified. Contractors wishing to provide NDE services will be required to understand and complete all activities in line with the nominated standards and build schedule requirements.

ASC Shipbuilding has defined the Non Destructive Examination work scope to support both Prototyping and FOC as:

- Conducting the following testing for Products, Weld Procedure Qualification, Welder Qualification, pre/post load testing and Lloyds Registers random tests as required at the Osborne Naval Shipyard and externally:
 - Radiographic Testing (RT);
 - Ultrasonic Testing (UT);
 - Magnetic Particle Inspection (MPI);
 - Dye Penetrant Inspection (DP).
- Ability to analyse the various testing in accordance with the mandated standards, Lloyds register rules and welding codes.
- Providing certified NATA endorsed certificates detailing either compliance or non-compliance post inspection/testing.
- Retest non-compliances post ASC Shipbuilding implemented repair and resolution.
- Maintain a live and accurate external data base of all tests as part of the HCFP linking reports, location and compliance (OQE). ASC Shipbuilding requires access to the contractors live system.

In addition to the above, Contractors would be required to:

- Hold NATA/ISO IEC 17025 accreditation.
- Provide NATA qualified personnel to complete all NDE activities.
- Meet and comply with security requirements for entry to the Osborne Naval Shipyard.
- Conduct services autonomously.
- Support ASC Shipbuilding with complying with customer/external authority requests to witness a nominated test.
- Provide staff with PPE to complete the SOW.
- Provide all testing equipment, machinery and consumables, calibrated and in correct order to complete the SOW.
- Support the requirement to provide all manner of services on an “On Call” basis to support HCFP schedules.

ASC Shipbuilding requires contractors to become an active participant of a fully integrated team working alongside ASC Shipbuilding and other onsite contractors. A cohesive working team is essential to ensure all shipyard activities are coordinated with planned schedules maintained to achieve milestones, avoid delays or unnecessary conflicts and rework to open or completed work fronts. A sound knowledge in EVMS reporting will be required. Weekly reporting requirements are expected and will have a direct link into HCFP reports issued and reviewed by the end customer.

Contractors will be required to satisfy and comply with ASC Shipbuilding processes and procedures at all-time whilst onsite while maintaining adherence to site, state and government SHE requirements, legislation and standards.

4. CAPABILITY QUESTIONNAIRE

1. Are you an Australian Owned company?
2. Will your company require engaging in any joint ventures or alternative contracting models to complete the SOW. Details are to be provided if applicable including combined \$Turnover and Employee Numbers.
3. Are you an Indigenous company?
4. Do you have a Reconciliation Action Plan (RAP) in place?
5. Please provide details on the number of Indigenous/Aboriginal/Torres Islander employees within your organisation? (Stipulate whether employees are Full Time or Part Time)
6. Provide details of the company's management organisation structure.
7. How many full time (permanent) employees does your company currently employ?
8. Do you have a full time Project Co-Ordinator currently working in your Organisation?
9. State Professional Indemnity, Product and Public Liability Insurance coverage.
10. State Marine Liability and Marine Products liability insurance or advise if included as part of above policies.
11. Confirm your company holds the following certification and accreditation including compliance against:
 - a. NATA/ISO IEC 17025
 - b. ISO 9001
 - c. ISO 14001, AS 4801
12. Confirm that your organisation holds the applicable EPA licenses required to complete the SOW onsite and at your facility? List as applicable. (RT License requirements).
13. Provide details on the number of certified technicians and inspectors your organisation employs, advising the highest level of qualification held by each.
14. Confirm equipment and machinery to complete SOW is calibrated detailing the occurrence testing is completed.
15. Does your organisation have an understanding and ability to test in accordance with Lloyd's Registers rules for surface ships?
16. Is your organisation certified to issue NATA endorsed certificates?
17. Do you hold a current DISP membership? Confirm level of membership your organisation holds.
18. Provide full details including value and location of previous major defence, maritime or commercial projects in which your company has delivered NDE services within Australia. Detailed overview required.
19. Stipulate all current and future projects that your company has any involvement in until 2026.
20. Confirm all NDE services detailed within the scope of work can be met by your organisation and successfully undertaken at both the Osborne Naval Shipyard, South Australia and your facility. Scope including but not limited to:

- a. RT
 - b. UT
 - c. MPI
 - d. DP
 - e. XRF
 - f. Weld Procedure and Welder Qualification
 - g. Pre/post load testing
 - h. Testing mandated by Lloyds Register
21. Confirm the location where offsite testing / services would be undertaken. In the event this is not in South Australia, identify how the geographical barrier could be mitigated by your organisation without affecting cost and schedule requirements of the HCFP.
22. Provide details of how your company can support ASC Shipbuilding's commitment to support AIC. Detail if the labour to complete the task will be provided by Australian permanent residents.
23. Stipulate any further competitive discriminators currently not identified.

Closing date for Expression of interest:

4.00PM ACST on Friday 27th September 2019