



# Expression of Interest

Provision of Non Destructive Testing &  
Destructive Testing Services – Batch 1

Hunter Class Frigate Program

**BAE SYSTEMS**

OFFICIAL

Maritime Australia

## Acronyms and Definitions

<b>Abbreviation</b>	<b>Definition</b>
AIC	Australian Industry Capability
AUD	Australian Dollars
BAESMA	BAE Systems Maritime Australia
DISP	Defence Industry Security Program
DP	Dye Penetrant Inspection
DT	Destructive Testing
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
NDT	Non Destructive Testing
OQE	Objective Quality Evidence
PPE	Personal Protective Equipment
RAN	Royal Australian Navy
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. INTRODUCTION**

BAE Systems Maritime Australia (BAESMA) are seeking Expressions of Interest (EOI) to supply Non Destructive and Destructive Testing Services for the Hunter Class Frigate Program (HCFP).

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

The BAE Systems Maritime Australia's 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 BAE Systems Maritime Australia facility at the Osborne Naval Shipyard, Adelaide, SA.

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

Batch 1 is on schedule to commence in June 2024 comprising of 3 ships expected to be built over approximately a 12 year period.

The purpose of the Capability Questionnaire is to establish the feasibility of prospective industrial partners to provide Non Destructive and Destructive Testing Services to BAE Systems Maritime across the HCFP in support of Batch 1 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 BAESMA'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 BAESMA 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 BAE Systems Maritime Non-Disclosure Agreement (NDA). Contactors 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 and Destructive Testing Services and achieve the appropriate standards of completion in line with the high level scope of work detailed below:

BAESMA has established processes and enabling services needed to achieve Batch 1 activities and to fulfil the outcomes of the Hunter Class Frigate Program (HCFP).

The Batch 1 phase of this program will be an integral part enabling the delivery of the Hunter Class Frigate (HCF) fleet to the RAN. Ensuring production proficiency is established to deliver quality products for First of Class (FOC) and subsequent ships. During the Batch 1 phase, BAESMA will be building three ships consisting of 22 blocks per ship, with increased difficulty.

Note: The exception is Block 22 which will be manufactured offsite by a 3<sup>rd</sup> party (Not included in this scope of work). Consolidation joint testing for this block may be included within this scope of work.

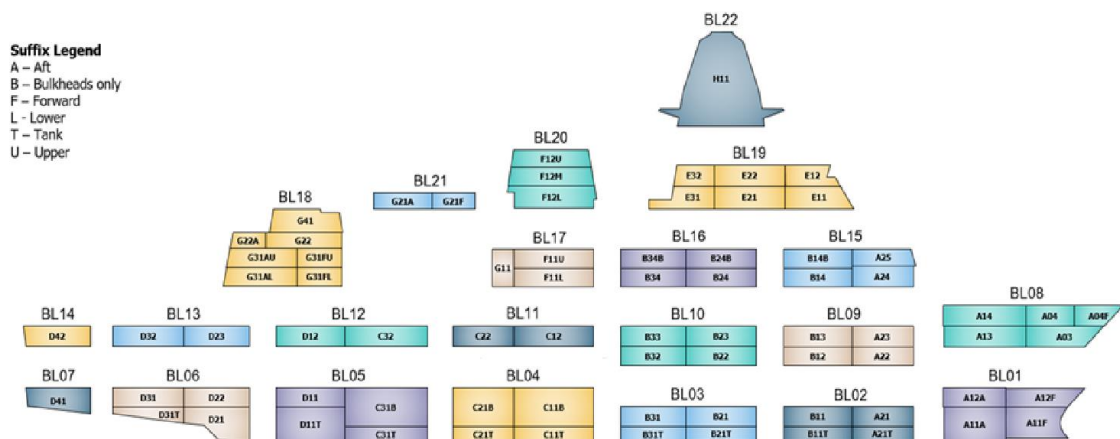


Figure 1. Hunter Class Frigate Diagram

As a result, all Batch 1 blocks will be required to undertake various levels of outfitting with specific levels of completion to be identified for each compartment. Contractors will be required to understand the requirements of each compartment once finalised and complete all activities in line with the nominated standards whilst working to the detailed build schedule. The completed compartments will then be subject to acceptance by BAE Systems Maritime and the Commonwealth of Australia with compliant OQE submitted.

BAESMA has defined the Non Destructive Testing work scope to support Batch 1 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 BAESMA 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.

BAESMA has defined the Destructive Testing work scope to support Batch 1 as:

- Conducting various types of testing in support of material and manufacturing evaluation, weld procedure and welder qualification. These may include but not be limited to the following examples;
  - Metallography examination
  - Mechanical testing
  - Hardness testing
  - Corrosion testing

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

- Hold NATA/ISO IEC 17025 accreditation.
- Provide NATA qualified personnel to complete all NDT and DT activities;
- Meet and comply with security requirements for entry to the Osborne Naval Shipyard;
- Conduct services autonomously;
- Support BAESMA 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.

BAESMA requires contractors to become an active participant of a fully integrated team working alongside BAESMA 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. 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 BAESMA’s processes and procedures at all-time whilst onsite while maintaining adherence to site, state and government SHE requirements, legislation and standards.



Figure 2. The Osborne Naval Shipyard

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

Entry level DISP (Defence Industry Security Program) membership will become mandatory and all respondents must show evidence to achieving this.

#### **4. PRE-QUALIFICATION QUESTIONNAIRE (GENERIC)**

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1. Have you updated your ICN company profile with the your Trading Name, Contact Details, Website, ABN, Number of Employees, Annual Turnover, Export Details (if applicable) and ANZSIC codes? This information will be used in assessing this EOI.
2. Are you an Australian registered company and fully Australian owned? If yes, provide your ABN number and ownership details please. If No please provide details of company ownership.
3. Please provide annual turnover in AUD.
4. Are you an Indigenous company (Defined as 50% or more owned by Aboriginal and/or Torres Strait Islander person(s).) and registered with Supply Nation? If yes, please provide a link to your profile on the Supply Nation Website or other supporting evidence.
5. Do you have a Reconciliation Action Plan (RAP) in place? Has it been endorsed by Reconciliation Australia and to what level being Reflect, Innovate, Stretch and Elevate? If yes, please attach evidence, if no please describe where in the process your organisation is with a Reconciliation Action Plan.
6. Please provide details on the percentage of Indigenous/Aboriginal/Torres Islander employees within your organisation. (Stipulate whether employees are Full Time or Part Time)
7. Please provide details on your company's willingness to participate in a collaborative trainee arrangement for this scope of work.
8. Provide details of your company's internal traineeship program for NDT technicians.
9. Does your company have ability to scale up and down? Please provide details.
10. Provide details of the company's management organisation structure and full time headcount. Attach evidence/organisation structure. Please include team structure to support offering to complete the high level SOW including location and break down of workforce.
11. How many of these employees hold a current Australian security clearance and to what level? Please specify details.
12. State your company's Professional Indemnity, Product and Public Liability and Work Cover Insurance coverage. Please attach evidence.
13. Please state what quality certification and accreditations your workforce and organisation hold? Please attach evidence.
14. Confirm your company holds the following certification and accreditation including compliance against: NATA/ISO IEC 17025; ISO9001; ISO14001/AS4801; appropriate Lloyds Register approvals for Naval Ship construction? Please provide detail.
15. Do you hold Defence Industry Security Program (DISP) Membership? If yes, please state what membership level you hold. Please provide evidence of DISP.
16. On Time Delivery – Are you able to consistently provide on time guaranteed service to agreed time frames, please provide details?



17. How do you self-evaluate and analyse your performance? Please provide any data / reports you have examples of?
18. Does your company comply with all relevant Anti-Slavery, Anti-Bribery, and Corruption legislation in your jurisdiction? Please provide details.

## **5. PRE-QUALIFICATION QUESTIONNAIRE (SPECIFIC TO THE REQUIREMENTS)**

19. Confirm that your organisation has the capability and a clear understanding of the complexities of the High Level Scope of Work provided in the Expression of Interest advising any areas of non-compliance.
20. If your company will require engaging in any joint ventures or alternative contracting models to complete the scope of work, please provide details.
21. 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).
22. Provide details on the number of certified technicians and inspectors your organisation employs, advising the levels of qualification held by each. Please ensure the scope of all level 3 technicians are included.
23. Confirm equipment and machinery to complete SOW is calibrated detailing the occurrence testing is completed.
24. Does your organisation have an understanding and ability to test in accordance with Lloyd's Registers rules for Naval Surface Ships? If Yes, please elaborate.
25. Is your organisation certified to issue NATA endorsed NDT and DT certificates detailing the scope of approval?
26. Provide full details including value and location of previous major defence, maritime or commercial projects in which your company has delivered NDT and DT services within Australia. Detailed overview required.
27. Confirm all NDT and DT 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 - Radiographic Testing (X-Ray, Gamma and Digital)
  - b. UT - Ultrasonic Testing
  - c. MPI - Magnetic Particle Testing
  - d. PT - Penetrant Testing
  - e. EC - Eddy Current Testing
  - f. XRF – X-Ray Fluorescence

- g. Weld Procedure and Welder Qualification
  - h. Pre/post load testing
  - i. Vacuum Box Testing
  - j. Destructive Testing
    - i. Photo Macroscopic Examination
    - ii. Transverse Weld Tensile
    - iii. All Weld Tensile – Ambient
    - iv. Longitudinal Tensile Test
    - v. Weld Joint Hardness
    - vi. Charpy V Impact Test
    - vii. Bend Test
    - viii. Fillet Break Test
    - ix. Microscopic Examination including For example ASTM A923 including ASTM E562
    - x. Microscopic Examination including Ferrite Count and Intermetallic Evaluation
    - xi. Chemical Analysis
    - xii. Intergranular Corrosion Testing
    - xiii. Standard Weld Procedure Qualification Butt Weld Test Plate
    - xiv. Standard Weld Procedure Qualification Fillet Weld Test Plate
28. 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.
29. Do you have a full-time NDT supervisor who would be allocated to the program? Please provide details.
30. Do you have a clear understanding of the requirements for providing CDRL and Objective Quality Evidence documentation? Please provide examples of experience.
31. Provide details of how your company can support BAE Systems Maritime Australia’s commitment to support AIC. Detail if the labour to complete the SOW will be provided by Australian permanent residents.
32. Stipulate all significant projects until 2026 that may stretch your company’s capacity.

33. Please stipulate any further competitive discriminators that have not been identified in the answers to previous questions.

## **Closing date for Expression of Interest:**

26<sup>th</sup> May 2023