



BAE SYSTEMS

**Expression of Interest:
Provision of Outfit Accommodation Supply and
Installation 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
CRDL	Contract Data Requirement List
D&P	Design and Productionisation
DISP	Defence Industry Security Program
EOI	Expressions Of Interest
EVMS	Earned Value Management Systems
FOC	First of Class
GCS-A	Global Combat Ship-Australia
HCFP	Hunter Class Frigate Program
ILS	Integrated Logistic Support
OQE	Objective Quality Evidence
RAN	Royal Australian Navy
RAP	Reconciliation Action Plan
SHE	Safety, Health and Environment
SOW	Scope of Work
T26	British Type 26 Global Combat Ship
ZX	Zone Review



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1. PREFACE

ASC Shipbuilding are seeking Expressions of Interest (EOI) for Outfit Accommodation Supply and Installation Services to support the Hunter Class Frigate Program (HCFP).

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

The ASC Shipbuilding'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 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 Outfit Accommodation Supply and Installation 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. Acknowledgement 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. This is included in the ICN questionnaire.
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 and submitted as part of the EOI response. This is included in the ICN questionnaire.

3. SCOPE OF WORK (High Level)

Contractors wishing to submit an Expression of Interest are advised that the current methodology for the provision of Outfit Accommodation Supply and Installation Services is to be a "turnkey" solution meaning interested contractors are required to be able to provide a complete end to end critical capability comprising of:

- Upfront and continuous in house engineering and naval architecture support, with complete accountability and direct feedback link to the incumbent design authority,
- Capability to support the live 3D model to produce fit for production design outputs including information to support internal Design Zone (ZX) reviews.
- Compartmental ownership where the contactor has been designated responsibility to ensure full approval/delivery through the design review.
- Compliance with and a thorough understanding of Lloyd’s Registers Rules, SOLAS, Australian Defence and Australian Standards for the marine and habitation environments.
- Ensure all materials and equipment supplied comply with Hunter Class shock, environmental and safety requirements.
- Supply and management of equipment mandated in Procurement Packages (Procpacks) along with all applicable Contract Data Requirements (CDRL) and Objective Quality Evidence (OQE) to agreed schedules. Contractor will be required to review each procpack, providing feedback and recommendation for alternatives for any item that doesn’t comply with current Australian requirements or where an opportunity to further maximise Australian Industry Capability (AIC) exists across the build.
- Ability to provide prefabricated compartments for review, inspection and acceptance prior to packaging up, storing and re-installing on-board.
- A suitably qualified in-house team to delivery all aspects of the Scope of Work (SOW) as a turnkey solution including but not limited to:
 - Engineers
 - Naval Architects,
 - Project Managers,
 - Schedulers,
 - Planners,
 - Qualified Tradespeople.
- Testing and commissioning supplied equipment.

In addition to the above, ASC Shipbuilding will require contractors to become an active participant of a fully integrated team working together with ASC Shipbuilding and other onsite contractors to deliver all aspects of the SOW. A cohesive working team is essential to ensure all shipyard activities are coordinated to maintain schedules, milestones, avoid delays or unnecessary conflicts and rework to open or completed work fronts across the ship.

Contractors will at times be required to satisfy and comply with ASC Shipbuilding processes and procedures whilst onsite while maintaining adherence to site, state and Commonwealth SHE standards and legislation.

Earned Value Management reporting will be a key requirement for contractors to complete. A sound knowledge and understanding of this reporting mechanism is



essential with data provided having a direct link into overall HCFP reports which will be issued to and reviewed by ASC Shipbuilding’s end customer.

Contractors will be responsible for the creation and adherence to a detailed schedule which will be imbedded as part of the overall HCFP schedule. The schedule will be tracked and provide confidence to ASC Shipbuilding and the end customer that the contractor will meet its requirements for both material and labour to support the turnkey offering. The current plan is for the contractor to be responsible for storing all procured material offsite, delivering directly to the yard only when work fronts are available for installation on-board.

ASC Shipbuilding and the Commonwealth of Australia is committed to maximising Australian Industry Capability as part of the Project. The successful contractor will be required to provide a detailed plan for how they intend to support this requirement across the Outfit Accommodation Supply and Install scope.

3.1 Batch 1 – First of Class

The Outfit Accommodation Supply and Installation requirements for the HCFP will require the contractor to actively manage the design, supply of material and installation of 280 compartments across each ship. Compartments range from small sanitary spaces / cleaning lockers to large complex galley and medical spaces requiring a high level of outfit and commissioning.

A total of 8946 individual items will be required to be supplied or fabricated prior to installation on board their nominated compartments.

ASC Shipbuilding advises contractors that the requirements and methodologies for FOC will initially be tested during prototyping D&P stage before both projects run concurrently from December 2022.

	03 Deck	02 Deck	01 Deck	1 Deck	2 Deck	3 Deck	4 Deck
Full Compartment Outfit	0	9	37	16	55	41	3
Partial Compartment Outfit	6	10	15	22	46	18	2

Figure 1. Hunter Class Frigate Outfit Compartment Breakdown

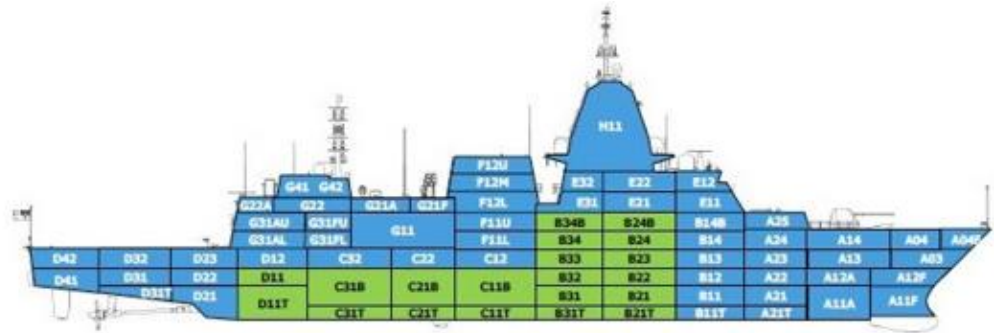


Figure 2. Hunter Class Frigate Diagram

3.2 General Requirements

ASC Shipbuilding will require a contractor who is capable of delivering a complete in-house “turnkey” solution to support completing the Outfit Accommodation work scope.

The successful contractor will be required to supply and install the following as detailed:

- Linings and Partitions (Bulkheads)
 - Material Supply:
 - B Class Inexa panels in various thicknesses including all trims, channels and supports etc.,
 - Allucore panels in various thicknesses including all trims, channels and supports etc.,
 - Stainless Steel and Aluminium Sheet including supporting framework,
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements,
 - Supply of paint for minor touch ups.
 - Contractor Scope:
 - Installation of Inexa and Alucore supplied items,
 - Cutting, drilling and bending of supplied material or supporting material as required for installation,
 - Sealing of all penetration cuts and wet areas in accordance with the ASC specification and nominated product,
 - Mounting of electrical items as determined by ASC, which may require additional cut outs and coring of panels,
 - Touch up paint to damage,
 - Application of care and protection material in the compartment.

- Ceiling Panels
 - Material Supply:
 - DAMPA Solid panels – painted finish,
 - DAMPA Perforated panels – painted finish,
 - Stainless Steel Sheet including supporting framework,
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements,
 - Supply of paint for minor touch ups.
 - Contractor Scope:
 - Installation of all ceilings (cutting and fitting of ceiling panels, ceiling trims, hangers, flashings, etc.),
 - Installation of horizontal and vertical framework grid (drilling, cutting, bolting etc.),
 - Sizing, cutting, drilling and fixing of stainless steel sheets to angle framework,
 - Sealing of panels where required (e.g. medical spaces, galley, serveries and pantries),
 - Installation of items and any cold work to support HVAC, Lighting, Fire Sprinklers and Smoke Detectors systems connections,
 - Install cover plate and flashings as applicable.
- Hatches
 - Supply and install all hatches in Inexa/Alucore/Sheet-metal bulkheads and Dampa Ceilings.
- Electrical Fittings
 - Contractor Scope:
 - Mounting of minor electrical items as determined by ASC,
 - Cut outs as required,
 - Additional coring of panels.
- Roller Shutters and Concertina Doors
 - Supply and installation in compartments designated as Contractor responsibility. Scope includes:
 - Mark out of Bulkhead cut,

- Bolting to the Bulkhead and all associated runners, boxes and trims,
 - Fabricate and install flashings as required,
 - Commissioning.
- COMMISSARIAT, NAFFI & LAUNDRY EQUIPMENT
 - Supply and install all equipment / furniture to support outfitting the Commissariat, NAFFI and Laundry compartments.
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements,
 - Mount all equipment / furniture to foundations as per the compartment layout drawings,
 - Commission equipment as defined by ASC.
- Furniture
 - Material Supply:
 - Supply or manufacture all furniture items required to completely outfit the accommodation spaces throughout the ship.
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements,
 - Supply Paint for minor touch ups.
 - Contractor Scope:
 - Install furniture contained within the compartments designated as contractor responsibility,
 - Breakdown and reassemble furniture items as required to support safe load out on the ship, e.g. bunks and other larger furniture items,
 - Drill and tap foundations as required,
 - Fire weld studs,
 - Install tie downs as required.
 - Connect bunks to the HVAC System.
- Flashings
 - Fabricate, install and seal any flashings required to close out small gaps around furniture,
 - Flashings to match the colour of the furniture to which they are attached.

- Soft Furnishings
 - Contractor to supply and install all ship's soft furnishings. This includes (but not limited to) the following:
 - Curtains, Binds, Pelments, Tie backs, Covers, Mattresses, etc.
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements.

- Shelving / Storage
 - Supply and manufacture all shelving units within the stores areas of the ship.
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements,
 - Install shelves and fabricate as applicable all connecting pieces at work within compartments designated as Contractor responsibility.

- Sanitary Equipment
 - Supply and install sanitary equipment including running of water lines above and behind ceilings and linings.
 - Equipment includes:
 - Shower units
 - Vanities
 - Toilets
 - Sinks
 - Hand dryers
 - Soap dispensers
 - Paper towel dispensers
 - Drinking water fountains
 - Cleaners sinks
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements.

- Medical Equipment
 - Supply and install all medical equipment as required to outfit the medical spaces on board the ship. This may include significant medical equipment.
 - Review and provide alternative material that may support maximising AIC and/or comply with Australian requirements.

Additional requirements to supply and install items may be applicable to those mentioned above which are currently being reviewed and clarified. Any additional scope will be finalised prior to RFT but will not be inconsistent with the scope described above.

Material Supply Category	Individual Items	Occurrences per ship
Roller Shutters and Concertina Doors	7	10
Commissariat, NAFFI and Laundry Equipment	177	370
Furniture and Shelving	708	4059
Soft Furnishings	106	2143
Sanitary Equipment	49	1021
Medical Equipment	22	154

Figure 3. Material Supply Breakdown

3.3 Design and Productionisation Stage – Prototyping

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 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. 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 FOC commences in December 2022.

ASC Shipbuilding has selected the following blocks to test the prototyping process:

Blocks: 10, 16, 03, 04 and 05.



Figure 4. 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.

In support of this, Outfit Accommodation Supply and Installation activities will be conducted exclusively within Blocks 16 and 10 and require the contractor to complete either full or partial compartmental outfitting. The current plan requires the successful contractor to be part of an integrated team within the wider ASC Shipbuilding business to complete 16 compartments to the agreed level of outfit.

	1 Deck	2 Deck
Full Compartment Outfit	1	10
Partial Compartment Outfit	1	2

Figure 4. Prototyping Outfit Compartment Breakdown

Contractors will be required to understand the requirements, plan and complete the work across all phases of the scope ranging from support with delivering engineering outputs all the way through to installation onsite by qualified labour to meet agreed schedules. Contractors will be required to liaise and manage constraints that may be caused through interaction with other trades onsite or when located within contractor nominated compartments.

Activities within the nominated prototype compartments have been selected based on the requirements of the FOC. The below are assumed standard activities which will take place during the Prototyping phase but are subject to change as the prototype plan and SOW further develops with design maturity in the lead up to cut steel in December 2020:

- **Prototype Activities:**
 - Sample furniture production,
 - Sample outfit of accommodation spaces currently planned for fourteen compartments in the 2nd deck area frames 55 – 70 as well as two compartments located on 1 deck,
 - Assist ASC Shipbuilding staff as required with any activities that support the successful completion of hot work within nominated contractor outfit compartments,
 - Trail the use of templates / jigs for marking out installation studs on repeatable furniture and shelving items,
 - Actively manage product change as part of the “turnkey” solution from engineering output to installation on-board,
 - Work to achieve formal agreement by all nominated parties on the minimum standard of workmanship for a full outfit compartment,
 - Intent is to have a practical example of acceptable gaps, repairs, cut outs, etc. which can be referred back to during FOC if a difference in opinion in quality arises.
 - Actively manage and interact with Lloyd’s Register as required,
 - Sample the supply and installation of different care and protection options to determine the optimal solution for implementation on FOC.



Figure 5. The Osborne Naval Shipyard

4. CAPABILITY QUESTIONNAIRE

1. Are you a 100% Australian Owned company? ABN details to be provided.
2. Will your company require engaging in any joint ventures or alternative contracting models to complete the SOW? ASC preference is for the contractor to have the ability to provide the complete "Turnkey" solution capabilities in house. Details to be provided.
3. Are you an Indigenous company?
4. Do you have a Reconciliation Action Plan (RAP) in place?
5. Provide details of the company's management organisation structure along with providing a proposed organisation structure for your complete "Turnkey" offering.
6. How many full time (permanent) employees does your company currently employ? Please provide a location and qualification breakdown for your workforce.
7. Do you have a full time Project Co-Ordinator currently working in your organisation and are they available to be imbedded into the team located at Osborne full time?
8. Provide details on the number of certified engineers and naval architects within your organisation including qualifications and years of experience working on marine and defence projects.
9. How many of these employees hold a current Australian security clearance and to what level? Please specify details.
10. Please provide details on the number of Indigenous/Aboriginal/Torres Islander employees within your organisation? (Stipulate whether employees are Full Time or Part Time)
11. Provide full details including value and location of previous major defence, maritime or commercial projects where your company has completed a "turnkey" solution for

Outfit Accommodation related activities. A detailed overview of each project is required.

12. Provide examples of key projects successfully completed by your in-house engineering department.
13. Stipulate all current and future projects that your company has any involvement in until 2026.
14. Provide annual turnover in AUD.
15. State Professional Indemnity, Product and Public Liability Insurance coverage. Copies of certificates to be provided.
16. State Marine Liability and Marine Products liability insurance or advise if included as part of above policies. Copies of certificates to be provided.
17. State and provided copies of acquired company certification and accreditation.
18. Do you hold a current DISP membership? Confirm level of membership and years held.
19. Confirm that your organisation has the capability and a clear understanding of the complexities of this Statement of Work provided in the Expression of Interest and that a true in-house "turnkey" offering could be provided to include:
 - a. Engineering,
 - b. Design Support,
 - c. Project Management,
 - d. Earned Value Management Reporting / Planning / Scheduling,
 - e. Material Supply and Management,
 - f. Prefabrication,
 - g. Meet and maintain compliance with OQE, CDRL, ILS requirements,
 - h. Trained and qualified in house personnel,
 - i. Defence security requirements.
20. Does your company have previous experience with supplying all materials identified in the High Level SOW for Outfit Accommodation projects within Australia? Examples to be provide and level of involvement: e.g. sourced, manufactured, fabricated etc.
21. Do you understand the requirements for importing / supplying medical equipment into Australia? Confirm the process that your organisation would follow.
22. Have you previously supplied, installed and commissioned medical equipment onto an Australian Naval Vessels? Please detail equipment supplied and if you were responsible for undertaking the commissioning.
23. Do you have South Australian warehouse capabilities to safely store offsite completed prefabricated compartments which includes all equipment, furniture and fittings along with the ability to delivery to the yard only when required as per an agreed schedule?
24. Do you have a clear understanding of the requirements for providing CRDLs, ILS and OQE documentation? Please provide examples of experience.

25. Provide details of how your company can support ASC Shipbuilding's commitment to AIC. Confirm that all labour to complete the planned SOW will be provided by Australian permanent residents. Detail any areas based on your knowledge and previous experience with Outfit Accommodation work scopes where you see that ASC Shipbuilding could potentially look to maximise its AIC opportunities.
26. Provide details of previous projects your company has completed Earned Value Management reporting.
27. Provide details of three separate references for your company from previous Outfit Accommodation projects preferably in the defence sector.
28. Stipulate any further competitive discriminators currently not identified including how your organisation would collaborate as a team sharing data, schedules and resources if required to ensure best for program outcomes are achieved.

Closing date for expression of interest:

4.00PM ADST on Friday 29th November 2019