



Defence Equipment & Support

Statement of Technical Requirements

Schedule 2 to 708901450 -BOATS/0011 Workboats - In Service Support

Equipping and Supporting our Armed Forces

Issue Date: 05/11/2023

Contents

PART 1	: Project Overview	3
1.	Background	3
2.	Operational Context	3
3.	Support Requirements	
4.	Overarching Requirements	
PART 2	: RELATIONSHIPS WITH ENGINE CONTRACTORS	12
1.	Delivery of Engine Support	
PART 3	: CLASS REQUIREMENTS	14
1.	Class Requirements	
2.	Class Taskings	16
3.	Supply of Codified & Uncodified Spares	
4.	Post Design Services (PDS)	
APPENDIX A - SUMMARY OF BOAT ACCEPTANCE OPTIONS		



STATEMENT OF TECHNICAL REQUIREMENTS AND PRICING

General

The Statement of Technical Requirements (SOTR) including pricing shall comprise of this document and Schedule 2A-2H, which contains the Pricing Structure and comprise the following worksheets:

- Table 0 Input Sheet
- Annex A to Table 0 Input Sheet
- Table 1 Planned & Unplanned
- Table 2 Tariff Definitions
- Table 3 Tariff Transportation
- Table 4 Spares (SWB Only)

Where further detail on a requirement is provided within Schedule 2A-2H, the relevant section and/or SOTR line item is referenced within this Schedule 2. Both documents should be consulted to understand the entirety of the requirement.

Part 1: Project Overview

1. Background

- 1.1. The Boats team is responsible for maintaining worldwide delivery of safe, capable and available craft to a diverse user community (Royal Navy, Royal Marines, Army, MOD Police, MOD A Block, Permanent Joint Operating Bases (PJOB), Royal Fleet Auxiliary (RFA), and Cadets) thus enabling them to carry out their endorsed tasking in roles relating to maritime operations, responsive force, adaptive force, extended readiness and training, as well as Adventurous Training and Cadet Forces.
- 1.2. In order to deliver these responsibilities, the Boats team maintains a portfolio of circa 2700 boats across circa 99 classes. At present Boats maintain the majority of these existing inservice Boats utilising the Boats In-Service Support (BISS) Contract, split into 11 Lots which deliver to all the above User Groups. Currently the Workboats are supported as part of the Workboat Delivery Contract with the Original Equipment Manufacturer (OEM) and expires on 31 March 2024; after this date support will continue to be contraAMENcted separately as a distinct group of boat classes with similar support requirements, common supply chains for most spares and equipment, and strong configuration control.
- 1.3. The objective of the requirement described within this documentation is to continue providing in-service support to the Workboats from across multiple User Communities, thus providing ongoing capability delivery.

2. Operational Context

2.1. The Authority's current Workboats Boats fleet has been procured to meet distinct User Requirements to provide each group with Hydrographic Survey, Officer Training, Route Survey, Passenger Transfer, Dive Support, and General Workboat capabilities. Each of these capabilities are delivered through a fleet of 35 Workboats across 10 User Groups. However, as with any mechanical and electrical systems, the Boats require regular maintenance and repair to keep providing this capability, so that Boats will continue to provide key capabilities to military Users for the foreseeable future.

- 2.2. The maintenance requirements for the MOD Boats fleet consist of both planned and unplanned elements. Planned maintenance includes activities that occur regularly, either on a calendar-based periodicity or based on the usage of the platforms. These activities are relatively predictable, and as a result the Authority will endeavour to inform industry of the proposed throughput of planned work for each Financial Year as early as possible. Unplanned work is generally in response to faults, failures or operational damage; by its nature it is very unpredictable. For this reason, the Authority has elected to retain a Framework Arrangement structure for these requirements, in order to maintain maximum flexibility to react to changing events.
- 2.3. The Authority will also require short-notice rectification of Operational Defects (OPDEFs) for some craft, which will result in unplanned maintenance activities. OPDEFs will be reported by front-line military personnel in accordance with the criteria in Table 1.

	OPDEF Effect Categories	
Α	Major capability inoperative.	
В	Major capability significantly degraded.	
С	All other OPDEFs.	
	Repair Indicators	
1	Immediate rectification required to meet ships commitments or programme. Repair will be ships primary aim and override existing programme intentions.	
2	Rectification required as soon as possible to meet future commitments or programme. Repair will be pursued within existing programme.	
3	Repair/Resolve during current or next Fleet Time Support Period; whichever is sooner.	
4	Repair or resolve during current or next Upkeep Period; or equivalent period whichever is sooner.	

Table 1 - OPDEF Reporting Criteria

- 2.4. Additionally, this SOTR contains a number of 'non-upkeep' requirements. The Authority on occasion finds it necessary to maintain, update or augment the capability provided by MOD Boats by placing tasks under this contract. The objective of each of these types of task will be made clear by the Authority on placement of a task, but may include (but not be limited to):
 - 2.4.1. Update of platforms to meet emergent requirements, maintain safe operations, manage obsolescence or meet new legislation. The end result of this will be to maintain the capability of the platform in question.

2.5. The maintenance requirements for these craft will be broadly similar due to the modular nature of the Workboats with roughly 80% equipment commonality between variants. The technical requirements within this documentation are the Authority's best estimate of the planned and unplanned activities that will be performed under this contract. However, all estimates of number of refits, number of hours used, and other assumptions made in this SOTR are for costing purposes only, are subject to change following the Contract Commencement Date, and do not result in any commitment by the Authority to perform that work.

3. Support Requirements

- 3.1. In order to deliver the objective the Authority will contract for a number of support requirements. These requirements are summarised below, however, the scope has been tailored to account for the specific requirements of the platforms maintained. When reviewing the tailored requirements, these paragraphs should be referred back to for the relevant definitions of the work involved.
- 3.2. To commit to performing any work, the Authority shall submit to the Contractor MOD Boats Form 1020 Work Request Form. This form will identify the requirements listed below that are relevant for that task.
- 3.3. In order to minimise costs to the Authority and downtime associated with transportation of the Boats, the Contractor shall undertake work at the Boat's usual location wherever possible. Where this is not feasible, the Contractor shall undertake the work at a facility which is within:
 - 3.3.1. 6 hours driving time by road for road transportable craft, or;
 - 3.3.2. 200 miles transit distance by sea of the Boat's location
- 3.4. Clause 3.3 shall not apply to boats based overseas. For this Contract, the Contractor shall undertake work in Gibraltar for Boat(s) based there. For any other boats based overseas, the Contractor shall endeavour to undertake work at the Boat's usual location wherever possible. The Authority recognises that skills and infrastructure may not be available at these locations to conduct every task; however, any decision to move boats from their usual location must be agreed with the Authority. It should be assumed that minor work is expected to be performed in-theatre, and any decision to move boats will only be taken if the time and expense of doing so is commensurate to the value, scale and operational importance of the work being carried out. The Authority reserves the right to challenge any decision to remove the Boat from its usual location. The 'usual location' of the Boat when used in this context refers to the country or territory that the Boat is most commonly located in and operated from.
- 3.5. The scope of tasks which may be contracted for via MOD Boats Form 1020 Work Request Form includes those listed in Paragraphs 3.5.1 to 3.5.24 below. Contractors should note that they should only perform the following requirements when directed to by the Authority via the submission of MOD Boats Form 1020 Work Request Form.
 - 3.5.1. 1st and 2nd Line Planned Maintenance: The Contractor shall deliver calendar and hours based electrical, mechanical and hull related low-level maintenance in accordance with the maintenance schedule for the craft. This would normally be performed by military unit maintainers, but where this is listed as a requirement the Authority does not have Suitably Qualified and Experienced Personnel (SQEP) employed to perform the activity, and has therefore asked for it to be provided by the contractor, usually at the User's premises. Work is to be conducted by a competent subject matter expert (SME) who is empowered to ensure that the Boat is safe to operate and that any unscheduled downtime is avoided.

- 3.5.2. 3rd and 4th Line Planned Maintenance: The Contractor shall deliver calendar and hours based electrical, mechanical and hull related maintenance based on the maintenance schedule and material state of the craft. This work is beyond the capabilities and facilities of military unit maintainers, and therefore will be conducted by a competent contractor, usually at the contractor's premises. Work is to be conducted to ensure that the Boat is safe to operate and that availability and capability for at least one major planned upkeep period is maintained.
- 3.5.3. Emergent Tasks: The Contractor shall perform any work that arises unexpectedly whilst carrying out Planned or Unplanned Maintenance activities, surveys or trials. Following agreement of the Emergent Task with the Authority, prompt action is required in order to restore capability and/or make the Boat safe to operate. Emergent Tasks shall be communicated to the Authority with all necessary detail and a Firm Price, if feasible. If a Firm Price cannot be provided, the Contractor shall provide a Limit of Financial Liability which must not be exceeded without further authorisation from the Authority. If more Emergent work is discovered for a task where a Firm Price has been agreed, the Contractor shall treat this as an additional Emergent Task. If the cost of the work exceeds £500 Materials, £500 Specialist Sub-Contractor, or 16 hours work, the Contractor shall provide the Authority with a breakdown of costs per task before commencing the task. The Contractor shall provide the Authority with an email detailing the issue and work required for an Emergent Task containing (but not limited to) a full description, photos, and (if necessary) videos to provide the Authority with sufficient detail to approve the work. If a task is time-sensitive, a phone call to describe the work required is sufficient, but must be followed up with the email detailed above within the same working day.
- 3.5.4. <u>Unplanned Maintenance:</u> The Contractor shall perform defect rectification work identified by the Authority for which the Authority does not have SQEP employed to perform the activity. In order to minimise unscheduled downtime all unplanned maintenance should be completed at the Boat location whenever possible. The Contractor shall perform an initial inspection and carry out the repair (if possible) at the Boats location. This shall take place the same working day if the Contractor is informed before 11:00, otherwise before 10:00 the following working day. Unplanned maintenance is required to re-instate the defective equipment, system, or function back to its designed intent in order to return the Boat to a material state such that it can meet its operational requirement and be safe to operate.
- 3.5.5. On-site Support: The Contractor shall provide support during core hours (Monday to Friday 08:00 16:00) in order to perform Planned Maintenance, Emergent Tasks, and Unplanned Maintenance at the Authority's premises.
- 3.5.6. Out of Hours Support: The Contractor shall provide technical advice via telephone and on-site technical support to the Authority outside of the core hours (Monday to Friday 08:00 16:00) in order to perform Unplanned Maintenance required to rectify Operational Defects (OPDEFs).
- 3.5.7. <u>Transportation</u>: The Contractor shall transport Boats either by road or sea (as appropriate for the Boat Class in question) between the User location and the Contractor facility (and vice-versa). Where the Contractor is tasked with Transportation, the Contractor shall also be responsible for the material state, security, and custody of the Boat during transportation and the safety of the transportation procedures, including adherence to any tie-down schemes and legal requirements. The Authority and Contractor shall sign over Care and Protection between the relevant parties during any handovers as part of the transportation activities. Note: 15m Platform variants require police escort for road transportation.

- 3.5.8. Storage: Outside of the requirement to store Boats during Planned and Unplanned Maintenance activities, the Contractor shall store Boats on behalf of the Authority. Storage shall be in a secure environment which will maintain the material state of the craft. This requirement will not include winterisation, maintenance or reactivation; if required these will be tasked separately.
- 3.5.9. <u>Codified Spares</u>: The Contractor shall supply NATO codified spares into the designated stores facility, and any parts which are required for Planned Maintenance, Emergent Tasks, Additional Tasks, and Unplanned Maintenance.
- 3.5.10. <u>Un-Codified Spares</u>: The Contractor shall supply spares and equipment that has not been codified by the Authority. This includes any parts which are required for Planned Maintenance, Emergent Tasks, Additional Tasks, and Unplanned Maintenance.
- 3.5.11. <u>Floating Maintenance Cradles:</u> The Lot Contractor shall supply new Floating Maintenance Cradles, perform 3rd and 4th line planned and unplanned maintenance, supply spares, conduct annual safety surveys, and conduct user training.
- 3.5.12. <u>Trailers</u>: The Contractor shall supply new Trailers, and perform 3rd and 4th line planned and unplanned maintenance on existing trailers which are associated with the relevant Boat. Where the trailer is to be used on the public highway, the Contractor shall ensure that any 3rd and 4th line planned and unplanned maintenance undertaken will result in the trailers continuing to comply with current road legislation, including the Road Vehicles (Construction and Use) Regulations 1986, as amended and the Road Vehicles Lighting Regulations 1989, as amended.
- 3.5.13. <u>Cradles</u>: The Contractor shall provide new Cradles, and perform 3rd and 4th line planned and unplanned maintenance of existing cradles which are associated with the relevant Boat.
- 3.5.14. Classification Society: The Contractor shall task a classification society to complete initial, annual, intermediate or renewal surveys as required to ensure that the Boat meets the requirements of MGN 280 or other standard agreed with the Authority. The Contractor shall task a classification society to assess work required meets the requirements of MGN 280 or other standard agreed with the Authority when repairs or proposed design changes impact the Key Hazard Areas:
 - Structures
 - Buoyancy and Stability
 - Propulsion and Manoeuvring Systems
 - Fire
 - Escape, Evacuation and Rescue
 - Navigation
 - Explosives
 - Aviation
- 3.5.15. <u>Dynamic Machinery Trials (DMTs)</u>: The Contractor shall conduct DMTs before a refit or major work package, in accordance with the specification set out by the Authority, to demonstrate the baseline performance and equipment or system condition before work commences. The Authority shall be present for these activities unless prior approval is obtained.
- 3.5.16. <u>Harbour Acceptance Trials (HATs):</u> The Contractor shall conduct HATs following a refit or major work package, in accordance with the specification set out by the Authority, to demonstrate the performance against the DMTs and acceptable functionality of equipments and systems worked on during the refit or major work

package. The Authority shall be present for these activities unless prior approval is obtained.

- 3.5.17. <u>Sea Acceptance Trials (SATs)</u>: The Contractor shall conduct SATs following a refit or major work package, in accordance with the specification set out by the Authority, to demonstrate the performance against the DMTs and acceptable functionality of equipments and systems worked on during the refit or major work package. The Authority shall be present for these activities unless prior approval is obtained.
- 3.5.18. Work Demonstration: The Contractor shall conduct a Work Demonstration following Unplanned Maintenance to demonstrate the acceptable functionality of the equipment or system worked on during the Unplanned Maintenance activity. The Authority shall receive written confirmation and either photo or video evidence this has been completed.
- 3.5.19. <u>Documentation Management</u>: The Contractor shall update the technical documentation to the agreed standard so that it fully represents the current material state of the Boat Class.
- 3.5.20. <u>Support to Safety and Environmental Cases</u>: The Contractor shall provide assistance to the update and revision of the Safety and Environmental Case of the Boat Class and supporting equipment.
- 3.5.21. Post Design Services (PDS): The Contractor shall provide design-related activities as tasked by the Authority to maintain the Boat's capability through its in-service phase. In addressing any PDS tasks, the Contractor shall ensure that any solution/proposal submitted considers the impact on the operational, safety, and classification society certification aspects of the Boat together with future supportability. In fulfilling any PDS tasks, the Contractor shall meet the requirements of DEF-STAN 05-57 Configuration Management of Defence Materiel.
- 3.5.22. <u>Fresh Water Systems:</u> The Contractor shall operate a process to provide assurance that all Boats with fresh water systems are maintained, tested and recorded to demonstrate compliance with water hygiene regulations including measures to prevent legionnaire's disease.
- 3.5.23. Codification: The Contractor shall, on demand of the Authority or agreement by the Authority of a suggestion by the Contractor, codify spare parts required for maintenance and continued operation of the Boat Class in question by following the requirements of DEFCON 117.
- 3.5.24. Ancillary Equipment: The Contractor shall provide new Boat Ancillary Equipment, and perform 3rd and 4th line planned, unplanned maintenance and training of new and existing ancillary equipment which is associated with the relevant Boat.
- 3.5.25. <u>Training</u>: The Contractor shall provide Maintainer and Train-the-Trainer Training for, but not limited to, the following:
 - Yanmar Engine
 - Panda Fischer Generator
 - Motivair High Pressure Air System.
- 3.5.26. <u>Software and Firmware Management:</u> The Contractor shall keep a record of all Software and Firmware versions for all relevant equipment on the Boats. The Contractor shall check these versions Annually to ensure the most up to date Software and Firmware is installed.

- 3.5.27. Specialist Maintenance: The Contractor shall conduct Specialist Planned and Unplanned Maintenance of equipment when stipulated by the Equipment or System OEM. This includes all maintenance in which the OEM identifies that only appropriately trained personnel shall conduct the maintenance activity. If the Contractor has evidence that personnel that work directly for them can conduct this maintenance then only the WAHR for Maintenance, upkeep and repair (for Planned & Unplanned work) must be used. If the Contractor requires appropriately trained personnel to be Sub-Contracted for the work, the Specialist Sub-Contractor cost may be uplifted by the percentage in Schedule 2A-2H. The Contractor shall conduct Specialist Maintenance on, but not limited to, the following:
 - 3.5.27.1. Yanmar Engines
 - 3.5.27.2. Fischer Panda Generator
 - 3.5.27.3. Harken Rail System
 - 3.5.27.4. Maxwell Windlass
 - 3.5.27.5. Palfinger Crane
 - 3.5.27.6. Hamilton Wateriet
 - 3.5.27.7. Sailor VHF DSC
 - 3.5.27.8. Motivair High Pressure Air System including Bauer Compressor
 - 3.5.27.9. Ambex/OSI Warship Electronic Chart Display and Information System (WECDIS)
- 3.5.28. Government Furnished Equipment (GFE) Management: The Contractor shall allow third party Contractors access to attend the Boats to conduct Maintenance activities on GFE in-situ during the Contractor's Planned and Unplanned Maintenance activities.
- 3.5.29. <u>Technical Reporting:</u> The Contractor shall submit Technical Reports to provide technical updates to the Authority. Part 3 provides more information.
- 3.6. The Contractor shall perform the activity in Paragraph 3.6.13.7.3 below as a matter of routine during their performance of the contract; they will not be separately described on any Work Request Form. The Contractor shall preform the task below as part of the ongoing contract management as defined by the Authority.
 - 3.6.1. Attendance at Boats Meetings: The Contractor shall attend Boats planned meetings held at either the Contractor's or the Authority's premises. These meetings will take place once a month to review progress and performance against the contract, unless otherwise agreed with the Authority. The Contractor will note that these meetings are not subject to separate personnel Travel and Subsistence (T&S) claims.
- 3.7. The Contractor shall perform the activities in Paragraphs 3.6.1 to 3.7.3 below as a matter of routine during their performance of the contract; they will not be separately described on any Work Request Form; there will be a monthly Limit of Liability (LoL) for Technical Support which the Contractor can book hours against and the Contractor shall perform any of the relevant tasks below as impacted during the completion of any In-Service Support Requirements and as part of the ongoing contract management as defined by the Authority.
 - 3.7.1. Configuration Management: The Contractor shall manage the Boat Class configuration in line with the principles of DEFSTAN 05-57 "Configuration of Defence Materiel". Part 3 provides more information.
 - 3.7.2. Obsolescence Management: The Contractor shall manage Boat obsolescence in line with the principles of IEC 62402 Edition 2 2019 (Obsolescence). Part 3 provides more information.

3.7.3. <u>Reliability Monitoring</u>: The Contractor shall monitor, record and manage Boat reliability. Part 3 provides more information.

3.7.4. <u>Security Management:</u> The Contractor shall monitor, record and manage Boat security. Part 3 provides more information.

4. Overarching Requirements

- 4.1. Throughout the contract, the Contractor shall ensure that all work completed complies with following Safety and Security Requirements.
- 4.2. The Contractor shall manage security of MOD Boats, equipment, materials and information whilst in their care and custody. This shall include but not be limited to:
 - 4.2.1. Preventing unrestricted public access to their premises where the Authority's Boats, equipment and materials will be located;
 - 4.2.2. Control and monitoring of entry and egress from their premises.
- 4.3. The Contractor shall have additional security measures and policies to prevent theft or physical damage to the Authority's craft, equipment and materials during silent hours and during weekends or holidays when their site(s) are closed for business.
 - 4.3.1. Systems & Information Security. The Contractor shall ensure the cyber security of the Authority's data and/or information classified as OFFICIAL-SENSITIVE. This shall include but not be limited to:
 - 4.3.1.1. Systems used to capture data/information.
 - 4.3.1.2. How information is classified and accessed.
 - 4.3.1.3. How persons who can access the data are vetted.
- 4.4. Safety and Environmental Management. Under UK law, all employers have a duty of care to their employees, the general public and the wider environment. For the Authority, this includes an obligation to manage the safety risk associated with military systems and their operation. In accordance with general guidance provided by the Health and Safety Executive, the Authority will discharge this duty by ensuring that, in as far as risks are not judged to be unacceptable, they are reduced to a level which is As Low As Reasonably Practicable (ALARP). Contractor's who undertakes the design, development, manufacture, supply and support of equipment and defence systems for the Authority will be obliged to apply ALARP principles.
- 4.5. The Contractor shall ensure that the equipment and services are safe for its intended purpose through its life and compliant with both Safety & Environment legislation and the Authority's Safety and Environmental policy.
- 4.6. The Contractor shall ensure the work they conduct to perform the tasks in the Statement of Technical Requirements is safe, for a given application in a given environment. This shall include activities of the Contract and any resultant managed sub-contracts, and will include, but not be limited to, the following:
 - 4.6.1. All relevant safety legislation, regulations, standards and MOD Policy are adhered to.
 - 4.6.2. All activities and products comply with the identified legislation, regulations, standards. MOD Policy and specific contractual requirements.
 - 4.6.3. Security, safety and environmental issues are considered from the earliest stage in a programme and used to influence all activities and products. It is essential that security risks, safety risks and project risks are managed together.
 - 4.6.4. Safety and environmental management is implemented as a key element of a harmonised, integrated systems engineering approach.