

Statement of Requirement (SoR)

Reference Number	1000170308
Version Number	1
Date	19/10/2021

1.	Requirement
1.1	Title
	Additional Defender ROVs for MIE ROV Project
1.2	Summary
	The Dstl MIE ROV project (iCAS No. 711179) project requires three additional VideoRay Defender ROVs and ancillary equipment in order to deliver a proof of concept demonstration to the customer.
1.3	Background
	The Dstl MIE ROV project is developing a capability to reduce the danger to clearance divers undertaking MIE. The project is three-years in duration. Use of an ROV for underwater Explosive Ordnance Disposal and Search has already been proven and this project will integrate this with current MCM/MIE capabilities and autonomous surface vessels to provide the end-to-end remote capability required by the customer.
1.4	Requirement
	<p>The Dstl MIE ROV Project Team require three additional ROV systems to deliver a proof-of-concept demonstration to the customer in February 2024. These additional ROVS will be used for:</p> <ul style="list-style-type: none">Beta testing by Royal Navy divers of the MIE solution as it develops over the three years of the project. This will ensure that the solution is viable and meets the user's needs. It will also bring capability into the hands of the users more quickly. This will require two additional ROVs.

- Developing some additional MIE capability (additional weapon choices) identified by the user as necessary to deliver a comprehensive MIE capability. This will require one additional ROV.

To deliver the concept each ROV system must have the following capabilities:

- Be man portable (maximum two-man lift for all system items).
- Be able to be operated in a maritime environment in adverse weather conditions (system surface items to have adequate waterproofing).
- Be able to operate at depths of up to 250m and 250m horizontally from its support craft or shore base.
- Be equipped with multiple manipulators with multiple jaw configurations able to lift a mass of at least 11kg, cut wire/rope and perform dextrous operations with ropes and connectors to connect items together.
- Be able to work in a current of at least one knot and ideally up to 4 knots.
- Have built in autonomy to provide ROV stabilisation (e.g. auto hover, direction lock) and assisted search capabilities (e.g. race-track search of a defined area).
- Be equipped with High Definition cameras (with LED lighting) and high-definition 2D sonar to enable items of interest to be located in zero visibility.
- Be equipped with navigation systems (GPS, Doppler and Inertial) to provide accurate ROV location on the surface and underwater.
- Be maintainable by the user (component replacement) with only basic training. To include a suitable spares package.
- Be easy to use (intuitive) with low skill fade. Include a training and support package

In addition the customer has stipulated that, in order to reduce the training and support burden, the ROV must be a VideoRay Defender as they already have one of these systems in service with two more currently being procured.

The above requirements can be realised by purchasing the following Commercial Off The Shelf (COTS) items from Atlantas Marine. Note, these are identical to items recently purchased by Dstl for this MIE ROV project:

No	Part No. (where applicable)	Specification	Total Qty
1	71036	Basic Defender ROV package	3
	70384	400m PPT - Neutral Performance Tether	3
	70452	XTDS - Tether Deployment system with 400 volt slip ring	3
	70236	100m PPT - Neutral Performance Tether.	3
	50240	Tether Bag Backpack.	3
	71042	Autopilot System (DVL, GPS & Integration kit)	3
	71047	BluePrint Oculus M750d Imaging Sonar and integration kit.	3
	70824	MSS Rotating Manipulator and five jaw heads.	3
	71532	Defender Module Spares Kit	3

		72040	Greensea EOD Workspace software.	3
		MSS- TRAIN-UK	3 day training course for up to 5 candidates	3
			Delivery to DSTL and Import charges	3
	2	72271	Greensea EOD Workspace software, annual support	4
	3	CSMP	CSMP Support Package	4
	4		Annual Service for a Defender ROV	4
1.5	Options or follow on work			
	None			

1.6	Deliverables & Intellectual Property Rights (IPR)						
Ref.	Title	Due by	Format	TRL*	Expected classification (subject to change)	What information is required in the deliverable	IPR DEFCON/ Condition
N/A. All items are COTS							

*Technology Readiness Level required

1.7	Standard Deliverable Acceptance Criteria
	N/A. All items are COTS
1.8	Specific Deliverable Acceptance Criteria
	N/A. All items are COTS

2.	Quality Control and Assurance
2.1	Quality Control and Quality Assurance processes and standards that must be met by the contractor
	<input type="checkbox"/> ISO9001 (Quality Management Systems) <input type="checkbox"/> ISO14001 (Environment Management Systems) <input type="checkbox"/> ISO12207 (Systems and software engineering — software life cycle) <input type="checkbox"/> TickITPlus (Integrated approach to software and IT development) <input checked="" type="checkbox"/> Other: (Please specify below) N/A. All items are COTS and covered under warranty and the servicing package.
2.2	Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement
	N/A. All items are COTS

3.	Security	
3.1	Highest security classification	
	Of the work	OFFICIAL SENSITIVE
	Of the Deliverables/ Output	UNCLASSIFIED
3.2	Security Aspects Letter (SAL)	
	Not applicable If yes, please see SAL reference- <i>Enter iCAS requisition number once obtained</i>	
3.3	Cyber Risk Level	
	Not applicable	
3.4	Cyber Risk Assessment (RA) Reference	
	313155423 If stated, this must be completed by the contractor before a contract can be awarded. In accordance with the Supplier Cyber Protection Risk Assessment (RA) Workflow please complete the Cyber Risk Assessment available at https://suppliercyberprotection.service.xgov.uk/	

4.	Government Furnished Assets (GFA)
GFA to be Issued - No	

5.	Proposal Evaluation criteria
5.1	Technical Evaluation Criteria

5.	Proposal Evaluation criteria
5.1	Technical Evaluation Criteria
5.2	Commercial Evaluation Criteria