

Serapis Tasking Form

Tasking Form Part 1: *(to be completed by the Authority's Project Manager)*

To:	Lot 4 QinetiQ Plc	From:	Dstl
Any Task placed as a result of your quotation will be subject to the Terms and Conditions of Framework Agreement Number: LOT 4 DSTL/AGR/SERAPIS/AII/01			
VERSION CONTROL			
Version control please ensure this is kept up to date 020921 initail Draft for Dstl 020921_spb returned draft form Dstl 140921_Final draft for Dstl 211021 Updated with new RAR, removed casandra from title			
REQUIREMENT			
Proposal Required by:	Oct 21	Task ID Number:	AII85
The Authority Project Manager:	[REDACTED]	The Authority Technical Point of Contact:	[REDACTED]
Task Title:	DCEAT WP 3.1 TDP-1 - High Threat Radio Communications (HTRC) Electronic Protection Measures – Land Environment		
Required Start Date:	Oct 21	Required End Date:	15/03/2022
Requisition No:	1000168431	Budget Range	~£350k (Year 1)
TASK DESCRIPTION AND SPECIFICATION			
Serapis Framework Lot	<input type="checkbox"/> Lot 1: Collect <input type="checkbox"/> Lot 2: Space systems <input type="checkbox"/> Lot 3: Decide <input checked="" type="checkbox"/> Lot 4: Assured information infrastructure <input type="checkbox"/> Lot 5: Synthetic environment and simulation <input type="checkbox"/> Lot 6: Understand		
Statement of Requirements (SOR) Background StratCom is engaged with numerous stakeholders within the Ministry of Defence (MOD), [REDACTED]. These must meet both UK sovereign needs and also offer interoperability options with coalition partners. [REDACTED]			

[REDACTED]

Previous work carried out under CSIS (project name cassandra) proposed an EPM scheme compatible with the NBWF higher protocol layers [REDACTED] The work in these WPs aim to further develop the EPM proposals and enable the UK to provide additional input to the LOS CAT on the effectiveness of the proposed waveform and **inform a UK sovereign VHF EPM capability[REDACTED].**

[REDACTED]

Requirement

This requirement is to support a future EPM VHF NBWF for LE TACCIS, [REDACTED] by performing technical assessments and studies of the techniques proposed for the NBWF S5630 Ed2 EPM capability (PHY Layer). [REDACTED]

The Tasks must be undertaken by vendors with proven capability of producing radio equipment with EPM and networking or broadcast capabilities and are in service in the UK (e.g. UHF SATURN).

As part of the proposal the team should highlight how the capability will be maintained and enhanced by developing SQEP.

Work Package 1 (essential) – [REDACTED]

[REDACTED] . This should include performance trade-offs, [REDACTED] and implementation complexity. [REDACTED]

[REDACTED] The analysis shall include the capability [REDACTED] the two S5630 proposed EPM hop-rates.

[REDACTED] The output of this work package should be a report on the hop-rate [REDACTED]. It should make a recommendation together with suitable justifications for a single or multiple hop-rate [REDACTED].

Work Package 2

[REDACTED]

The output of this work package should be a report containing a description of the proposed MCS and synchronisation schemes, [REDACTED]

Work Package 3 (Option)

Threat assessments often consider the worst-case scenario of a single jammer attacking a single communications network. [REDACTED] Assumptions should be made relating to the communications waveform's tolerance of blocked and partially blocked hops, and a follower-jammer's ability to detect and respond. Multiple networks [REDACTED] with a common waveform should be considered. This analysis should include the effects of terrain and clutter.

The output of this work package should be a detailed report describing the analysis and how this impacts decisions on EPM characteristics such as hop-rate, [REDACTED] and synchronisation methods. This could be combined with the report from WP2.

Work Package 4

Taking account of the outcome of WPs 1-3 propose a two year costed technical demonstrator programme. The TDP shall aim to evaluate and demonstrate at RF the new PHY layer together with S5631/32 or vendors own NET/LINK layer capabilities. The TDP will support and undertake the evaluation and demonstration of the waveform's EPM, throughput, latency and recovery performances for a range of test conditions that shall be proposed for the TDP. The number of nodes required and how they may be instantiated to make up the TDP shall be proposed and justified, although an assumption is that cost will limit this to 5 nodes. This should include the ability to support recommendations of alternative NET/LINK layer capabilities and their parameters to aid future EPM options, rather than be constrained by those proposed. The equipment shall be delivered to DSTL for further testing. WP4 will inform an MOD Decision Point to proceed or not with the High Threat Radio Communications (HTRC) Technical Demonstrator WP5.

Work Package 5 TDP

Taking account of the outcome of WP 4, build TDP under DEFCON 703 and undertake the agreed test, evaluation and demonstration of the waveform. Upon completion, the TDP will be delivered to Dstl. Delivery shall include all appropriate documentation, software and equipment to realise a five node (tbc) EPM network. Produce final report including all test results, analysis and recommendations.

Innovation Benefits and Exploitation Plan (IBEP)

By conducting the work the following are anticipated.

1. Innovation – (i.e. what are we building on?)
 - a. General know-how and previous knowledge of platform systems
 - b. S&T trends
2. Benefits (i.e. what will the contracted stakeholders get from this?)
 - a. Development of new capabilities
 - b. Increased collaboration between industry, academia and government.
 - c. Development of SQEP
3. Exploitation (what are the artifacts that Dstl will get that can be more widely exploited)
 - a. Reports and papers
 - b. Understanding of technical barriers
 - c. Know-how in the wider supply chain for design tools
 - d. International influence
4. Plan (what's the plan for exploitation)
 - a. Development / input into a standard
 - b. Exploitation and re-use of information for defence purposes
 - c. TDP for wider industry exploitation

Outputs.

Outputs (or artefacts) of the activities that may be exploited more widely include:

- Reports and white papers
- Prototype system descriptions
- Simulations data and models
- Measurement data
- Conference and journal papers
- Threat information

- Illustrative architectures
- Use case

Deliverables.

Deliverables of the project are suggested in in the Deliverables section and will be agreed during proposal development.

An end of FY 22 consolidated report will be required in February/March 2022 highlighting:

- Aims
- Technical Progress
- Achievements
- Exploitable outputs
- Recommendations

Procurement Strategy

☒ Lot Lead to recommend

☐ Single Source / Direct Award

Pricing:

☒ Firm Pricing

☐ Ascertained Costs*

☐ Other*

Firm Pricing shall be in accordance with DEFCON 127 and DEFCON 643

Ascertained Costs shall be in accordance with DEFCON 653 or DEFCON 802.

*only at Authority's discretion

Task IP Conditions

Task IP Conditions [REDACTED]	Summary of the Authority's rights in foreground IP (IP generated by the supplier in performance of the contract)
DEFCON 703 <input checked="" type="checkbox"/>	Vests ownership with the Authority
DEFCON 705 Full Rights <input checked="" type="checkbox"/>	Enables MOD to share in confidence as GFI or IRC under certain types of agreements. Can be shared in confidence within UK Government.
OTHER IP DEFCONS: 14* <input type="checkbox"/> , 15* <input type="checkbox"/> , 16* <input type="checkbox"/> , 90* <input type="checkbox"/> , 91* <input type="checkbox"/> , 126* <input type="checkbox"/>	Generally only suitable for deliverables at TRL 6 and above.
BESPOKE IP Clause <input type="checkbox"/> *	Details to be added and agreed by IP Group

* Do not use without IPG advice and approval

Please state in this text box if MOD or the customer has a requirement a) that one or more Other Government Departments is able to share confidentially with their own suppliers, b) to publish but you do not think there is a requirement to own or control the deliverable, or c) to share under a procurement Memorandum of Understanding (MOU).*

*If any of these three issues applies, please contact IPG for advice before completing this form. *Listing research MOUs is not required, but can be a helpful courtesy to the supplier.*

DELIVERABLES

[REDACTED]

DELIVERABLE: ACCEPTANCE / REJECTION CRITERIA

Unless otherwise stated below, Standard Deliverable Acceptance / Rejection applies. This is 30 business days, in accordance with DEFCON 524 Rejection, and DEFCON 525 Acceptance.

Standard Deliverable Acceptance / Rejection:-

Yes ☐ (DEFCON 524 Rejection, and DEFCON 525 Acceptance)

No ☐ (if no, please state details of applicable criteria below)

Deliverable Acceptance / Rejection Criteria:-

If there are any other specific acceptance/rejection criteria you would like to apply to any of the deliverables, please state them here.

Government Furnished Assets (GFA)

ISSUE OF EQUIPMENT/RESOURCES/INFORMATION/FACILITIES (if not applicable, delete table and insert "None" in this text box)

<u>Unique Identifier/ Serial No</u>	<u>Description</u>	<u>Classification</u>	<u>Type</u>	<u>Available Date</u>	<u>Issued by</u>	<u>Return or Disposal Date</u>	<u>Any restrictions?</u>

QUALITY STANDARDS

☐ **ISO9001** (Quality Management Systems)

☐ **ISO14001** (Environment Management Systems)

☐ **ISO12207** (Systems and software engineering — software life cycle)

☐ **TickITPlus** (Integrated approach to software and IT development)

☐ **Other:** (Please specify in free text below)

SECURITY CLASSIFICATION OF THE WORK

[REDACTED]

TASK CYBER RISK ASSESSMENT. (In accordance with DEF STAN 05-138 and the Risk Assessment Workflow)

Cyber Risk Level	[REDACTED]
Risk Assessment Reference	[REDACTED]

ADDITIONAL TERMS AND CONDITIONS APPLICABLE TO THIS CONTRACT

Please ensure all completed forms are copied to DSTLSERAPIS@dstl.gov.uk when sending to the Lot Lead.

Tasking Form Part 2: *(To be completed by the Lot Lead)*

To: The Authority		From: The Lot Lead	
Proposal Reference _____ (attached)			
Delivery of the requirement: The proposal <u>shall</u> include, but not be limited to: <ul style="list-style-type: none"> • A full technical proposal that meets the individual activities that are detailed in Statement of Requirements (Part 1 to Tasking Form). • Breakdown of individual Deliverables, with corresponding Intellectual Property rights applied. • Breakdown of Interim Milestone Payments, with corresponding due dates. • A work breakdown structure/project plan with key dates and deliverables identified. • A list of required Government Furnished Assets from the Authority, including required delivery dates. • A clear identification of Dependencies, Assumptions, Risks and Exclusions which underpin your Technical Proposal. • Sub-Contractors Personnel Particulars Research Worker Form and security clearances (if applicable) 			
COMMERCIAL [REDACTED]			
PRICE BREAKDOWN <i>You are to use the costs detailed in Item 2 Table I in the Schedule of Requirement and at Annex E Table 2 of the Serapis Framework Agreement. Please also provide a price breakdown which should include, but is not limited to: Lot Lead Rates, Sub-contractors costs and rates, travel and subsistence. In support of your Proposal you are requested to provide clear details of all Dependencies, Assumptions, Risks and Exclusions that underpin your price.</i>			
Offer of Contract: <i>(to be completed and signed by the Contractor's Commercial or Contract Manager)</i>			
	£444,635.71 Firm Price £73,607.37 Optional WP3 £2,697,820.08 Limit of Liability for optional years 2-4 Year 2 option total £962,078.60 Year 3 option total £1,103,390.39 Year 4 option total £632,351.09		(ex VAT)
Start Date:	01/02/2022	End Date:	01/09/2022
Lot Leads Representative	Name	[REDACTED]	
	Tel	[REDACTED]	
	Email	[REDACTED]	
	Date	27th January 2022	
Position in Company	Assistant Commercial Manager		
Signature	[REDACTED]		

Core Work – Breakdown [REDACTED]

Core Work – Milestone breakdown costs

Proposed Milestones Payments

Your TMS bid costs shall be included in milestone 1.

The final Milestone must reflect the actual cost of the deliverable, and be greater than 20% of the Task value, unless otherwise agreed with your Commercial POC

Please duplicate the template per milestone table format below as necessary, and rename milestone number accordingly.

[REDACTED]

Future Tasks – Summary

[REDACTED]

Tasking Form Part 3:

To be completed by the Authority's Commercial Officer and copied to the Authority's Project Manager.

1. Acceptance of Contract:		
Authority's Commercial Officer	Name	[REDACTED]
	Tel	[REDACTED]
	Email	[REDACTED]
	Date	15/02/2022
Requisition Number		R1000168431
Contractor's Proposal Number		All85 DCEAT WP 3.1 TDP-1 - High Threat Radio Communications (HTRC) Electronic Protection Measures – Land Environment
Purchase Order Number		[REDACTED]
Signature		[REDACTED]
<i>Please Note: Task authorisation to be issued by the Authority's Commercial Officer or Contract Manager. Any work carried out prior to authorisation is at the Contractor's own risk.</i>		