

Serapis Tasking Form

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

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|--|---|--|---------------|
| To: | Lot 1 Roke Manor Research Ltd | From: | The Authority |
| Any Task placed as a result of your quotation will be subject to the Terms and Conditions of Framework Agreement Number: LOT 1 DSTL/AGR/SERAPIS/COL/01 | | | |
| VERSION CONTROL | | | |
| V1.0 | | | |
| REQUIREMENT | | | |
| Proposal Required by: | 15/07/2022 | Task ID Number: | C68 |
| The Authority Project Manager: | Redacted | The Authority Technical Point of Contact: | Redacted |
| Task Title: | A review of trends in communications technology and the implications for communications electronic surveillance | | |
| Required Start Date: | 29/08/2022 | Required End Date: | 21/11/2022 |
| Requisition No: | RQ0000019699 (RQ000011450 – not used) | Budget Range | £150k |
| TASK DESCRIPTION AND SPECIFICATION | | | |
| Serapis Framework Lot | <input checked="" type="checkbox"/> Lot 1: Collect <input type="checkbox"/> Lot 2: Space systems <input type="checkbox"/> Lot 3: Decide <input 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) <p>The Electronic Surveillance (ES) Project seeks to develop new and novel sensing capabilities for use in the future Electromagnetic Environment (EME). To facilitate this, it is necessary to undertake a review of both current and future targets and technologies, in the RF space. Within this review, the ES challenges associated with these targets and technologies should be considered. Finally, the review should assess current radar ES and comms ES capability. This task, therefore, concerns the completion of a technology watch against next generation RF target systems and the resulting implications for ES, as well as review of current COTS ES hardware and software.</p> | | | |
| The Task <p>The supplier is asked to undertake a technical review of trends in RF comms and radar Research and Development (R&D) and the challenges these present for ES. The scope can be broken down into three Work Packages (WP) (see below). The aspiration is to conduct all three WPs. However, individual costs for each work package should be stated.</p> | | | |

- WP 1: Tech watch of both current and future RF communication targets and technologies. Within this tech watch, the ES challenges associated with these targets and technologies should be considered. Finally, the tech watch should assess current comms ES hardware and software.
- WP 2: Tech watch of both current and future radar targets and technologies. Within this tech watch, the ES challenges associated with these targets and technologies should be considered. Finally, the tech watch should assess current radar ES hardware and software.
- WP 3: Tech watch of current and future dual-purpose comms/radar technologies. In addition, the tech watch should include any ES hardware and/or software capable of conducting both comms ES and radar ES.

For each WP, the scope should comprise both software and hardware, including currently available Commercial Off The Shelf (COTS) equipment and emerging research. The Supplier should assess the likely utilisation of new technology and, where possible, evaluate relevant open source standards (for example ETSI, IEEE) to highlight likely uptake. For clarity, proprietary standards are also considered in scope. For each technology/standard identified, the Supplier should detail the likely application along with the frequency, power, bandwidth and other physical layer features (such as modulation and multiple user access methods). As an example for “WP 1: Comms tech watch”, this part of the review should attempt to provide an update to the GFI provided [1].

For each WP, the review should be presented in three epochs of deployment:

- The current State of the Art (the present).
- Emerging trends (over the next 5 years).
- Future trends (beyond 5 years).

For each epoch, the Supplier should identify the potential ES capability challenges presented by developing trends. The analysis should focus on all aspects of ES, including detection, recognition, identification, and location.

A full review of current COTS ES capabilities should be presented. This shall include hardware (detailing bandwidth, frequency coverage, etc.) and software tools for analysing and visualising the RF electromagnetic environment.

Work should be delivered in the following stages:

- T0 + 4 weeks: An initial presentation after 4 weeks highlighting areas that have been identified for more in depth study. The presentation session will enable the Authority to provide feedback and set a direction for the second phase of the work. This will also act as a potential break point.
- T0+ 8 weeks: A full presentation on the output with a Q&A session.
- T0+ 10 weeks: A final report on the output, as well as all assumptions and resulting conclusions.

[1] “Review of existing & emerging personal communications standards and technologies and their implications for future communications electronic warfare systems 2017”, DSTL/TR101113.

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 (Follow the NIPPY guide to identify your information and IP requirements for each deliverable) | Summary of the Authority's rights in foreground IP (IP generated by the supplier in performance of the contract) |
| DEFCON 703 <input type="checkbox"/> | Vests ownership with the Authority |
| DEFCON 705 Full Rights <input 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 | |
| <p><i>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).</i></p> <p><i>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.</i></p> | |

DELIVERABLES

| Ref | Title | Due by | Format | TRL | Expected classification (subject to change) | Information required in deliverable | IPR DEFCON |
|-----|----------------------------------|----------|----------------------|-----|---|--|------------|
| D-1 | Initial Presentation of Findings | 5 weeks | Presentation (.pptx) | N/A | Redacted | An overview of progress. Supplier to highlight any areas/trends that have been identified. The Authority to provide feedback and direction for the second phase of the work. This is a potential break point. | Redacted |
| D-2 | Full presentation | 10 weeks | Presentation (.pptx) | N/A | Redacted | A full presentation on findings on the technology trends and challenges identified after the initial presentation. | Redacted |
| D-3 | Final Report | 12 weeks | Document | N/A | Redacted | A comprehensive final report detailing all identified technologies and standards, along with their implications for future ES capabilities. | Redacted |

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|-----|-------------------------------|----------|----------|-----|----------|---|----------|
| D-4 | Product sheets and references | 12 weeks | Document | N/A | Redacted | All associated product sheets and references used in generating the final report. | 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> |
|-------------------------------------|---|-----------------------|-------------|-----------------------|------------------|--------------------------------|--------------------------|
| DSTL/TR101113 | Review of existing & emerging personal comms standards & technologies | Redacted | Report | Start of the contract | Dstl | | Redacted |
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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

The highest classification of this SOR

OFFICIAL ☐ OFFICIAL-SENSITIVE ☐ SECRET ☐ TOP SECRET ☐ STRAP ☐ SAP ☐

The highest expected classification of the work carried out by the contractor

OFFICIAL ☐ OFFICIAL-SENSITIVE ☐ SECRET ☐ TOP SECRET ☐ STRAP ☐ SAP ☐

The highest expected classification of Deliverables/Output

OFFICIAL ☐ OFFICIAL-SENSITIVE ☐ SECRET ☐ TOP SECRET ☐ STRAP ☐ SAP ☐

Is a Security Aspects Letter (SAL) required? *(A Security Aspects Letter (SAL) will be required for each Tasks Official-Sensitive and above)*

Yes ☐ No ☐

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 | Lot1 C68 Proposal_Roke Manor Research (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) | | | |
| 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> | | | |
| Total Proposal Price in £ | £138,900.31 | | (ex VAT) |
| Start Date: | 01/11/2022 | End Date: | 03/02/2023 |
| Lot Leads Representative | Name | Redacted | |
| | Tel | Redacted | |
| | Email | Redacted | |
| | Date | 20/10/22 | |
| Position in Company | Commercial Manager | | |
| Signature | Redacted | | |

Core Work – Breakdown

Lot Lead Rates for Task Management Services (TMS)

Please insert/delete rows as necessary

| Team Member Name | Role | Activity Type | Rate (£) | Total Hours | LMS recovery per role per hour (‘d’ element) | Total LMS recovery due (£) (‘d’ x total hours) | Total TMS Cost (£) (Rate x total hours) |
|------------------|------|---------------|----------|-------------|---|---|--|
| | | | | | | | |

Redacted

Lot Lead Rates for Self-Delivery (only complete if applicable – otherwise delete table)

Please insert/delete rows as necessary

| Team Member Name | Role | Activity Type | Rate (£) | Total Hours | LMS recovery per role per hour (‘d’ element) | Total LMS recovery due (£) (‘d’ x total hours) | Total Self Delivery Cost (£) (Rate x total hours) |
|------------------|------|---------------|----------|-------------|---|---|--|
| | | | | | | | |
| Redacted | | | | | | | |
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Work Delivered by Sub-Contractor(s)

We recognise that suppliers may fit into multiple categories, please choose the drop down that categorises the supplier by the definition that is lowest on the list (i.e. a Defence Supplier Academic would be treated as an Academic.

Please insert/delete rows as necessary

| Name of Sub-Contractor | Supplier Type | Activity Description | Rate (£) | Total Hours | Total Cost (£) |
|------------------------|---------------|----------------------|----------|-------------|----------------|
| | | | | | |
| Total | | | | | |

Travel, Subsistence, Materials & Equipment

Please insert/delete rows as necessary

| Supplier Name | Spend Type | Description / Rationale | Unit Cost (£) | Qty | Total Cost (£) |
|---------------|------------|-------------------------|---------------|-----|----------------|
| | | | | | |

| | | | | | |
|-------|-----------------|--|--|--|--|
| | Choose an item. | | | | |
| | Choose an item. | | | | |
| | Choose an item. | | | | |
| Total | | | | | |

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.

| Milestone 01 | | | | | | |
|----------------------------|--------------|------------------------|-------------------------|--------------------------|--------------------|--------|
| Description | TMS cost (£) | Self-Delivery cost (£) | Sub-contractor cost (£) | Total milestone cost (£) | Milestone due date | DEFCON |
| <u>EMR Delivery</u> | Redacted | | | Redacted | T0 +1 week | |
| Travel/Subsistence | | | | 0 | | |
| Materials/Equipment | | | | 0 | | |
| | | | | | | |
| Milestone LMS recovery (£) | Redacted | | | | | |

| Milestone 02 | | | | | | |
|-------------------------------------|--------------|------------------------|-------------------------|--------------------------|--------------------|----------|
| Description | TMS cost (£) | Self-Delivery cost (£) | Sub-contractor cost (£) | Total milestone cost (£) | Milestone due date | DEFCON |
| D1 Initial Presentation of Findings | Redacted | Redacted | | Redacted | T0 +5 week | Redacted |
| Travel/Subsistence | | | | | | |
| Materials/Equipment | | | | | | |
| | | | | | | |
| Milestone LMS recovery (£) | Redacted | | | | | |

| Milestone 03 | | | | | | |
|----------------------------------|--------------|------------------------|-------------------------|--------------------------|--------------------|----------|
| Description | TMS cost (£) | Self-Delivery cost (£) | Sub-contractor cost (£) | Total milestone cost (£) | Milestone due date | DEFCON |
| D2 Full Presentation of Findings | Redacted | Redacted | Redacted | Redacted | T0 +12 week | Redacted |

| | | | | | | |
|----------------------------|----------|--|--|--|--|--|
| | | | | | | |
| Travel/Subsistence | | | | | | |
| Materials/Equipment | | | | | | |
| | | | | | | |
| Milestone LMS recovery (£) | 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 | 28 Oct 2022 |
| Requisition Number | | RQ0000019699 |
| Contractor's Proposal Number | | Document No: 72/22/P/243/R Date: June 2019 – Issue 01-000 |
| Purchase Order Number | | DSTL0000009322 |
| 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> | | |