

# Serapis Tasking Form

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

<b>To:</b>	Lot 4 QinetiQ Plc	<b>From:</b>	The Authority, 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			
<b>VERSION CONTROL</b>			
Version 0.a			
<b>REQUIREMENT</b>			
<b>Proposal Required by:</b>	May 2022	<b>Task ID Number:</b>	AII120
The Authority Project Manager:	[REDACTED]	<b>The Authority Technical Point of Contact:</b>	[REDACTED]
<b>Task Title:</b>	AII120 _ C5I Roadmap & Concepts Project Design		
<b>Required Start Date:</b>	1 June 22	<b>Required End Date:</b>	31/03/23
<b>Requisition No:</b>	RQ0000008486	<b>Budget Range</b>	Total scope FY23 £1.5M Task 1: £200k Task 2 (Follow on work): £1.3M
<b>TASK DESCRIPTION AND SPECIFICATION</b>			
<b>Serapis Framework Lot</b>	<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		
<b>Statement of Requirements (SOR)</b>			
<b><u>Abstract</u></b> This work supports the development of Generation After Next (GAN), Command and Control, Communications, Computing, Cyber and Information (C5I) capabilities for military systems, and supports the Science and Technology (S&T) needed to develop and deliver concept demonstrations of how this might be achieved.			
<b><u>Background</u></b> The C5I Roadmap and Concepts project will deliver a vision and roadmap for how S&T will be integrated to realise the convergence of Generation After Next (GAN) Command and Control, Communications, Computing, Cyber and Information (C5I) capabilities for military systems, and develop and deliver concept demonstrations of how this might be achieved.			

This vision, roadmap and concept demonstration will provide a 'Headmark' for relevant S&T exploitation across relevant Driving and Responding programmes in the S&T research portfolio. As such, the project will be a fundamental integrator for research delivered by [REDACTED] programmes. The project will also provide the mechanisms to demonstrate C5I technology and system maturity for continued development and exploitation by Responding programmes (Maritime, Land, Air, Space and Specialist Systems), for the purposes of Capability Development.

Through the vision, roadmap and concept demonstration the project will demonstrate a viable pipeline for S&T, from the discovery and maturation of new and promising science and technologies through to their system demonstration within a context that is relevant to exploiting Commands and organisations.

Based on early planning, future GAN-C5I work may be structured along the following headline activities:

- WP1 Understanding the future environment
- WP2 C5I concept catalogue
- WP3 Baseline C5I current capability
- WP4 Baselining accelerated next generation and generation after next concepts
- WP5 Analysis approaches

#### **WP1 Understanding the future environment**

This work package will be designed to ensure that the future environment for C5I in an 'accelerated next generations' (ANG) and 'generation after next' (GAN) context is understood. The scope of this is the broad global geopolitical landscape, potential deployable operations as well as understanding the likely UK defence capability in C5I and how it might be used as well as strategic threats.

#### **WP2 C5I concept catalogue**

This work package is designed to seek/find, capture and maintain 'concepts' in the C5I capability arena (or that have potential utility in the C5I arena in ANG/GAN). This is strongly linked to WP1 and will need to utilise the narrative from WP1 to be able to map concepts to capability gaps and also to drive development of concepts to fill any remaining capability gaps either with single concepts or through the use of combinations of concepts. Assessment criteria will be developed in WP5 but it is expected that WP2 will be intrinsically engaged in designing the assessment approach to concepts bringing a more technical understanding.

#### **WP3 Baseline C5I current capability**

This work package is focused on bringing together the information to enable the understanding of the current C5I capability baseline. This will require collating information on current in service C5I capability as well as that on the programme of record. This will require interaction with FLCs and in particular their capability development areas to build a 'map' of capability against time (Capability Audits will be the main source of input for much of this but this will require the pulling together of C5I capabilities from across a number of capability audits). Ensuring that a clear audit trail of data/information is maintained is also key.

#### **WP4 Baselining accelerated next generation and generation after next concepts**

This work package will be designed to develop an understanding of how S&T can support emerging C5I concepts and could potentially modify the existing C5I capability baseline. This WP will need to understand the emerging S&T across the CSA portfolio and identify opportunities for exploitation of S&T into C5I 'concepts'. It will also require development of some sort of concept assessment criteria (in concert with WP2 & WP5).

#### **WP5 Analysis approaches**

This work package is fundamentally operational research/decision support focused. It will require a broad understanding of analysis methods, models and tools with the ability to design, develop and implement assessment methodologies (including but not limited to demonstrations, trials, experimentation and wargaming) across a range of C5I capabilities. It is the enabling WP for WP2 and WP4 and is responsible

for the main deliverable of the project - the assessment of what S&T areas to 'back' to support ANG and GAN concepts that have real military benefit.

### **Requirement for FY23**

#### **Task 1 Subject Matter Expert Task force (T0 + ~8 weeks) ~ £150 – 200k - [REDACTED]**

The approach for this task is to request CVs from subject matter experts to create a small Subject Matter Expert Task force (SMET), of 1 chair and ~3 experts, to support the Dstl Project Senior leadership Team (SLT).

The first task of the SMET will be to work with the SLT to define an initial vision, roadmap, and approach to deliver the overall C5I project outcomes.

The SMET will then develop an initial viable activity-pipeline for S&T, relevant to Generation After Next (GAN) C5I capabilities, seeking to understand and capture future concepts and mapping GAN to gaps identified (i.e. where existing or Accelerated Next generation (ANG) will not enable the concept). This activity-pipeline may range from the discovery to the maturation of new and promising science and technologies through system demonstrations.

The aim will be to translate the pipeline into defined activities (Task 2), to be contracted and delivered jointly by Dstl and the wider supply base. For planning purposes, the budget initially allocated to GAN-C5I activities this FY, (i.e. the remaining period expected to be ~6-8 months), is ~£1.2M- £1.5M.

The activity outputs within the first 8 weeks from the SMET are expected to be briefing documents, with supporting evidence and a short report.

SMET force activities may include but not be limited to:

- Developing initial vision statements
- Developing/contributing to novel outline use-cases to help direct the work
- Identifying barriers to developing and exploiting the technologies needed
- Identifying C5I capability gaps
- Creating and maintaining an activity log
- Technically reviewing commercial and academic research work to understand and direct planned GAN-C5I research work
- Identifying opportunities to accelerate the novel research work in the industrial/academic sector
- Advising Dstl on technical areas that should be investigated and drafting outline Statements of Requirements (SoR),
- Developing research plans
- Highlighting the benefits of proposed activities
- Creating and maintaining an actions and activity log
- Engaging with Dstl stakeholders
- Generating a white paper

Skills required:

- Understanding military C5I systems and networks and their military drivers
- Identify emerging C5I threats
- Ability to understand research and development processes and challenges

- Innovative thinking i.e. the ability to identify linkages, exploitation routes and develop road maps and research plans
- Understanding and application of Operational Analysis
- Understanding and application of Enterprise Architecture
- Good presentation, communications and listening skills
- Report writing
- Developing research requirements
- Ability to provide strategic (>3 years) and tactical (<3 months) advice to enable decision making
- Ability to work in a cross discipline team and maintain a high temp of response

**[REDACTED]**

### **Constraints/Conflict of Interest Management**

Companies that provide experts to the SMET may bid for tasks and activities emerging from the outputs of the SMET, following confirmation against a conflict of interest statement i.e. that the expert individual involved in developing the specific SoR is not directly involved in the bidding process. (This enables the expert to be involved as a planned resource if needed).

### **Task 2. (follow on work): T0 + to March 2023 (£1.3M) – [REDACTED]**

This aim of this task will be to implement a number of early and mature recommendations made by the Task force and Dstl.

Activities may include but not be limited to:

- seeking continued support from one or two members of the task force to aid the implementation of recommendations as “customer friend”, by for example;
  - o reviewing reports
  - o supporting exploitation plans
  - o developing and maintaining roadmaps
  - o contributing to technical white papers
  - o down-selecting research studies (in-collaboration with Dstl),
  - o developing more detailed statements of requirements
- contracting studies to:
  - o develop outline concepts and architectures
  - o conducting initial experiments
  - o holding innovation challenge calls
  - o Developing plans for Year 2 activities.

### **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
  - c. Future C5I concepts

2. Benefits (i.e. what will the contracted stakeholders get from this?)
  - a. Development of new C5I capabilities
  - b. Closer defence-sector collaboration
  - c. Increased collaboration between industry, academia and government.
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
4. Plan (what's the plan for exploitation)
  - a. Integration into C5I processes, procedures and doctrine
  - b. Development or support of specific standards.
  - c. International leadership in C5I concepts

### **Outputs.**

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

- Reports and white papers
- Prototype system descriptions
- Demonstration of concepts
- Simulations data and models
- Conference and journal papers
- Threat information
- Illustrative architectures
- Use cases

### **Deliverables.**

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

### **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**

<b>Task IP Conditions</b> (Follow the NIPPY guide to identify your information and IP requirements for each deliverable)	<b>Summary of the Authority's rights in foreground IP (IP generated by the supplier in performance of the contract)</b>
DEFCON 703 <input checked="" 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>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).</p> <p>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.</p>	

### DELIVERABLES

Ref	Title	Due by	Format	TRL	Expected classification (subject to change)	Information required in deliverable	IPR DEFCON
D-1	Presentation	T0+ 8 weeks	Presentation		[REDACTED]	A presentation covering aspects such as; <ul style="list-style-type: none"> <li>Activities conducted</li> <li>recommendations,</li> <li>risks,</li> <li>new work.</li> </ul>	703
D-2	Report	T0+8 weeks	Report		[REDACTED]	A Report to include: <ul style="list-style-type: none"> <li>Aims</li> <li>Technical Progress</li> <li>Recommendations</li> <li>Benefits</li> <li>Activity plan</li> <li>.</li> </ul>	703

Option – deliverables to be agreed but may include; Monthly progress reports, interim reports and final reports

### 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)

None

**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](mailto: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	
<b>Proposal Reference</b> <u>All120 Proposal dated 27/05/22</u> (attached)			
<b>Delivery of the requirement:</b> <b>The proposal <u>shall</u> include, but not be limited to:</b> <ul style="list-style-type: none"> <li>• A full technical proposal that meets the individual activities that are detailed in Statement of Requirements (Part 1 to Tasking Form).</li> <li>• Breakdown of individual Deliverables, with corresponding Intellectual Property rights applied.</li> <li>• Breakdown of Interim Milestone Payments, with corresponding due dates.</li> <li>• A work breakdown structure/project plan with key dates and deliverables identified.</li> <li>• A list of required Government Furnished Assets from the Authority, including required delivery dates.</li> <li>• A clear identification of Dependencies, Assumptions, Risks and Exclusions which underpin your Technical Proposal.</li> <li>• Sub-Contractors Personnel Particulars Research Worker Form and security clearances (if applicable)</li> </ul>			
<b>COMMERCIAL</b> [REDACTED] <b>PRICE BREAKDOWN</b>			
<b>Offer of Contract:</b> <i>(to be completed and signed by the Contractor's Commercial or Contract Manager)</i>			
<b>Total Proposal Price in £</b>	Task 1 –£200,000 Task 2 –£1,300,00.00		(ex VAT)
<b>Start Date:</b>	T0 (assumed to be 07/06/22)	<b>End Date:</b>	31 Mar 24
<b>Lot Leads Representative</b>	Name	[REDACTED]	
	Tel	[REDACTED]	
	Email	[REDACTED]	
	Date	[REDACTED]	
<b>Position in Company</b>	Assistant Commercial Manager		
<b>Signature</b>	[REDACTED]		

### Core Work – Breakdown

[REDACTED]



[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]

## Tasking Form Part 3:

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

<b>1. Acceptance of Contract:</b>		
<b>Authority's Commercial Officer</b>	Name	[REDACTED]
	Tel	[REDACTED]
	Email	[REDACTED]
	Date	14/06/22
<b>Requisition Number</b>		RQ0000010773
<b>Contractor's Proposal Number</b>		Serapis Task All120: C5I Roadmap & Concepts Project Design 27/05/22 v1.0
<b>Purchase Order Number</b>		DSTL0000004471
<b>Signature</b>		[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>		