

# Serapis Tasking Form

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

<b>To:</b>	Lot 5 Newman & Spurr Consultancy Ltd	<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 5 DSTL/AGR/SERAPIS/SSE/01			
<b>VERSION CONTROL</b>			
V0.1			
<b>REQUIREMENT</b>			
<b>Proposal Required by:</b>	15/05/2022	<b>Task ID Number:</b>	SSE43
<b>The Authority Project Manager:</b>	Redacted under FOIA Section 40 - Personal Information	<b>The Authority Technical Point of Contact:</b>	Redacted under FOIA Section 40 - Personal Information
<b>Task Title:</b>	Extension: Lance Campaign Model to Version 1.1		
<b>Required Start Date:</b>	15/05/2022	<b>Required End Date:</b>	30/09/2022 (unless Option1 activated)
<b>Requisition No:</b>	RQ0000009321	<b>Budget Range</b>	£100k - £180k inc option1
<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 type="checkbox"/> Lot 4: Assured information infrastructure <input checked="" type="checkbox"/> Lot 5: Synthetic environment and simulation <input type="checkbox"/> Lot 6: Understand		
<b>Statement of Requirements (SOR)</b> <b>Overview</b> <p><b>Continuation of SSE27:</b> the Agile software development team working to create the new campaign level simulation model called Lance. This is labelled as a new task only because of new funding at FY 2022-2223, although the task remains exactly as for SSE7, with a software development team from NSC. This extension is expected to continue on the same ascertained costs basis, up to a Limit of Liability of £120k, with a rolling breakpoint of 2 sprints-length, until contract end in September of FY 2022-2023. Further funding may still be found from the customer, so there should be up to a further £60k included, as an option of £60k, that can be mobilised quickly as part of this extension from September 2022.</p> <p>The software development team will continue to be a collaborative effort between NSC and Dstl staff. NSC will continue to provide the Scrum Master, and Dstl will act in the Product Owner role. The definition of "Done" will remain as already agreed by the team, and quality standards equivalent to TickITplus are to be met. The contract is expected to start immediately after SSE27 completes, at end of Q4 of FY 2021-2022. Lance V1.1</p>			

and V1.2 will be interim versions of Lance that will be a further step towards v2.0 (which will cover all domains). Development work on Lance V1.1 and option for V1.2 will be managed using the Scrum agile method. Areas of the Backlog prioritised for development will be the beginnings of the representation of the Land domain, and fixing issues identified from the first use of Lance in the development stages of PFT9. Lance V1.1 is expected Sep 2022, and Lance V1.2 from September 2022 – December 2022 and ultimately Version 2.0 at approximately September - December 2022 if sufficient additional funds are found (not part of this contract).

The previous vision for this task remains: to develop a campaign-level joint warfighting model that will enable analysts to assess the effectiveness of force structures within scenarios. The model will simulate Redacted under FOIA Section 26 - Defence effects through the multi-domain interactions between Redacted under FOIA Section 26 - Defence elements. It will represent Redacted under FOIA Section 26 - Defence, as non-traditional effects. The model will be quick to run, intuitive and engaging, with analytically accurate outputs. In order to help analysts assess the effectiveness of force structures within scenarios, the model will simulate warfare to discover “what it takes to win” (WITTW) in a particular situation of interest. WITTW might include: the ability of particular force to achieve the military objectives set; time taken to achieve the objectives; losses of different types of asset for both the red and blue forces; casualties; other costs such as fuel and munitions consumed. Modelling is expected to help the analyst to understand what factors drive these outcomes and also what risks are involved.

The product of this task remains: a campaign-level model, and therefore needs to represent large numbers of Force Elements (FEs) in a simplified or aggregated format. It will rely on input data such as look up tables generated by other more detailed models to determine the outcomes of combat interactions between FEs.

### **Requirements**

This task is for the continued development of a new campaign level model Lance. The development uses the SCRUM implementation of the Agile methodology. There will be rolling a breakpoint of 2 sprints-length, which means that notice can be given at the end of one sprint that the contract will pause/cease after the following 2 sprints.

This extension is expected to continue on the same ascertained costs basis, up to a Limit of Liability of £120k, with a rolling breakpoint of 2 sprints-length, during FY2022-2023. Further funding may still be found from the customer, so there should be up to a further £60k included, as an option of £60k, that can be mobilised quickly as part of this extension.

The task is for collaborative working in a software development team with Dstl staff. Dstl will continue to provide the Product Owner and 2-3 software developers at approx. 70% utilisation. A similar level of effort is expected as a minimum from other members of the software development team.

The specific role of Scrum Master is to be provided as part of the contract, to define the sprint rhythm, and ensure it is maintained along with all the associated ceremonies and artefacts.

### **Tech standards**

#### **OVERVIEW**

Quality standards equivalent to TickITplus for software are to be met.

The development is to be in a framework that allows open competition for future maintenance of the model.

Top level requirements will be captured using User Stories<sup>1</sup>, and it is expected that these will be refined into tasks and issues through discussions between the Product Owner and the Development Team. Tasks and issues are expected to be managed through Azure DevOps or equivalent. Configuration management will be undertaken using Git, and using a Git branching strategy agreed by the team.

Coding standards will be agreed for final delivery, along with user defined performance. To allow fast and flexible delivery the specific performance and coding standards to be met for a sprint will be agreed during sprint planning.

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<sup>1</sup> <https://www.gov.uk/service-manual/agile-delivery/writing-user-stories>

Delivery of software will include containerised versions of the software, including recipe / compose files. Due to the potential requirement to scale, a Linux base is expected.

#### SOFTWARE PLATFORM

The model will need to run in a range of environments, including Dstl's corporate networks, high performance computers (HPCs) and Dstl's cloud computing service, D-cloud, at multiple classifications. Some use cases will require the model to run from a stand-alone laptop or isolated LAN.

Dstl's IT infrastructure is likely to change substantially over the lifetime of the model, so the IT solution needs to be flexible rather than targeted specifically at existing corporate systems.

To enable this Lance uses containers.

#### SOFTWARE LANGUAGE/ENVIRONMENT

Lance makes maximum use of appropriate COTS and open source frameworks,. The following criteria apply to the choice of technology:

- Open and widely used framework – i.e. no proprietary frameworks;
- Long likely longevity to enable backward compatibility and long-term maintenance;
- Minimal licence costs;
- Appropriate for use on secure defence systems – i.e. no requirement for internet connection or other security issues.

The software development standard is expected to follow industry norms, with full use of version control tools, appropriate coding standards, modular development and unit-tested modules.

#### COLLABORATION

For team collaboration, there should be connectivity over open networks, such as using a Azure DevOps repository for storage of code.

#### SECURITY

Redacted under FOIA Section 24 - National Security

The Dev Team may be required to help debug models running on classified networks, this is likely to be led by Dstl members of the team, but may require assistance from the industry members.

#### Deliverables

Progress reporting at the end of each sprint, in the format of updated issues log /artefacts. Also working executable code, and its source code, is to be delivered at the end of each sprint. The performance standard for code (loading time, running time, outputs) to be as defined by the development team.

#### **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**

<b>Task IP Conditions</b> (Follow the <a href="#">NIPPY</a> 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 checked="" 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	Information required in deliverable	IPR DEFCON
	Product Backlog, Sprint Backlog, and Product Increment (as artefacts defined by Scrum). Also executable code.	At the end of each 3-week sprint	Redacted under FOIA Section 24 - National Security			These are to be updated / delivered at the end of each sprint. Performance criteria for the code will be specified and agreed by the software development team.	703
	Lance V1.1.	September 2022	Redacted under FOIA Section 24 - National Security				703
	Lance V1.2 Option	December 2022	Redacted under FOIA Section 24 - National Security				703

**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:-**

Scrum defines the set of 3 primary artefacts to be delivered at the end of each Sprint, which must meet the software development team's agreed definition of Done.

**Government Furnished Assets (GFA)**

**ISSUE OF EQUIPMENT/RESOURCES/INFORMATION/FACILITIES**

<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>
1	Product Owner	N/A	Staff	01/04/2022	Dstl	31/03/2023	N/A
2	Software developers	N/A	Staff x2	01/04/2022	Dstl	31/03/2023	N/A
3	User Stories (as defined by Scrum)	Official	GFI	01/04/2022	Dstl	31/03/2023	N/A
4	Algorithms for combat or sensing interactions derived from previous combat models, as appropriate.	Official	GFI, provided in logic rather than in code.	01/04/2022	Dstl	31/03/2023	N/A

**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**

Redacted under FOIA Section 24 - National Security

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

Redacted under FOIA Section 24 - National Security

**The highest expected classification of Deliverables/Output**

Redacted under FOIA Section 24 - National Security

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

Redacted under FOIA Section 24 - National Security

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

Cyber Risk Level	Redacted under FOIA Section 26 - Defence
Risk Assessment Reference	Redacted under FOIA Section 26 - Defence

**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>QTSL-820.043-1845</u> <b>(attached)</b>			
<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>PRICE BREAKDOWN</b> <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>			
<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>	182,247.72		(ex VAT)
<b>Start Date:</b>	01/04/22	<b>End Date:</b>	01/12/22
<b>Lot Leads Representative</b>	Name	Redacted under FOIA Section 40 - Personal Information	
	Tel	Redacted under FOIA Section 40 - Personal Information	
	Email	Redacted under FOIA Section 40 - Personal Information	
	Date	20/05/2022	
<b>Position in Company</b>	Director – QinetiQ Training and Simulation		
<b>Signature</b>			

**Core Work – Ascertained Costs**

**Redacted under FOIA Section 43 - Commercial Interests**

**Core Work – Milestone breakdown costs Ascertained 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*

**Redacted under FOIA Section 43 - Commercial Interests**



## 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>	<b>Name</b>	Redacted under FOIA Section 40 - Personal Information
	<b>Tel</b>	Redacted under FOIA Section 40 - Personal Information
	<b>Email</b>	Redacted under FOIA Section 40 - Personal Information
	<b>Date</b>	21/06/2022
<b>Requisition Number</b>		RQ0000009321
<b>Contractor's Proposal Number</b>		QTSL-820.043-1845 V1.0
<b>Purchase Order Number</b>		DSTL0000004771
<b>Signature</b>		Redacted under FOIA Section 40 - Personal Information
<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>		