Statement of Requirement (SOR)

Contact & Project Information:

Project Manager	Name	[Redacted under FOIA Section 40 – Personal information]		
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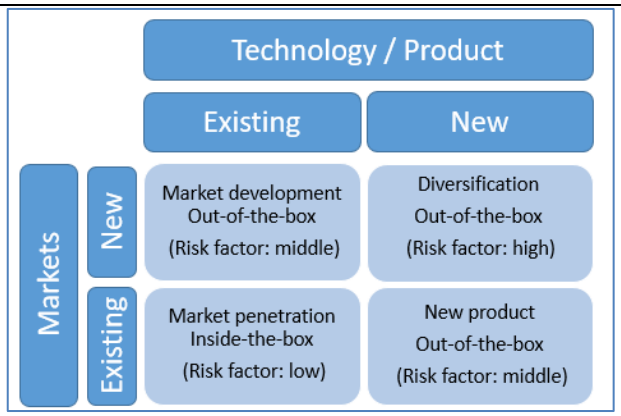
	Site	[Redacted under FOIA Section 40 – Personal information]		
Technical Partner(s)		[Redacted under FOIA Section 40 – Personal information]		
		[Redacted under FOIA Section 40 – Personal information]		
		[Redacted under FOIA Section 40 – Personal information]		
iCas project number	710014 0001			
Owning division	PLS	**Delivering division**	PLS	
Programme	Land Systems Programme predominantly plus others			
Indicative task budget(s) £k	Core / initial work:	**12,000**	Options / follow on work:	**8,000**

Innovation risk appetite:	**Choose an item.**	Confirmed on a study by study basis
(Using the Ansoff matrix below, please indicate your risk appetite with regards to accepting innovative bids/solutions. The type of analysis/experimentation technique is included within 'Technology/Product'.)		


Technology / Product
Existing
New
Markets
New
Existing
Market development
Out-of-the-box
(Risk factor: middle)
Diversification
Out-of-the-box
(Risk factor: high)
Market penetration
Inside-the-box
(Risk factor: low)
New product
Out-of-the-box
(Risk factor: middle)

Statement of Requirement (SoR)

Project's document ref	
Version number	**1.0**
Date	**29/07/2021**

1.	**Requirement**
1.1	**Title (including AST/ prefix)**
	AST062/Software and Wargaming Support
1.2	**Summary**
	This SOR fulfils a need for Software and Wargaming Support across **five top-level requirements** which may be delivered by one or more suppliers working together. 1. **Maintain and Enhance Software / Software Models.** Dstl requires the provision of software model support in the form of software maintenance and enhancement of a number of existing business critical and other important software models and tools. This will be delivered via an agreed, appropriate software development lifecycle. An example set of these models is listed later in this document. It should be noted that the list includes COTS software models from commercial games suppliers. 2. **Develop New Software / Software Models**. Dstl requires the supplier to be able to develop new software and/or software models. This will be delivered via an agreed, appropriate software development lifecycle. 3. **Provide Software support to Software Models during gaming.** Dstl requires the supplier to be able to provide software support to certain models during their use. This will need the supplier to provide appropriately skilled staff to support work during specific windows, potentially working on a Dstl site with Dstl infrastructure. 4. **Run Software Models/Games and conduct analysis.** Dstl requires the supplier to be able to conduct gaming and analysis using Dstl owned software models/games. Dstl will provide the software and potentially data to the supplier to enable independent or collaborative work for a Dstl project. 5. **Design, Development, Execution and Analysis of Wargames.** Dstl requires the supplier to be able to participate in and/or conduct the whole of the wargaming process as outlined in the MOD Wargaming Handbook. Wargames can be used to explore national-strategic, strategic, operational and tactical issues across the full spectrum of Defence & Security activity and Dstl requires the supplier to support across this range.

	To meet the requirement, the supplier will need to provide Dstl with an agile and responsive mechanism for accessing industry support akin to that previously provided by ASC 311 and 206. A key element of this requirement is the continued ability to quickly and efficiently service a broad range of software and wargaming requirements similar to those previously delivered under ASC 206 and ASC 311 (e.g. study values ranging from £20k to £350k, average time to contract circa 3 weeks, with tasks lasting from a few days to several months). The supplier shall provide a regular written financial and technical progress update on all work packages accepted by Dstl under this contract.
1.3	**Background**
	Dstl has an ongoing requirement for software and wargaming capabilities in support of activities across a number of programmes. To meet this need, Dstl must be able to rapidly engage industry software modelling and wargaming capability to support a breadth of evolving software model and wargaming requirements. This requirement aims to build on the success of similar constructs under ASC (ASC Tasks 311 and 206) to continue to: • Improve long-term coherence across software modelling and wargaming activities; • Build capability in the supplier base; • Provide Dstl access to a wider pool of expert resource; • Increase capacity where Dstl is constrained internally; • Introduce flexibility into Dstl's capability; • Improve delivery performance and agility through adoption of an Agile delivery approach; • Meet Dstl's needs for successful delivery. Key to this requirement is to continue the agility and responsiveness successfully established by predecessor tasks under ASC 311 and 206. This includes: • Responsiveness - A streamlined and responsive contracting process that enables individual requirements to be serviced (i.e. on contract) in circa three weeks from a requirement being raised. • Scalability – Efficient overarching management and assurance akin to ASC 311 and 206, that scales from low value requirements (circa £20k) to high value requirements (circa £350k). Note: The profile of ASC 311 requirements, which this requirement is expected to continue, was 25% of requirements were circa £30k or less (lowest £18k), 50% were circa £60k or less, 80% were circa £100k or less, and only 15% were £200k or greater. It is essential that task management overheads do not preclude such smaller scale tasks being delivered.

1.4	**Requirement**
	Requirement 1: Maintain and Enhance Software / Software Models via the use of an appropriate software development lifecycle The supplier will, through a number of software development cycles, maintain and/or enhance software models and tools**.** The development lifecycle(s) will need to be agreed with Dstl but may consist of an agile/iterative approach typically of a few weeks duration, with a ‘study’ consisting of a number of software iterations. The supplier will conduct independent work or work

collaboratively with Dstl staff to maintain or enhance an existing software / model, versions of which will be provided back to Dstl as deliverables for Dstl user acceptance testing and use.

The supplier will provide the necessary IT infrastructure to host a copy of the Software/ Software model on their site at the necessary classification, which may be up to (S). The supplier will maintain the necessary documentation associated with the model as specified by Dstl.

1.1. Maintain Software / Software Model. The supplier will provide maintenance support to an agreed level for a specific piece of software or software model, addressing an issues list that will be provided by Dstl.

1.2. Conduct a specific enhancement of Software / Software Model. The supplier will conduct bounded development activities as defined by Dstl for specific software or software models.

An example list of Software/Software Models that may be included, dependent on the need over time, are:

- [Redacted under FOIA Section 26 – Defence]

Requirement 2: Develop New Software / Software Models use of an appropriate software development lifecycle

The supplier will use a number of software development cycles, to develop new software models and tools according to Dstl's requirements**.** The development lifecycle(s) will need to be agreed with Dstl but may consist of an agile/iterative approach, typically of a few weeks duration, with a 'study' consisting of a number of software iterations.

The supplier will conduct independent work or work collaboratively with Dstl staff to develop new software / models, versions of which will be provided back to Dstl as deliverables for Dstl user acceptance testing and use.

The supplier will provide the necessary IT infrastructure to develop and host a copy of the Software/ Software model on their site at the necessary classification, which may be up to (S). The supplier will generate the necessary documentation associated with the model as specified by Dstl.

Requirement 3: Provide Software support to Software Models during gaming via the delivery of GAME SOFTWARE SUPPORT

The supplier shall provide Software Maintenance to Software Models during periods which typically last two to three weeks each, although could be six to eight weeks (i.e. sprints)**.**

The supplier will provide the capability to conduct support to specific software models during the defined period of a game and testing prior to the game. This will require the provision of the appropriately skilled and experience staff to be available to provide either dedicated on-site support or on-call support for the period of a game. This may require working on the Dstl floorplate during this period and the use of Dstl provided IT infrastructure.

An example list of Software/Software Models that may be included are:

- [Redacted under FOIA Section 26 – Defence]

This list is not intended to be exhaustive and may be added to in future.

Requirement 4: Run Software Models/Games and conduct analysis via the delivery of MODEL/GAME EXECUTION & ANALYSIS

The supplier will conduct software Model / Game Execution & Analysis on the results. Dstl will provide the software / software model and potentially data to a supplier to enable independent or collaborative work for a Dstl project. The supplier shall conduct analysis using a model/game/tool and provide a written or presentation output as agreed with Dstl.

The supplier will provide the necessary IT infrastructure to host a copy of the Software model on their site at the necessary classification, which may be up to (S). The supplier will have access to appropriately skilled and experienced staff to conduct the game. This may require working on the Dstl floorplate during this period, and the use of Dstl provided IT infrastructure.

4.1. Collaboratively run a game. The supplier will run a game in collaboration with a Dstl team, according to project requirement provided by Dstl. This may require working on the Dstl floorplate during this period, and the use of Dstl provided IT infrastructure.

4.2. Independently run a game and conduct the analysis. The supplier will plan and run a game without direct involvement of Dstl staff, and conduct the analysis of the game, according to a project requirement provided by and technically partnered by Dstl.

An example list of Software/Software Models that may be included are:

- [Redacted under FOIA Section 26 – Defence]

This list is not intended to be exhaustive and may be added to in future.

Requirement 5: Design, Development, Execution and Analysis of Wargames via the delivery of WARGAMES & SUBSEQUENT ANALYSIS.

The supplier will shall deliver sets of Wargames ('sets' as one customer requirement may necessitate more than a single game or several variations on a baseline game) accompanied by analytical outputs. This may include some or all of the design, development, delivery, and analysis phases of the wargaming cycle. Dstl requires the supplier to be able to participate in and/or conduct the whole of the wargaming process as outlined in the MOD Wargaming Handbook. Wargames can be used to explore national-strategic, strategic, operational and tactical issues across the full spectrum of Defence & Security activity and Dstl requires the supplier to support across this range.

The supplier will provide any necessary IT infrastructure or materials required at the necessary classification, which may be up to (S). The supplier will have access to appropriately skilled and experienced staff. This may require working on the Dstl floorplate during this period, and the use of Dstl provided IT infrastructure. Games may be delivered in the Defence Wargaming Centre on Dstl Portsdown West site or at other MOD locations for example, but not limited to Shrivenham or the Maritime Warfare Centre at Collingwood. Games may also be run on supplier sites or other suitable locations as agreed with Dstl.

Expertise

The supplier will have access to appropriately skilled and experienced staff to develop the software in the relevant programming language and using appropriate software.

Examples of relevant programming languages include but are not limited to:

- ADA
- C++
- C#
- CSS/HTML/PHP
- Python
- Java
- Javascript
- VB.Net

Examples of appropriate software include but are not limited to:

- Configuration control software such as Git / Subversion
- Database software such as MS Access, SQL & MongoDB.
- Integrated Development Environments (IDEs) such as MS Visual Studio

The supplier will have access to appropriately skilled and experienced staff for Wargaming. This includes:

- Game Design.
- System Mechanics/Rules.
- Adjudication.
- Relevant domain knowledge.

Contract Management

The Task Lead will be responsible for contract management activities on this Task. Activities satisfying requirements 1-5 will be termed studies.

At an appropriate drum beat, studies will be discussed, and prioritised for delivery, with the supplier. Proposals to deliver the agreed study will then be prepared and accepted by Dstl. Following acceptance these studies will be mobilised and tasked to deliver the agreed requirements.

Studies can be added or removed from the task at regular review points provided they meet the scope of this RCA.

It is essential that this Task has the necessary level of flexibility to be responsive to potential changes to project priority and funding. It is therefore intended that some of this work will be contracted on an Ascertained Costs basis with limit of liability, with work to be selected and approved on a study by study basis.

As part of the contract management activity the Supplier will:

- Hold study specific Technical progress meetings with Dstl
- Produce monthly written report detailing progress (formal) and spend (LoL studies) to Dstl and ASTRID PMO
- Hold a quarterly contract progress meeting (at Dstl or Supplier premises, or online depending on COVID restrictions)

In addition:

	• The Supplier is to assume that access to Authority nominated stakeholders will be facilitated by Dstl • The level of technical assurance required will be defined and agreed with Dstl on a Study by Study basis • An agreed process for selecting, recommending and approving each Study's team is required (e.g. Dstl need to approve the Supplier's recommended team before each study proposal is produced) • An agreed Governance process for accepting study proposals and setting budgets is required (e.g. supplier cannot move money between studies without prior written consent from Dstl) • GFA ownership. Where necessary, Security Aspect Letters (SALs) will be written on a Study by Study basis)
1.5	**Options or follow on work**
	1) Option to extend for one year 2025-2026 2) Option to extend for one year 2026-2027 3) Option to increase the limit of liability to a maximum of £20M Important note regarding option 3: It is anticipated that the limit of liability option can be used/issued in smaller values throughout the life of the task.

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**
Progress Report	Monthly: Progress reports on the health of the overarching task. Individual studies will agree own reporting mechanism and timelines	T0+1 months	Word Document (.docx)	n/a	Redacted under FOIA Section 26 – Defence	Report to include but not limited to: • Progress report against project schedule. • Review of risk management plan. • Commercial aspects. • Review of deliverables. • GFA and supplier performance	Each individual study will set their own DEFCON levels

*__Technology Readiness Level required__

1.7	**Standard Deliverable Acceptance Criteria**
	Deliverable Acceptance Criteria (As per ASTRID Framework T&Cs) 1. Acceptance of Contract Deliverables produced under the Framework Agreement shall be by the owning Dstl or wider Government Project Manager, who shall have up to 30 calendar days to review and provide comments to the supplier. 2. Task report Deliverables shall be accepted according to the following criteria except where alternative acceptance criteria are agreed and articulated in specific Task Statements of Work: • All Reports included as Deliverables under the Contract e.g. Progress and/or Final Reports etc. must comply with the Defence Research Reports Specification (DRRS) which defines the requirements for the presentation, format and production of scientific and technical reports prepared for MoD. Reports shall be free from spelling and grammatical errors and shall be set out in accordance with the accepted Statement of Work for the Task. • Interim or Progress Reports: The report should detail, document, and summarise the results of work done during the period covered and shall be in sufficient detail to comprehensively explain the results achieved; substantive performance; a description of current substantive performance and any problems encountered and/or which may exist along with proposed corrective action. An explanation of any difference between planned progress and actual progress, why the differences have occurred, and if behind planned progress what corrective steps are planned. • Final Reports: shall describe the entire work performed under the Contract in sufficient detail to explain comprehensively the work undertaken and results achieved including all relevant technical details of any hardware, software, process or system developed there under. The technical detail shall be sufficient to permit independent reproduction of any such process or system. 3. Failure to comply with the above may result in the Authority rejecting the Deliverables and requesting re-work before final acceptance. 4. Acceptance criteria for non-report Deliverables shall be agreed for each Task and articulated in the Statement of Work provided by the Contractor
1.8	**Specific Deliverable Acceptance Criteria**
	To be defined at an individual study level

2.	Quality Control and Assurance
2.1	**Quality Control and Quality Assurance processes and standards that must be met by the contractor**
	☒ **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) Any additional QC/Assurance standards to be defined on an individual study level
2.2	**Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement**
	The nature of most of the analysis supporting projects is expected to be office based, and therefore Dstl standard corporate risk assessments will apply to staff embedded in the team, for office work, travel in the UK and potentially travelling abroad. Staff are also to adhere to any controls in place when visiting other MOD sites. However, the project may include deployment to observe at live exercises and trials, and then the procedures for running these activities are to be applied. If Dstl is running the trial, a Trials Manager will be in place to ensure all the appropriate paperwork and procedures are in place to protect anyone involved. Risk assessments are to be read, understood and signed by all participants. All appropriate legislation must also be adhered to, when gathering data at exercises and trials. This may include, but is not limited to: • Ethical considerations of data collection and MODREC; • General Data Protection Regulation, (EU) 2016/679, effective from May 2018; • Data Protection Act 2018

3.	Security	
3.1	**Highest security classification**	
	Of the work	Redacted under FOIA Section 26 – Defence
	Of the Deliverables/ Output	Redacted under FOIA Section 26 – Defence
3.2	**Security Aspects Letter (SAL) – Note the ASTRID framework has an overarching SAL for quotation stage (up to OS)**	
	To be completed at an individual study level	
3.3	**Cyber Risk Level**	
	Redacted under FOIA Section 26 – Defence	
3.4	**Cyber Risk Assessment (RA) Reference**	
	Redacted under FOIA Section 26 – Defence	

4.	Government Furnished Assets (GFA)				
To be completed at an individual study level					
GFA No.	**Unique Identifier/ Serial No**	**Description:** *Classification, type of GFA (GFE for equipment for example), previous MOD Contracts and link to deliverables*	**Available Date**	**Issued by**	**Return Date or Disposal Date (T0+)** *Please specify which*

5.	Proposal Evaluation criteria
5.1	**Technical Evaluation Criteria**
	To be defined at an individual study level
5.2	**Commercial Evaluation Criteria**
	As per ASTRID Framework T&Cs.