ASTRID
ANALYSIS FOR SCIENCE & TECHNOLOGY RESEARCH IN DEFENCE

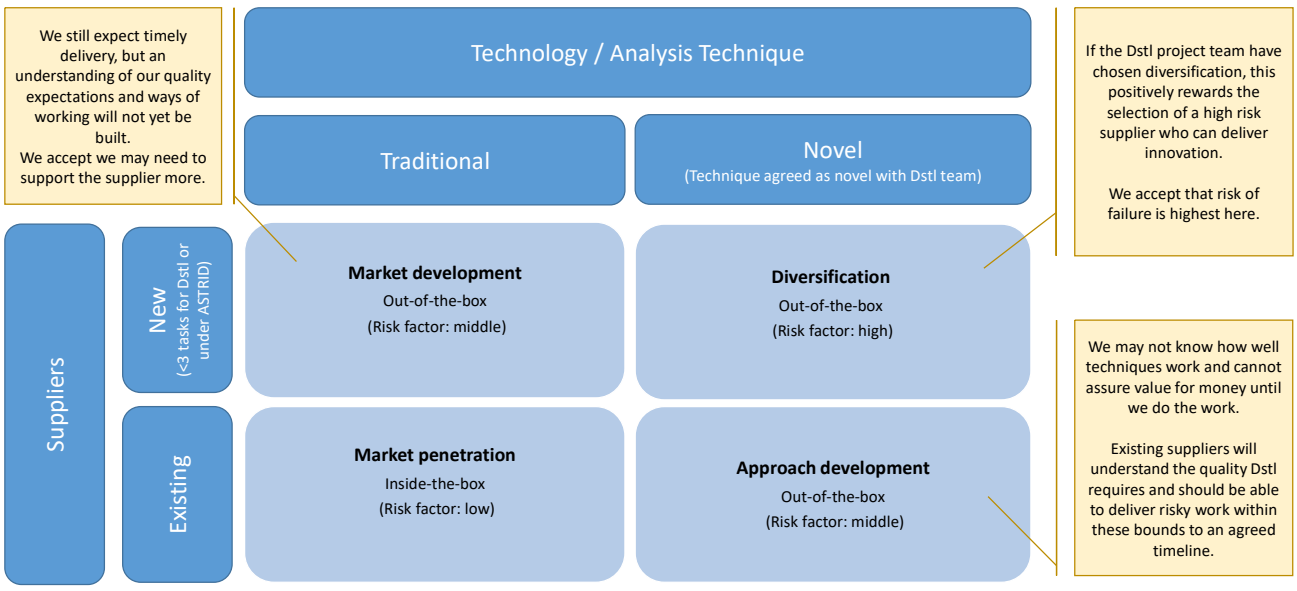
Statement of Requirement (SOR)

Contact & Project Information:

Project Manager	Name	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
	Email	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
	Telephone number	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
Technical Partner	Name	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
	Email	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
	Telephone number	REDACTED UNDER FOIA SECTION 40- PERSONAL INFORMATION
Project number	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST	
Owning division	REDACTED UNDER FOIA SECTION 43- COMMERCIAL I	**Delivering division** REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST
Programme	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST	
Indicative task budget(s) £k	Core / initial work: REDACTED UNDER FOIA SECTION 43- COMMERCIAL INT	Options / follow on work: REDACTED UNDER FOIA SECTION 43- COMMER

Innovation risk appetite:	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST
Narrative (if applicable):	

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'.



Use of Outputs: *(This section is used to inform risks, liabilities, mitigations and exploitation)*

Intended uses (including the approximate time before use and any key decisions that will use the output):
Support for defence decisions regarding Air capability Management
Possible uses:
Defence spending decisions, operational decisions and capability Management decisions.
Excluded uses:
None

Risk Assessment Process:

Project teams are required to complete the ASTRID Liabilities spreadsheet that will look at the direct and indirect risks associated with the work. The assessment must be completed at the outset before the draft SOR is submitted, this will prevent delays and lessen negotiations when the proposal is received.

The risk assessment spreadsheet can be found in the document list on the ASTRID Nexus Homepage:
REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST

Some generic risks are pre-filled so please ensure they apply to your task and delete/add as necessary. Each risk must be assessed in turn and a score entered in the spreadsheet. They will be automatically marked and a colour code produced. Please enter the results in the boxes below. A completed copy of the spreadsheet must be attached to this SOR when submitting it to the REDACTED UNDER FOIA SECTION 43- COM for review and approval to release to CORDA.

Direct Risk	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST

In the event that a direct risk is scored as “Green” or “Yellow” the risk will be capped at pre-agreed limits of liability and the project team may continue with the submission of their requirement to CORDA once all necessary approvals have been issued by the REDACTED UNDER FOIA SECTION 43- COM

In the event that a direct risk is identified as “Amber” or “Red” project teams should discuss the requirement with their Commercial POC before the task is submitted.

Indirect/Consequential Risk	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST
In the event that the indirect risk is "Excluded" project teams may continue with the submission of their requirement to CORDA once all necessary approvals have been issued by the REDACTED UNDER FOIA SECTION 43- COM In the event that the indirect risk is identified as "Included" project teams should discuss their requirement with their Commercial POC before the task is submitted.	

Levels of Technical Assurance:

The framework can offer three levels of Technical Assurance Support, and you have the ability to determine which level is suitable for your task.

Full guidance listing the types of support under each level (and the trade-offs) can be found in the "ASTRID Guide – Levels of Assurer Support" REDACTED U or in the document list on the REDACTED UNDER FOIA SECTION 43- COMMERCI

It may be that the level of support you require changes in the early discussion phase. Please ensure the final version of your SOR has the correct level indicated.

Please indicate below which level you require

- Hub level assurance will be minimal, higher levels of scrutiny may be required assessed upon a study-by-study basis.

Minimum ☒	Standard ☐	Enhanced ☐

Statement of Requirement (SoR)

Project's document ref	
Version number	**001**
Date	**22/04/2022**

1.	**Requirement**
1.1	**Title (including AST/ prefix)**
	AST/131/Air Hub
1.2	**Summary**
	The overall aim of Dstl's Air Operational Analysis and Decision Support (OA&DS) project, is to provide the Front Line Command (FLC) customer community – Primarily Air Command, with the evidence, insights and advice needed to support decision making as part of air and aviation capability management. To deliver the capability required to do this, there is a need for external suppliers to undertake a range of analytical tasks.
1.3	**Background**

Task AST131/Air_HUB The air OA&DS project through the conduct of operational analysis will generate the evidence, insights and advice required; which will span technical through to enterprise levels and be integrated across platforms, enablers and supporting factors. The HUB comprises of a number of scope areas (plus linkages into Air and Space Warfare Centre and wider Science and Technology work), each aimed at a specific area of interest for the FLC customer. These scope areas are interlinked, and structured according to areas of interest.

The Work Scope areas are:

Air Enterprise and Strategic Analysis

- RAF enterprise decision pathways (and interdependencies) analysis
- Strategic (pan-RAF) Balance of values and force development
- Air Net Zero
- People/Training
    - Training, NGOT, NGFT, Pers, Org

Integrated Air Capability and Concepts

- Identify and evidence the capability and capacity demands on Air
    - Policy Impact, Cap Audit
- Evaluate the pan-Air integrated ability to deliver against demands
    - Force Development, 2035+
- Manage Air Integrated Concept Approach

Control of the Air / Attack Analysis

- Control Of The Air, Offensive Counter Attack, Attack
- Fleet profiles
- Weapons, Offensive Cyber

Air Ops in the Information Age Analysis

- Air Battlespace Management, Intelligence Surveillance Reconnaissance ,Command and Control
- Information Systems, Interoperability
- Surveillance of Air from the Surface

Enabling Air

- Air Platform Protection, Preparation, Stockpiles
- Air Mobility, Force Protection
- Infrastructure, Logistics

The work will consist of several tasks, such as study, design or model development, which together will generate the outputs and outcomes required by the FLC's.

In turn, these tasks are composed of individual activities, such as literature reviews, verification and validation, cost and capability analysis

Primarily sponsored by Air Command, this capability is to be supported by a dedicated team, of Dstl staff with full broad analytical expertise and well developed Air and Aviation Domain knowledge, working on the activities and tasks needed in each study. The work conducted by the project will produce evidence, advice and insights as outputs, which in turn will enable better outcomes from FLC decision making. The project will benefit the FLC customer by facilitating the delivery of a capable, affordable, sustainable Air and Aviation capability for the UK, by enabling the development of narratives, courses of action and propositions for strategic reviews, by supporting the pull through of Technology concepts from observed front line capability.

In order to generate the breadth of capability and the necessary capacity to deliver this, the authority has a requirement for external support to complement its own internal provision. With the expectation of close collaboration between the parties where possible, to build on shared expertise and enhance future capability.

1.4	Requirement

	The authority (Dstl) requires access to suppliers sometimes on a short notice basis, to provide additional support to its existing internal provision, providing integrated analytical support across tasks and activities or specialist analysis capability on individual activities. Required to support the full scope of delivery capability in an integrated manner (Including working at authority sites), with and alongside the authority as one team; in order to deliver the activities and tasks needed for each Study package. Each study package has individual outcomes to be achieved and specific challenges and needs. They provide a contextual setting for the analysis activities and tasks that will be required and are outlined in a separate document. Over the duration of the contract, additional study packages may potentially be created, to accommodate the FLC's changing priorities and objectives, there is also a requirement to start, stop or modify activities and tasks in a responsive manner. Decisions to start/stop work should be implemented within 1 week (unless otherwise agreed by Air OA&DS Project Manager (PM)), and decisions to modify work shall be implemented as soon as practicable. Activities and tasks will be guided by regular study package reviews, which shall be attended by the supplier and oversight of progress will be maintained by the Air OA&DS PM. The following requirements have been identified: 1. Deliver analysis activities and tasks into the respective study packages, co-ordinating capabilities from across the supply chain to do so. 2. Support the development of analytical and/or domain expertise within the study packages. 3. Provide and co-ordinate Technical Assurance of work to the Air OA&DS project. 4. Provide regular progress and financial reports to Air OA&DS PM, aligned with the Dstl reporting frequency. 5. Identify, agree and monitor appropriate milestones in each activity/task with the OA&DS PM In addition to the above, the following mandatory requirements have been identified: Required Activities/Tasks

Suppliers are required to define, agree, conduct and deliver tasks (Underlined) and Activities (Bulleted) as illustrated by the list below, and set within the context of the respective study packages.

The list is comprehensive, but not exhaustive, and does not preclude different or innovative approaches that may be offered, and are indeed encouraged.

Study Design

- Problem Structuring and Definition
- Literature reviews and industry surveys
- Requirement formulation
- Development study approaches

Conduct Analysis

- Historical analysis
- Policy analysis
- PESTLE analysis
- Benefits mapping
- Enterprise mapping
- Multi-criteria analysis techniques
- Concept assessment
- Needs and Numbers analyses
- Cost effectiveness & cost-benefit analyses
- Lines of development analyses (personnel/logistics etc.)
- Training needs analyses
- Cost analyses and balance of investment
- Cost engineering – Generating cost data for concepts and technologies
- Reporting of impact – Communicating advice, Insights and evidence at all levels including visualisation

Methods, Models and Tools (MMT)

- MMT development and maintenance
- Evaluation and Integration of the AFSIM framework into MMT set
- Research into future methods and areas of interest
- Verification and Validation
- Developing and maintaining subject matter expertise
- Data science techniques

Data and Knowledge Management

- Data collection
- Management of Data and Knowledge of various classifications
- Identifying and developing platforms and formats
- Identifying sources of data, including from extant MOD and external research

Wargaming

- Scenario development and experimental design
- Integrating Wargaming with analysis
- Wargame facilitation
- Data capture and post event processing of data and information
- Pre and Post event analysis
- Coherence activity between events and with other FLC/FMC activity
- Developing Wargaming Capability

1.5	**Options or follow on work**

	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST

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** *(Commercial to enter later)*
Example D – 1	*Half Yearly Progress and Technical Review (QPTR 1)*	*T0+6 Months*	*Presentation (.pptx)*	*n/a*	REDACTED UNDER FOIA SECTION 43- COMM	*Presentation pack to include but not limited to:* *• Update on technical progress* *• Progress report against project schedule.* *• Review of risk management plan.* *• Commercial aspects.* *• Review of deliverables.* *• Risks/issues.* *• GFA and supplier performance*	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST
D - 2							
D - 3							

*Technology Readiness Level required, if applicable

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. Shall include an executive summary of 2 – 4 pages which may standalone from the rest of the report. 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**

	Acceptance by Study Package Technical Lead and Lead Technical Reviewer. Or As deemed necessary at activity/Task commencement <u>Basic Deliverable Set</u> Progress Reports (Required) As defined at activity/Task commencement Customer Presentations (Required) As defined at activity/Task commencement Summary Reports (Required) As defined at activity/Task commencement Technical Reports (Required) As defined at activity/Task commencement Final Technical Report (Required) As defined at activity/Task commencement Software Source Code (Required) As defined at activity/Task commencement Software Executable Code (Required) As defined at activity/Task commencement

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 specific quality assurance standards required in addition to those indicated above, will be confirmed on a study-by-study basis.
2.2	**Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement**

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
	Where the work requires more than occasional access to Dstl premises (e.g. for meetings), SC Clearance will be required.	
3.2	**Security Aspects Letter (SAL) – Note the ASTRID framework has an overarching SAL for quotation stage (up to OS)**	
	REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST for	
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)

GFA to be Issued - Choose an item.

REDACTED UNDER FOIA SECTION 43- COMMERCIAL INTEREST

If GFA is to be returned: It must be removed from supplier systems and returned to the Dstl Project Manager within 2 weeks of the final Task deliverable being accepted. (Any required encryption or measures can be found in the Security Aspects Letter associated with the Task).

If GFA is to be destroyed: It must be removed from supplier systems and destroyed. An email confirming destruction should be sent to the Dstl Project manager within 2 weeks of the final Task deliverable being accepted

5.	Proposal Evaluation
5.1	**Technical Evaluation Criteria**
	Process will be as per ASTRID Framework T&Cs. If particular attention should be paid to certain aspects of the requirement, please confirm here:
5.2	**Commercial Evaluation Criteria**
	As per ASTRID Framework T&Cs.