RCloud Tasking Form – Part B: Statement of Requirement (SoR)

Title of Requirement	REDACTED UNDER FOIA EXEMPTION (TRED-H)
Requisition No.	**1000162992**
SoR Version	**0.1**

1.	**Statement of Requirements**
1.1	**Summary and Background Information**
	Summary: TRED-H is the development of a purpose built REDACTED UNDER FOIA EXEMPTION Remotely Piloted Aerial System (RPAS) capability, operated by single User in support of a small team. REDACTED UNDER FOIA EXEMPTION The capability will support mission based configuration of payload and STA sub systems based on operational tasks to optimise platform endurance REDACTED UNDER FOIA EXEMPTION The capability will be enabled through the provision of automation and autonomy by lowering user burden with flying and navigation, presenting appropriate target information REDACTED UNDER FOIA EXEMPTION The system will be capable of edge processing in order to support both the AI requirement and the C2 of other UAS assets. Background: It is well established that future operating environments are likely to be cluttered and congested which will result in restrictions being placed on the freedom of manoeuvre of traditional supporting assets such as manned aviation. When unavailable this could cause deployed small teams to lack the firepower required to defeat emerging threats. TRED-H is designed to provide a responsive, cost effective and proportional organic fire support capability that can be controlled and tasked by the deployed team that requires it. Fitted with a suite of engagement options the deployed unit is able to conduct a rapid and accurate response to emerging threats. TRED-H builds on the lessons identified from previous TRED projects; specifically the need for automation and autonomy to reduce piloting complexity, integration of effectors from first principles and exploiting technology sprints to generate user buy in and benefit from their feedback. TRED-H is project terminology not a design restriction, the word H (Heavy) is taken to describe a bespoke TRED platform capable of conducting multiple engagement serials in the same flight without the need to “return to home” for rearming.
1.2	**Requirement**

The key project deliverable is a fully integrated, user flown, TRL6 concept demonstrator to be delivered by 31 March 2025. A demonstration of the REDACTED UNDER FOIA EXEMPTION system as a standalone capability will be provided by the 31st of August 2023.

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Please Note:

Government Furnished Assets (GFA):

This will be in the form of Government Furnished Information. It will include information on other projects that form part of this effort. This GFI will be provided as contract support items. This will include:

- A capping paper on IWO
- Summary briefs on TRED years 1, 2 and 3.
- A high level overview of Project SCALE
- A high level overview of Project PAINT.
- High level overview of MDIS

This will be supplied to the winning bid only, and will be required to be disposed of at the end of the contract. Proof of this will be required.

1.3 **Options or follow on work** *(if none, write 'Not applicable')*

Additional Technical Work Package Options

The Authority shall not be obliged to exercise these following options.

	During the course of the contract technical opportunities (and additional funding) *may* present themselves which are not listed in the requirements in section 1.2. A non-exhaustive list is below; following contract award this list will become the start of a series of "white board" options that will be added to by both the winning supplier and the Dstl technical team. The scope of these options will be reviewed by Dstl Project Management team and commercial to ensure they remain within the bounds of the TRED-H SoR and switched on when the Dstl Technical and Project Management team decide it would benefit the final deliverable and is financial viable. • REDACTED UNDER FOIA EXEMPTION • A roadmap to show the integration of counter physical and electronic C-UAS. • REDACTED UNDER FOIA EXEMPTION • REDACTED UNDER FOIA EXEMPTION • Integration with third party collaborative flight control software. • REDACTED UNDER FOIA EXEMPTION • Integration with third part Object Classifiers. • Concept identification and development of RPAS signature reduction techniques. • Integration of robust encrypted communications for platform command and control.
1.4	**Contract Management Activities**
	Bronze level contract management.
1.5	**Health & Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement**
	Quality Control and Quality Assurance processes and standards that must be met by the contractor: ☒ **ISO9001** (Quality Management Systems) ☒ **TickITPlus** (Integrated approach to software and IT development)

1.6	Deliverables & Intellectual Property Rights (IPR)					
Ref.	**Title**	**Due by**	**Format**	**Expected classification (subject to change)**	**What information is required in the deliverable**	**IPR Condition**
D-1	Quarterly Progress Report	T0+3 Months and + 3 months thereafter for the duration of the contract.	Presentation (.pptx)	OS	Presentation pack to include but not limited to: - Update on technical progress - Progress report against project schedule. - Review of risk management plan. - Review of deliverables. - Risks/issues. - GFA and supplier performance	Default RCloud Agreement Terms and Conditions shall apply
D-2	Concept Options	T0+3 months	Presentation (.pptx)	OS	A one off presentation pack to include but not limited to: - Platform size, weight and power considerations - Platform payload considerations - Platform AI component considerations	Default RCloud Agreement Terms and Conditions shall apply

					- Proposed study areas for FY21/22 and 22/23 To inform the Dstl selection of concepts	
D-3	Technical Options	T0+ 6 months	Presentation (.pptx)	OS	A one off presentation pack to include but not limited to: - Platform size, weight and power options - Platform payload options - Platform AI component options - User interface options - Gimbal options - To inform the User/Dstl selection of technical options	Default RCloud Agreement Terms and Conditions shall apply.
D-4	FY 21/22 Design End of Year Report	T0+ 6 months	Written report (.docx)	OS	Report showing the technical approach taken during design phase, record of technical decisions and progress towards demonstration.	Default RCloud Agreement Terms and Conditions shall apply.

D-5	Technical Demonstrators and/or Prototypes	T0+18 months	Technical Demonstrators and/or Prototypes	OS	Technical components of the system demonstrated in either isolation or as a representative system to highlight technical progress towards the demonstration.	Default RCloud Agreement Terms and Conditions shall apply
D-6	FY22/23 Develop End of Year Report	T0+18 months	Written report (.docx)	OS	Report showing the technical approach taken during develop phase, record of technical decisions and progress towards demonstration.	Default RCloud Agreement Terms and Conditions shall apply
D-7	Concept Demonstrator	T0+23 months	Technical Demonstrator	OS	Complete system demonstrated with system mature enough to be flown by representative users.	Default RCloud Agreement Terms and Conditions shall apply
D-8	FY 23/24 Design End of Year Report	T0+23 months	Written report (.docx)	OS	Report showing the technical approach taken in the concept demonstration year including lessons identified and outcomes from the demonstration itself.	Default RCloud Agreement Terms and Conditions shall apply
D-9	System Training	Between T0+23 to 42 months	Training on system	OS	Pilot training for SUAS for up to 6 MOD users. Presentation to describe ground control station and basic platform details (eg battery changes and reloading)	Default RCloud Agreement Terms and Conditions shall apply

D-10	Integrated Demonstrator	T0+42 months	Technical Demonstrator	OS	Complete system demonstration within a Battlefield architecture for scalable collaborative engagement. Dstl will expect the delivery of 2 complete TRED-H systems with ownership being transferred from the supplier to Dstl upon completion.	Default RCloud Agreement Terms and Conditions shall apply
D-11	FY 24/25 Integration End of Year Report	T0+42 months	Written report (.docx)		Report showing the technical approach taken in the integration phase including lessons identified and outcomes from the demonstration itself.	Default RCloud Agreement Terms and Conditions shall apply

1.7	**Deliverable Acceptance Criteria**
	Standard Deliverable Acceptance Criteria: 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. 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. Any 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. All Reports shall be free from spelling and grammatical errors and shall be set out in accordance with the Statement Of Requirement (1) above. Failure to comply with the above may result in the Authority rejecting the deliverables and requesting re-work before final acceptance. Specific Deliverable Acceptance Criteria: • The supplier will provide a concept demonstrator to Dstl (including but not limited to TRED-H platform, weapon system, STA suite and GCS) compliant with the requirements specified in section 1.2. • The supplier will run a demonstration of the concept demonstrator in year 3 of the contract. • The supplier will support a demonstration of the integrated concept demonstrator in year 4 of the contract. • The supplier will provide 2 complete systems to Dstl upon conclusion of the contract.

2	**Evaluation Criteria**
2.1	Method Explanation

Weighted Value for Money Index

The overall tender score is calculated as follows:

$$\frac{Non - Cost\ Score^{\frac{wQ}{wC}}}{Cost}$$

Where: wQ = weighting of non-cost criteria
wC = weighting applied to cost
Assuming that wQ = 70% and wC = 30% gives:

Using tender B as an example:

- Step 1: Work out the power (wQ÷wC)
  70 ÷ 30 = 2.33
- Step 2: Factor weighting against non-cost score (x^y or ^ on the calculator)
  850 x^y 2.33 = 6,691,848.45
- Step 3: Divide the factor weighting result by cost score
  6,691,848.45 ÷ 24 = 278,827.02

Tender	Non-Cost Score	Cost (£NPV)	Weighted VfM Index	Rank
A	$620^{70/30}$ = 3,208,282.75	20	160,414.14	3
B	$850^{70/30}$ = 6,691,848.45	24	278,827.02	2
C	$1000^{70/30}$ = 9,772,372.21	29	336,978.35	1

The higher weighting applied to the non-cost score results in Tender C being the highest-ranking tender in this case.

2.2 Technical Evaluation Criteria to generate Non-Cost Score

Non-Cost Score generation.

Each technical criteria is scored against the scoring guides as detailed below with a possible score of 0, 3, 7 or 10.

These technical criterial will be scored by a Dstl review panel.

An average score for each criteria will be generated from the whole review panel's scores and then rounded to the nearest score type (0, 3, 7 and 10).

A total non-cost score will be calculated using a weighted sum of marks awarded for each of the six questions, resulting in a maximum achievable technical score of 1000 (i.e the sum of each criteria when scored 10 multiplied by its weighting).

ID	Criteria	Score	Weighting

1	The Tenderer provides a series of detailed technical plans against each requirement showing how they would deliver a solution to section 1.2. Refer to TH1-21 Table within 1.2 within your proposal.	0, 3, 7, 10	45%
2	The Tenderer demonstrates evidence of how they would approach the use of automation and autonomy to feed autopilot controls and weapon fire control solutions against the requirements.	0, 3, 7, 10	20%
3	The Tenderer demonstrates a clear understanding of complex system design and integration, with specific evidence of how they would approach first principles weapon system integration on to RPAS.	0, 3, 7, 10	15%
4	The Tenderer demonstrates (showing evidence of prior research and development) a deep knowledge of technical components and system design to meet the technical requirements.	0, 3, 7, 10	10%
5	The Tenderer is able to demonstrate confidence of successfully completing the project within the required timescales identifying risks and risk mitigations.	0, 3, 7, 10	5%
6	The Tenderer demonstrates a collaborative approach and provides evidence of how they will support Dstl shape the concepts in order to provide the best possible solution given the available budget and timeframe.	0, 3, 7, 10	5%

The following scoring guide will be used to evaluate technical scores against each criteria.

Score	Rating	Characteristic
10	Excellent	The response addresses all elements of the requirement, and provides a comprehensive, unambiguous and thorough explanation of how the requirement will be fulfilled.
7	Good	The response addresses all of the elements of the requirement and provides sufficient detail and explanation of how the requirement will be fulfilled.
3	Adequate	The response addresses the majority of elements of the requirement but is weak in some areas and does not fully detail or explain how the requirement will be fulfilled.
0	Inadequate	The response does not address or explain how the requirement will be fulfilled and fails to demonstrate the ability to meet the requirement.

Bids will be deemed to fall short of Dstl's technical requirement and therefore be technically non-compliant in the following case:

- An average score of 3 or less (Adequate to Inadequate), prior to weighting, is recorded on two or more questions in any of the technical criteria
- An average score of 3 or less (Adequate to Inadequate), prior to weighting, is recorded on any one of the Criteria marked ID 1, 2, and 3.

Dstl will not consider any revisions to a proposal deemed to fall short of the technical requirement. A record will be made of all decisions relating to the scoring of the tender for clarification purposes.

2.3 Commercial Evaluation Criteria

ID	Criteria	Score
1	The proposal has been submitted as a Firm price for all tasks identified, and must be affordable as per the declared budget. (Core £5,600,000)	Pass / Fail
2	The proposal prices do not exceed the R Cloud Rates submitted upon application and acceptance.	Pass / Fail
3	The proposal accepts the Additional Terms and Conditions laid out in R1000162992_RCloud_Tasking_Form_Part A-Task_Overview	Pass / Fail
4	The proposal has included the Suppliers Assurance Questionnaire (SAQ) in response to the specified Cyber Risk Assessment with the appropriate approval and all documents submitted.	Pass / Fail
5	The Supplier submits a priced Commercial proposal (Qty 1) and an unpriced Technical Proposal (Qty 1).	Pass / Fail

Bids that fail any one of the Commercial Evaluation Criteria will be non-compliant, and will not be considered further. No revisions will be considered.