

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

Title of Requirement	Stratospheric Air Platform – data capture/assessment & bespoke flight trials development
Requisition No.	RQ000019661
SoR Version	2.0

1. Statement of Requirements

1.1 Summary and Background Information

To gain a broader evidence base to support the potential acquisition/use of stratospheric air platforms for military operations. Redacted Under FOI Exemption

Stratospheric platforms (also known as HAPS or High Altitude Platform Systems) have been under development/assessment for some time but are now delivering experimental data to support potential military operations. To date, the market has been dominated by a single light platform but the authority requires a broader commercial base to be operating Redacted Under FOI Exemption

Redacted Under FOI Exemption

Under an endorsed Task PlarRedacted Under FOI Exemption

Redacted Under FOI Exemption

Redacted Under FOI Exemption through consideration of a UK single source commercial vehicle to BAE

Systems Redacted Under FOI Exemption

Redacted Under FOI Exemption

The intent is to gain a greater technical understanding of PHASA35 as a flight platform and to develop/assess military capable test and evaluation opportunities (payloads/scenarios/locations) for flight trials over the next 12-18 months.

1.2 Requirement

The intent is to gain a greater technical understanding of PHASA35 as a flight platform capable of operating in stratospheric altitudes and to develop/assess military capable test and evaluation opportunities (payloads/scenarios/locations) for flight trials over the next 12-18 months. The supplier is to propose an approach which will demonstrate platform day/night performance



(priority) and payload of interest to MoD (to be specified in proposal) related requirements (secondary), Redacted Under FOI Exemption

Redacted Under FOI Exemption

The Authority are expecting to fund the following activities, with BAES seeking alternative funding options elsewhere to physically undertake any flight trial(s) activity.

1. Trial Preparation

Support to mission planning Redacted Under FOI Exemption

Redacted Under FOI Exemption

This will include (but not be limited to): Modifications/Updates to Current Aircraft/Payload,
Obtain Flight clearances, Flight Crew training, Logistics for transportation &
accommodation, Infrastructure update/development

Output: Proposed Flight/Mission Trials Plan (to include proposed aircraft mission tasks specific to the platform as agreed with all stakeholders, plus Payload Mission Plan (if appropriate); Summary report of all activities undertake for Trial Preparation

2. Readiness to Fly at Trial Location

Specific activities to generate and be ready to execute a stratospheric air platform flight trial, to include (but not limited to): Assembly of aircraft (including unpacking, aircraft structure assembly and flight/avionics systems integration), Aircraft System soak test (including battery/power management and avionics), Payload System soak test (if appropriate) (including sensor, power management & mission computing) preflight tests and Integration of the payload (if appropriate) (including EMI interference tests with platform & the Flight Range once installed).

Output: Endorsed Flight Trials Plan (to include Payload Mission Plan if appropriate), to also include criteria for go/no go flight launch decisions; Summary report of all activities undertake for Flight Readiness

3. Site Shutdown & Return to UK

Supplier to propose whether these elements are to be undertaken within Dstl's funding element, or by an alternative funding stream.

4. Flight Data Analysis

To include (but not necessarily limited to): Mission plan, Heading, IMU data, Air Data, GNSS data, Flight Control Data, Motor Data, Transponder data, Health data, Power control data and Battery data. Mission planning and weather data should also be included.



In the event that a flight does not take place (outside of the scope of Dstl's funding) the Authority requires simulation/modelling/ground integration data and supporting analysis to be conducted by the supplier.

Proposal should include details of what actual/simulated data will be supplied and the level of analysis to be conducted & reported in the final report by the supplier.

Output: Final technical report, library of supporting data

5. Payload Data (if included in trial)

Redacted Under FOI Exemption

In the event that a flight does not take place (outside of the scope of Dstl's funding) or a payload of MoD interest is not included, the Authority requires simulation/modelling/ground integration data and supporting analysis to be conducted by the supplier.

Proposal should include details of what actual/simulated data will be supplied and the level of analysis to be conducted & reported in the final report by the supplier.

Output: Final technical report, library of supporting data

The trial(s) is expected to be conducted during 2023 with final completion of requirement (all reporting, data etc.) received by Dstl March 2024. There is a declared budget available for **all activities** to be undertaken within this Statement of Requirement BAES are invited to issue a firm price proposal for the activities detailed above, broken down as per requirement. This budget is not to be exceeded.

It should be clearly identified in the proposal which activities can't be undertaken if budget limitations are identified. The priority objective is to demonstrate the platform operating in stratospheric altitudes.

The costs associated with flying the platform are outside of the scope of this requirement document.

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

Further flight activities Redacted Under FOI Exemption

Redacted Under FOI Exemption

1.4 Contract Management Activities



	To be conducted by Authority Project Manager			
1.5	Health & Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement			
	These are to be identified by BAES in the proposal (e.g. Flight clearances etc)			

1.6	Deliverables & Intellectual Property Rights (IPR)					
Ref.	Title	Due by	Format	Expected classification (subject to change)	What information is r deliverab	
D-1	Proposed Trials Plan	Completion of Trial Preparation Schedule to be proposed	As identified in proposal	OFFICIAL	To be included in proposal a Stakeholders	
D- 2	Summary report of all activities undertake for Trial Preparation	Completion of Trial Preparation To be proposed	Report or Presentation (to be identified in proposal)	OFFICIAL	All activities undertaken dur Preparation phase	
D- 3	Endorsed Flight Trials Plan	Completion of Trial Readiness To be proposed	As identified in proposal	OFFICIAL	To be included in proposal a agreed by stakeholders as	

RCloud (version 4) Tasking Form – Part B (Statement of Requirement (SoR)

Version 1.0 (December 2020)

Page 5 of 8

D-4	Summary report of all activities undertake for Flight Readiness	Completion of Trial Readiness To be proposed	Report or Presentation (to be identified in proposal)	OFFICIAL	All activities undertaken dur Readiness phase
D-5	Technical report	2 months after trial completion	Report	OFFICIAL	The final report to include the achievements of the flight in flight, payload (if appropriate meteorological data, and suressons learnt. Flight data analysis to include necessarily limited to): Miss IMU data, Air Data, GNSS of Data, Motor Data, Transport data, Power control data and Mission planning and weath be included. Library of supporting data

RCloud (version 4) Tasking Form – Part B (Statement of Requirement (SoR)

Version 1.0 (December 2020)

Page 6 of 8

Insert Classification



1.7 Deliverable Acceptance Criteria

Evidence to be provided that activities undertaken have enabled the platform to be readied for trials(s) to achieve the stated objectives.

Progressing then to undertake the flight trial itself is outside of the scope of this requirement document.

Evidence to be provided that activities undertaken have cleared the trial site & enabled the platform to be returned to the UK (TBA in proposal if this element is to be included).

2	Evaluation Criteria					
2.1	Method Explanation					
	Technically compliant and VFM					
2.2	Technical Evaluation Criteria					
	A subjective assessment based on the evidence provided by the Supplier to enable the Authority to have confidence in the Supplier's ability to undertake and complete the tasks as shown within the Authority Statement of Requirement					
2.3	Commercial Evaluation Criteria					
	ID	Criteria	Score			
	1	The proposal has been submitted as a Firm price for all tasks identified under the core work, reference Part B Section 1.2 and the associated deliverables at Section 1.6. Noting this must be affordable as per the declared budget of	Pass / Fail			
	2	The supplier provides unqualified acceptance of the additional terms and conditions				
	3					
	The proposal has included the Suppliers Assurance Questionnaire (SAQ) in response to the specified Cyber Risk Redacted Under FOI Exemption		Pass / Fail			
	5	The Supplier submits a priced Commercial proposal (Qty 1) and an unpriced Technical Proposal (Qty 1).	Pass / Fail			
	6	The supplier has submitted a competed RCloud Tasking Form Part C as part of the submission, including a completed Annex A Statement Relating to Good Standing, and Annex B Notification of Intellectual Property Rights (IPR) Restrictions, or a confirmed Nil Return	Pass / Fail			

Insert Classification



The supplier has completed a DEFFORM 528 where any deliverables has been identified as subject to either a) Export Control or b) End Use Restrictions or a Nil Return has been provided.

Pass / Fail