# Statement of Requirement (SoR)

### **Purpose**

This document is for new Extra-Mural (EMR) Contracts. Use the Request for Contract Action (RCA) Guidance for EMR page on WikiD when filling out this SoR and a supporting RCA. Please seek assistance if desired from Commercial or your Divisional Procurement Representative.

This document is supplier facing and the RCA is an internal document. Please delete non-essential grey text before issuing externally/ to suppliers.

Reference Number	RQ0000017525
Version Number	0.1
Date	21/09/2022

1.	Requirement
1.1	Title
	Further enhancement of drone collision response algorithm
1.2	Summary
	Redacted under FOIA Section 26 – Defence. It is now required that the approach be independently verified and extended to ensure its general pedigree and appropriateness for the customer's application space.
1.3	Background

Work has been undertaken by Dstl and its partners to develop a series of algorithms Redacted under FOIA Section 26 – Defence. The overall quick-running approach is predicated on modelling the impact of simplified drone representations upon rigid targets. Redacted under FOIA Section 26 – Defence. It is now required that the approach be independently verified to ensure its general pedigree and appropriateness for the customer's application space.

Redacted under FOIA Section 26 - Defence

This may take the form of far simpler media such as a series of tables or charts. Incorporation of imponderability, concerning the nature of drone threat, will therefore have to be considered. A "C-UAS expert forum" should be assembled for all industrial, academic, and government stakeholders as well as key international parties to ensure coherence in this fast-moving field of modelling, simulation and associated analysis.

Over the past several years QinetiQ have undertaken extensive work to understand the consequence of drone collision Redacted under FOIA Section 26 – Defence. This has involved the development of detailed numerical models of many drone variants Redacted under FOIA Section 26 – Defence. As a consequence of this effort, QQ have developed a significant amount of data which is direct relevance to the SOR below. Although the numerical models themselves are IP protected, the extracted data and associated expertise would immediately serve to verify these approaches. To the WP lead's knowledge, there is no other agency in the UK with anywhere near approaching capability of this relevance. For another agency in the UK to develop data of this scope and detail would be highly prohibitive in terms of time and cost.

#### 1.4 Requirement

It is required that QQ use the capability, mentioned in the background section, to compare the current quick-running predictive approach to the outputs from higher fidelity drone impact modelling. Redacted under FOIA Section 26 – Defence. The outputs from the QQ study may be used to recalibrate the current quick-running approach.

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

With respect to the next steps within the background section, work is required to expand the quick-running predictive approach to cater for drone impact Redacted under FOIA Section 26 – Defence

Input into establishing a method of appropriately incorporating imponderability and uncertainty within the approach, concerning the nature of drone threat, is also needed.

There is a desire to establish a "C-UAS expert forum" associated with the analysis of drone collision and its consequences. For participants, this would involve the attendance and preparation for two meetings (held either remotely or in the UK) during FY23-24.

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)
1	Work Plan	20/01/23	MS Office file(s)	n/a	Redacted under FOIA Section 43 – Commercial Interest	Presentation pack to include but not limited to:  Project schedule  Summary of work  What will be included within the deliverable  Risks/issues  Statement on ability to deliver to contract	Redacted under FOIA Section 43 – Commercial Interest
2	Report	17/03/23	MS Office file(s)	6	Redacted under FOIA Section 43 – Commercial Interest	Written deliverable  Meeting to present / discuss the deliverable at  QinetiQ Farnborough	Redacted under FOIA Section 43 – Commercial Interest

<sup>\*</sup>Technology Readiness Level required

Notes- IPR should be inserted / checked by commercial staff before sharing with the supplier(s) to ensure accuracy.

1.7	Standard Deliverable Acceptance Criteria
	As per RCloud T&Cs
1.8	Specific Deliverable Acceptance Criteria
	N/A
	N/A

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)				
	☐ <b>TickITPlus</b> (Integrated approach to software and IT development)				
	☐ Other: (Please specify below)				
2.2	Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement				
	N/A				

3.	Security		
3.1	Highest security classification		
	Of the work	Redacted under FOIA Section 43 – Commercial Interest	
	Of the Deliverables/ Output	Redacted under FOIA Section 43 – Commercial Interest	
3.2	Security Aspects Letter (SAL)		
	Not applicable		
	If yes, please see SAL reference- Enter iCAS requisition number once obtained		
3.3	Cyber Risk Level		
	Not applicable		
3.4	Cyber Risk Assessment (RA)	Reference	
	Redacted under FOIA Section 43 -	- Commercial Interest	
	accordance with the Supplier C	ed by the contractor before a contract can be awarded. In cyber Protection Risk Assessment (RA) Workflow please ssment available at https://www.gov.uk/guidance/supplier-	

## 4. Government Furnished Assets (GFA)

GFA to be Issued - No

If 'yes' – add details below. If 'supplier to specify' or 'no,' delete all cells below.

GFA No.	Unique	Description:	Available	Issued by	Return Date
	Identifier/	Classification, type of GFA	Date		or Disposal
	Serial No	(GFE for equipment for			Date (T0+)
		example), previous MOD			

	Contracts and link to		Please
	deliverables		specify which
GFA-1			

5.	Proposal Evaluation criteria
5.1	Technical Evaluation Criteria
5.2	Commercial Evaluation Criteria
	Commercial Assistance needed here before or after a requisition is raised. Framework evaluation criteria as per T&C's may apply.