

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

Title of Requirement	SINC: Support toward a general theory of sensor deception
Requisition No.	RQ0000015770
SoR Version	0.1

1.	Statement of Requirements
1.1	Summary and Background Information
	<p><i>This request covers workshop support to be delivered by the University of Liverpool to the Authority in developing a general-purpose theory of sensor deception.</i></p> <p>In 1982 Barton Whaley proposed a general theory of deception [1]. Despite being general purpose and more tailored toward psychology and human factors this was used as the basis for a description of various deceptive categories used in the sensor deception work under the Redacted project which ran from 2017-2022.</p> <p>A principal part of the deception work under Redacted was delivered via an EMR contract by the University of Liverpool (UoL). The outcomes, reports, presentations and training events showed various promising advances toward quantifying and mitigating deceptive action against sensors. In their development of these solutions, they went some way to a mathematical description of types of deceptive behaviour. It is on this foundation that we wish to build initial work to be delivered in SFM Counter Deception.</p> <ol style="list-style-type: none"> 1. Whaley, B. 1982, Journal of Strategic Studies Volume 5, Issue 1: Military Deception and Strategic Surprise
1.2	Requirement
	<p>We now seek to develop Whaley's work and specialise it to the area of sensor deception. We will conceive and publish a general mathematical framework characterising the six types of deception found in [1]. For reference these are masking, repackaging, dazzling, mimicking, inventing, decoying.</p> <p>In order to leverage the work delivered by UoL under Redacted for this purpose we require an amount of detailed interaction with the researchers at UoL. The following specifics are requested:</p> <ul style="list-style-type: none"> • up to 20 person-days of support to workshops and interpretation of deliverables • 3 virtual and 3 in-person meetings at Liverpool and PTN • Ad-hoc advice and responses to specific questions as required. • Anticipated duration of contract, 6 months.
1.3	Options or follow on work <i>(if none, write 'Not applicable')</i>

	None.
1.4	Contract Management Activities
	As per SOR Deliverables As per RCloud T&Cs
1.5	Health & Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement
	None

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	Attendance at and minutes of progress meeting 2	T0+2 Months	Written notes (pdf)	Redacted	Proceedings of meeting	Redacted
D - 2	Attendance at and minutes of progress meeting 4	T0+4 Months	Written notes (pdf)	Redacted	Proceedings of meeting	Redacted
D - 3	Attendance at and minutes of progress meeting 6	T0+6 Months	Written notes (pdf)	Redacted	Proceedings of meeting	Redacted

1.7	Deliverable Acceptance Criteria
	<ol style="list-style-type: none"> 1. All other deliverables shall follow the acceptance / rejection process detailed within the Framework terms. 2. All deliverables must be in accordance with Clause 19 – Deliverable Report Marking of the RCloud Version 4 terms and conditions.

2	Evaluation Criteria
2.1	Method Explanation
	Non-competitive, based on whether requirements are met and value for money.
2.2	Technical Evaluation Criteria
	A clear, robust and concise technical plan detailing how the requirement will be met, demonstrating value for money.
2.3	Commercial Evaluation Criteria
	<ol style="list-style-type: none"> 1. No limiting IP issues. Any background IP claims must be specified in the proposal. 2. Complies with RCloud T&Cs 3. Costs do not exceed £50k 4. Please provide pricing assumptions, dependencies and exclusions. 5. Completion of Research Workers Form's for all team members. Note: If applicable, Part 3 of the form will need to be signed, dated and certified by your Human Resources Officer or similar.