

# RCloud Tasking Form – Part A: Task Overview

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## 1. Project Title and Return Deadline

<b>Top Level Budget (TLB)</b>	Defence, Science and Technology Laboratory (Dstl)
<b>Title of Requirement</b>	Feasibility Study into Novel Concepts for a UV Redacted System.
<b>Requisition No.</b>	RQ0000008722
<b>Tasking Form Version</b>	1.0
<b>Deadline for Clarification Questions</b>	31/05/2022
<b>Return Deadline</b>	10/06/2022

## 2. Primary Contact

<b>Name</b>	Redacted
<b>E-mail Address</b>	Redacted
<b>Telephone Number</b>	Redacted

## 3. Summary of Task Information

<b>Key Dates / Contract Duration</b>	Anticipated Start Date	01/07/2022
	Anticipated End Date	31/12/2022
<b>Highest Security Classification<sup>1</sup> - All redacted</b>	Tasking Form (including supporting documentation)	Choose an item.
	Work to be undertaken:	Choose an item.
	Deliverables / Outputs:	Choose an item.
<b>Pricing Mechanism</b>	Firm	
<b>Intellectual Property Rights (IPR)</b>	R-Cloud Annex A IPR T&C's apply.	

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<sup>1</sup> Redacted

	<p>If any non-standard IP rights are required, this is set out in this tasking form, (Part A, section 1.6). See also Annex A par 1.2, 12(d) and 12(g).</p> <p>A Full Rights version is required for each deliverable (par 9). Document marking requirements are set out in this tasking form (par 17).</p> <p>All deliverable information is to be delivered in Full Rights version(s), except information that is clearly identified by the Supplier as being Background IP, and where the Authority agrees in writing that it can be delivered only in Limited Rights version(s).</p>
<b>Cyber Risk Level</b>	Choose an item.
<b>Cyber Risk Assessment (RA) Reference<sup>2</sup></b>	Redacted
<b>Research Worker Forms</b>	Required
<b>Research Worker Form Process</b>	Forms to be submitted with your response to tender.

<b>Additional Terms and Conditions (if applicable)</b>
<ol style="list-style-type: none"> <li>1. Quality Control and Quality Assurance processes and standards that must be met by the contractor - ISO9001 Quality Management Systems).</li> <li>2. No GFA to be issued under this Task unless requested prior to contract award.</li> </ol>

#### 4. Supporting Documentation

<b>Supporting documents</b>	<b>All supporting documentation will be published in the RCloud Portal, unless otherwise stated below.</b>
<b>Statement of Requirement</b>	[See the RCloud Portal]
<b>Security Aspects Letter</b>	N/A
<b>Research Worker Form</b>	[See the RCloud Portal]
<b>[Other]</b>	[See the RCloud Portal]

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<sup>2</sup> Redacted

## **SPECIAL NOTES AND INSTRUCTIONS TO TENDERERS**

The contents of the RCloud Tasking Form and subsequent instructions must not be disclosed to unauthorised persons and must be used only for the purposes of responding.

In addition to the R-Cloud Agreement Terms and Conditions and R-Cloud Tasking Form, the following shall also apply:

### **1. Submission of the proposal**

- 1.1 Your proposal should be returned via R-Cloud Portal, ensuring individual documents are uploaded to the coherent area of R-Cloud, unless otherwise agreed with the Authority in writing.
- 1.3 Documents should arrive no later than the date stated at Part A (Section 1). Any responses after this time may not be considered for assessment.
- 1.4 As part of the Tenderers response:
  - Tenderers are required to provide a full breakdown of the prices proposed for the requirement as per the SOR, utilising the rates which are to be used under RCloud .(version 4)
  - The Tenderer must clearly state in the response any Third Party or Company owned background Intellectual Property (IP) that is proposed to be used in undertaking this task.
  - The Authority reserves the right to reject any proposal which includes Background IP, or 3rd party IP in the deliverables where that IP may need to be withheld and therefore limiting the Authorities ability to exploit the deliverables.
  - The Tenderers response must detail the proposed split between Contractor, partners and sub-Contractors (if applicable) in terms of both effort and finance (percentage and value).
  - Technical and commercial proposals must be separated into 2 individual documents, ensuring there are no commercial elements contained within technical responses.

### **2. Communication and Clarification**

- 2.1 All communications including approaches for technical and commercial information and clarification must be made via the Task Primary Contact (as identified at Part A (Section 2).
- 2.2 Responses to clarification questions will be answered in writing as soon as practicable after receipt.
- 2.3 The Authority may wish to seek, where appropriate, further clarification of the proposal, including technical expertise in the form of a written response, presentation and/or Contractor visit.

### **3. Evaluation Process**

- 3.1 The proposal will be assessed for commercial compliance using the criteria set out in Part B of the Tasking Form.
- 3.2 The proposal will be individually reviewed by a Technical Evaluation Panel using the technical evaluation criteria and marking scheme set out in Annex C to the Tasking Form.

### **4. Task Timetable**

- 4.1 All dates associated with this Task may be subject to change, any changes will be communicated using the notification process in the RCloud Portal.

### **5. Disclaimer**

- 5.1 The placing of any contract will depend upon consideration of the proposal received and the Authority reserves the right, if necessary, not to place any contract as a result of this Task. Any expenses incurred by the bidder during the Tasking Procedure will remain the liability of the bidder.
- 5.2 Whilst every care has been taken to ensure that the data and information contained within this Tasking Form is valid, the Authority does not warrant the accuracy of the information and data contained

therein. At any time prior to the deadline for receipt, the Authority may amend the Task documents. Any such amendment will be notified via the RCloud Portal. In order to provide reasonable time in which to take the amendment into account in preparing your proposal. The Authority may, at its discretion, extend the deadline for receipt.

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

Title of Requirement	Feasibility Study into Novel Concepts for a UV Redacted System.
Requisition No.	0000008722
SoR Version	2.0 – Contract award

1.	Statement of Requirements
1.1	Summary and Background Information
	Redacted
1.2	Requirement
	<p>Redacted The aim is to gain a deeper understanding and to assess:</p> <ul style="list-style-type: none"><li>• A novel method of generating UV radiation using nanoscale waveguides to increase the intensity of the driving laser light, whilst allowing for manipulation of the wavefront; and</li><li>• The use of graphene and other 0D, 1D and 2D materials to fabricate novel sensors, whose performance can be optimised to the emission radiation of the UV source.</li></ul> <p>To achieve this aim, Dstl has identified research activities conducted by Imperial College London and Nottingham University from previous EMR contracts which can be used to inform this work. This approach presents an opportunity for Dstl to exploit and maximise previous research funding to develop UV sources and sensors with exceptional performance, as well as to build on existing collaboration links to de-risk as much as possible this new research activity.</p> <p>The following activities are required for the feasibility study:</p> <ol style="list-style-type: none"><li>1. Dstl wishes to build on Imperial College London's previous work on a UK/US collaborative project co-funded by Dstl in producing high intensity mid infrared laser radiation to developing a novel laser-driven source of bright Redacted light. The work will assess the use of nanofocussing structures and plasmonic enhancement techniques to improve the properties of Redacted radiation sources. Research should also be conducted to explore techniques to control the phase and wavefront of the Redacted radiation, Redacted.</li><li>2. Dstl wishes to build on the work conducted by Nottingham University on the engineering of graphene properties by surface functionalisation, to develop low dimensional structures for operation in the Redacted waveband. Based on Nottingham's proven expertise on graphene based heterostructures, Dstl is now interested in the potential of designing and fabricating these devices so they can be optimised to operate in the Redacted waveband, with high gain and low dark current rate, whilst insensitive to the background solar radiation. The work should also consider the challenges of large-scale fabrication methods using advanced techniques.</li></ol> <p>Redacted To maintain close working throughout the feasibility study, two in-person meetings will be held and attended by both universities and Dstl, with each university hosting one meeting. The exact timing of these meetings is to be mutually agreed, but it is anticipated the first meeting will take place three months after contract start and the second meeting just before contract end.</p> <p>Your proposal shall include details of:</p> <ol style="list-style-type: none"><li>1. The concept for using nanoscale structures containing nonlinear media suitable for low order harmonic generation of Redacted radiation.</li></ol>

	<p>2. The activities you will conduct to demonstrate the UV source concepts, which could be a combination of modelling and fabrication of preliminary samples for characterisation.</p> <p>3. The concept for low dimensional heterostructures and techniques for optimising their performance for operation in the Redacted waveband.</p> <p>4. The activities you will conduct to fabricate preliminary Redacted sensors and to demonstrate their photoresponse.</p> <p>5. A project plan, including risks and their mitigations; dependencies; critical paths; and decision points.</p> <p>6. Any Intellectual Property (IP) that will be used to achieve the aim of this feasibility study, making clear whether that IP was developed in previous work for Dstl, or is background IP that had been developed outside any work funded by Dstl.</p>
<b>1.3</b>	<b>Options or follow on work</b> <i>(if none, write 'Not applicable')</i>
	<p>Subject to a review at the end of the feasibility study, Dstl may fund a project to develop a proof-of-concept UV Redacted.</p> <p>Dstl sets out to confirm this is not a guarantee of any additional work.</p>
<b>1.4</b>	<b>Contract Management Activities</b>
	<p>The contract will be managed locally by the project manager.</p>
<b>1.5</b>	<b>Health &amp; Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement</b>
	N/A

1.6	Deliverables & Intellectual Property Rights (IPR) – <b>Note:</b> Redacted					
Ref.	Title	Due by	Format	Expected classification (subject to change)	What information is required in the deliverable	IPR Condition
D - 1	Monthly progress report detailing work on the UV source, in the form of a 'Quad Chart'.	Starting from T0 (contract award) and subsequently throughout duration of contract	1-page quad chart. (.pptx)	Redacted	As per quad chart provided by Dstl.	705 Full User rights
D – 2 (*)	Monthly progress report detailing work on the UV sensor, in the form of a 'Quad Chart'.	Starting from T0 (contract award) and subsequently throughout duration of contract	1-page quad chart. (.pptx)	Redacted	As per quad chart provided by Dstl.  The University of Nottingham	705 Full User rights
D -3 (*)	Presentation and demonstration of progress at mid-point  TRL - 1-2 for demo	Date to be mutually agreed, but anticipated to be three months after contract start	Presentation (.pptx)	Redacted	The presentation shall detail the technical work completed; the knowledge and know-how gained; conclusions of work conducted; and recommendation of work for the remaining half of contract.  The demonstration is to be mutually agreed depending on progress, and could include devices at different	705 Full User rights for the presentation

					stages of their fabrication and their performance parameters at that point	
D – 4 (*)	Presentation and demonstration of progress at end of contract TRL - 1-2 for demo	Date to be mutually agreed, but anticipated to be no later than 31/12/22.	Presentation (.pptx)	Redacted	<p>The presentation shall detail the technical work completed; the knowledge and know-how gained; conclusions of work conducted; and recommendation of work for any follow on work.</p> <p>The demonstration is to be mutually agreed depending on progress, and could include devices showing their range of operating parameter.</p>	705 Full User rights for the presentation
D – 5 (*)	Technical Report at end of contract	No later than 31/12/22.	MS Word	Redacted	<p>The report(s) shall detail the technical work completed; the results and data generated; the knowledge and know-how gained; conclusions of work conducted; and recommendation for any following work.</p>	705 Full User rights for the presentation





<b>1.7</b>	<b>Deliverable Acceptance Criteria</b>
	<ol style="list-style-type: none"> <li>1. All other deliverables shall follow the acceptance / rejection process detailed within the Framework terms.</li> <li>2. All deliverables must be in accordance with Clause 19 – Deliverable Report Marking of the RCloud Version 4 terms and conditions.</li> <li>3. Demonstrations will take place either at contractors' premises, or at a location to be mutually agreed.</li> <li>4. If upon review of the reports and/or the final demonstrator, the Authority/Dstl does not accept the deliverables, the Contractor shall provide acceptable replacements at no additional cost to the Authority.</li> </ol>

2	Evaluation Criteria		
2.1	Method Explanation		
	Non-competitive, based on whether technical/commercial requirements are met and value for money.		
2.2	Technical Evaluation Criteria		
ID	Criteria	Score	
1	The proposal details the concepts for using nanoscale structures containing nonlinear media suitable for Redacted.	0-10	
2	The proposal outlines the activities that will be to demonstrate the UV source concepts.	0-10	
3	The proposal details the concept for Redacted and techniques for optimising their performance for operation in the Redacted waveband.	0-10	
4	The proposal outlines the activities you will conduct to fabricate preliminary Redacted sensors and to demonstrate their photoresponse.	0-10	
5	The proposal includes a project plan, including details of timings and the inter-dependencies between the work on the UV source and the work in the UV sensor, and any critical paths and decisions points.	0-10	
6	The proposal details what IP, if any, will be used to achieve the aim of this feasibility study.	0-10	
The following scoring guide will be used to evaluate against each criteria:			
Score	Definition		
10	Exceeds the Authority's requirement		
8	Fully meets the Authority's requirement		
6	Adequately meets the Authority's requirement		
4	Falls short of the Authority's requirements in a minor respect		
2	Fall short of the Authority's requirements in a major respect, or tenderer did not adequately explain their response of did not provide adequate evidence of claimed capability		
0	Tenderer did not respond to the question or tenderer's response indicated that their capabilities wholly failed to meet the Authority's requirements.		
2.3	Commercial Evaluation Criteria		
	Tenderer has submitted a commercially compliant bid:		
	1. No limiting IP issues. Any background IP claims must be specified in proposal.	Pass/Fail	
	2. Firm priced version submitted within budget of £98K	Pass/Fail	
	3. Labour rates and price as per single source rates uploaded to R Cloud	Pass/Fail	
	4. Completion of Research Workers Form's	Pass/Fail	
	5. Confirm acceptance of R Cloud Version 4 Terms and Conditions	Pass/Fail	

# RCloud Tasking Form – Part C: Task Response Form

TO BE COMPLETED BY THE BIDDER

## 1. Proposal

Registered Company Name	Imperial College of Science, Technology and Medicine
Registered Address	Imperial College London South Kensington Campus Exhibition Road London SW7 2AZ
Registered Company Number	Redacted
Proposal Reference (attached)	PA2260
Proposed Task Start Date	01/07/2022
Proposed Task End Date	31/12/2022

## 2. Cost Proposal

### SUMMARY

TOTAL COST OF TASK	
Redacted (ex VAT) – <u>Core Activity Only</u>	£98,000
Redacted (ex VAT) – <u>Including Options (if applicable)</u>	£
OR	
Redacted (maximum price payable (ex VAT)) – <u>Core Activity Only</u>	£
Redacted (maximum price payable (ex VAT)) – <u>Including Options (if applicable)</u>	£

## COST BREAKDOWN

Please provide a full breakdown of all costs associated with this Task. Inserting additional rows into the Table below, as required

Please identify whether each row forms part of the Task core activity or is an optional item.

PROVISION FROM SERVICE	Hourly Rate	Quantity	Sub-Total	Core/Option
Manpower (insert rows below as appropriate)				
Each row should identify the relevant RCloud Role Description (as per the Pricing Matrix within the RCloud Portal) e.g. "Head or School or Director"				
Please identify each role, rates and number of hours. Hourly rate must be inclusive of profit and overhead.				
(Not to exceed the maximum rates stated in your Pricing Matrix within the R-Cloud Portal)				
PROVISION FROM SUBCONTRACTORS	Cost	Quantity	Sub-Total	Core/Option
Redacted				
Choose an item.				
ADDITIONAL CHARGES				
Redacted				
INFORMATION ONLY:				
Redacted				

Assumptions and Dependencies (if applicable)
Redacted

### Milestone (M/S) Payment Notes:

- 1) Dstl will not make any form of Payment on Contract award.
- 2) M/S Payment cost to be qualified as Value for Money (VFM) justifiable charge.
- 3) Where Equipment is purchased in support of this Task, full payment will only be made following Contractor confirmed receipt of Equipment. If a deposit has to be paid at time of Contractor placing the Order, then this deposit payment, at the Authority's discretion, may be approved if supported by documentation as proof of Contractor payment.
- 4) For tasks of less than 6 month duration, M/S payments are at the discretion of the Authority.

## 3. Additional Information

3.1	Government Furnished Assets (GFA)
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Please state below whether GFA is required from the Authority. If 'Yes', please provide a complete list. All GFA must be recorded in a formal list whilst in the possession of the Contractor.

For any purchased materials which will become GFE, please provide the known pricing within section 2. Cost Proposal.

GFA to be Issued - Choose an item.

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

If 'Yes' – provide details here.

### **3.2 Contractor's Personnel and Government Establishments**

If performance of the Contract requires access to the Authority's site(s) please confirm insurance is in place in accordance with the R-Cloud Agreement Terms and Conditions

Choose an item.

### **3.3 Commercially Sensitive Information**

Is any Commercial Sensitive Information included within your proposal?

Choose an item.

If 'Yes', please provide the following information:

Description of Commercially Sensitive Information:

Cross Reference(s) to location of sensitive information in proposal:

Explanation of Sensitivity:

Details of potential harm resulting from disclosure:

Period of Confidence (if applicable):

Contact Details for Transparency/Freedom of Information matters:

Name: Redacted

Position: Redacted

Address: Redacted

Telephone Number: Redacted

Email Address: Redacted

### **3.4 Security - Research Workers Process**

For Tasks where a Research Workers Form has been provided, please complete and return as per the process outlined in Part A (Task Overview).

One form is required per Research Worker.

**Please return the completed Tasking Response Form by via the RCloud Portal for the relevant task.**

**Acceptance by the Authority of the proposal to the bidder will be through the issue of an R-Cloud notification containing a purchase order number, which must be quoted on any relevant invoices.**

**The RCloud (version 4) Agreement Terms and Conditions shall apply<sup>1</sup>.**

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<sup>1</sup> Redacted

# Actual Procurement Timescales Template

Actual Procurement Timescales	
Department / organisation	DSTL
Title of procurement	DSTL0000008722 - Feasibility Study into Novel Concepts for a UV REDACTED (Research-Cloud Framework Agreement)
Start date	04/07/2022
Planned date of contract award	01/07/2022
Actual Date of contract award	04/07/2022

## Notes:

1. Start Date – This is the date of the Find a Tender or other Advertisement where used or the date of issue of the ITT or other document used for that purpose.
2. Planned date of contract award - This is the estimated date of contract award stated within the Find a Tender or other Advertisement where used or the date of issue of the ITT or other document used for that purpose.