



R-Cloud Tasking Form – Part B: Authority Statement of Requirement (SoR)

1. Task Identifiers	
Reference	[REDCATED – FOI]
Title	SOFHI Project Laser Wavelength Study
Document Version	0.2

2. Requirement
2.1 Summary
As part of the SOFHI project, Dstl is looking at developing high average power visible and near infrared light sources that can be used for long range spectroscopy applications.
2.2 Background
Wavelength conversion via non-linear processes, such as Raman or four wave mixing are options for achieving visible and near infrared light generation. Dstl wishes to explore the use of photonic crystal or gas filled hollow core fibres for visible and near infrared light generation.
2.3 Technical Requirement
<p>The supplier is to carry out a research study covering the following;</p> <ul style="list-style-type: none">• Methods for generating tuneable or broadband visible and near infrared high average power light (CW and pulsed)• Methods for generating high average power supercontinuum covering the visible and near-infrared wavelengths• Fibre designs for optimum power and beam quality• Requirements for pump sources (i.e. power, wavelength, beam size, CW, quasi CW, pulsed)• Modelling of potential fibre designs• Considerations on thermal management and requirements for input and output coupling optics and end caps• Proposal for a longer follow up task on fabricating fibres for Dstl to test
2.4 Options or Follow-On Work
<p>[REDACTED – FOI]</p> <p>If the modelling looks promising, Dstl would like the option to fund a further 12 months task to manufacture prototype fibres that can then be tested at Dstl using available high power laser sources. It would be expected that this would be iterative as test feedback would be used to further improve the fibre design.</p>



We may also like to re-run the 1st task but change the area of research to mid-wave infrared (3.5 – 5 um) light generation using longer wavelength pump sources.

2.5 Regulatory or Legislative Aspects of the Requirement, including Health and Safety.

Not Applicable

2.6 Social, Environmental or Ethical Aspects of the Requirement

Not Applicable

3. Deliverables & Intellectual Property Rights (IPR)

Please see also the R-Cloud (Version 4) Terms and Conditions, Schedule 3, Annexes S3-A & S3-B.

3.1 Deliverables & Intellectual Property Rights (IPR)

Note: In the IPR column, the following indicators are used to specify the IPR required for each deliverable:

R-Cloud

A2 IPR vests in the supplier (Schedule 3, Annex S3-A applies) and Full Rights are required for other UK Government Organisations.
(See Schedule 3, Annex S3-A clause 1.2.1. Unless otherwise specified, this covers all UK Government Departments and all UK Central Government Bodies)

Ref.	Deliverable Title	Due by	Format	Expected Classification (subject to change)	Information Required in the Deliverable	IPR
D – 1	Technical review and modelling of visible light generation in photonic crystal or hollow core fibres	T0+3 Months	Presentation (.pptx) and report	O	Report and presentation pack to include but not limited to: Technical progress Modelling data Fibre designs Proposal for next stage	A2

All deliverables must comply with the R-Cloud document marking requirements as set out in Tasking Form Part A, Appendix and the R-Cloud (Version 4) Terms and Conditions (Schedule 3, clause 19 and Annexes S3-A and S3-B (as applicable to the deliverable(s))).

3.2 Deliverable Acceptance Criteria

Note to Suppliers: The following Acceptance Criteria must be demonstrated to the satisfaction of the Authority before Deliverables will be deemed have been Accepted by the Authority (R-Cloud (Version 4) Terms and Conditions, clause 8.16 (Payment)).

- Recommendations should be technically viable and demonstrate the path to exploitation.
- Further criteria to be developed as part of the ongoing dialogue with the supplier.

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 the 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.

All Reports shall be free from spelling and grammatical errors and shall be set out in accordance with the DRRS Statement of Requirement above. Failure to comply with the above may result in the Authority rejecting the deliverables and re-requesting re-work before final acceptance.

Monthly Progress / interim reports shall summarise (not detail) work undertaken over the course of the month (including the outcomes of any sprint activity), risks to progress, opportunities and issues related to delivery. These will be reviewed by the Authority with a 5 working day acceptance period.

The Training Manual should be able to be understood by a competent engineer. The technical details shall be sufficient to allow the operation of the supplied equipment. It shall be delivered as a .PDF file. These will be reviewed by the Authority with a 10 working day acceptance period.

Please see also (R-Cloud (Version 4) Terms and Conditions, clause 8.

4. Quality Control and Assurance

4.1 Quality Control and Quality Assurance Processes and Standards that must be met by the Contractor

Not Applicable

4.2 Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement

Not Applicable

5. Government Furnished Assets (GFA)

GFA to be issued		No			
GFA No.	Unique Identifier / Serial No.	Description	Available Date	Issued by	Return or Disposal
Instructions for managing GFA					
N/A					

6. Contract Management

Contract management activities (including Key Performance Indicators (KPIs), where applicable)

KO meeting – in person at Bath

Monthly progress updates

Final review – in person at Bath

Bronze contract – Managed locally by the Project Manager.

7. Additional Information and Supporting Documentation

All supporting documentation will be published in the R-Cloud Portal, unless otherwise stated below. Supporting documentation identified in Section 6 shall be deemed to form part of this Tasking Form.

Tasking form Part A	Please see R-Cloud Portal
Tasking form Part C	Please see R-Cloud Portal
Tasking Form Part D	Please see R-Cloud Portal
Research Workers form	Please see R-Cloud Portal

[REDACTED – FOI]



[REDACTED – FOI]

Annex A- (Annex S3-A) Limitation of Contractors Liability (LoCL)

Limitation of Contractor's Liability (LoCL) shall be managed in accordance with the R-Cloud Terms and Conditions (Schedule 3, clause 23), which references this Annex as Annex S3-A of the Tasking Form (Part B).

Responses not found to comply with Schedule 3, clause 23, risk non-compliance with the Tasking Procedure.

Annex B: Data Protection Particulars

[If used, this Annex will be completed by the Authority on Contract Award]

Where it is proposed that Personal Data will be processed on behalf of the Authority under any resultant Contract, please provide a draft version of R-Cloud Terms and Conditions, Schedule 5 (Data Protection Particulars) with your Response.

The Authority will review and agree a final version with the successful supplier.]