

# Statement of Requirement (SoR)

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## *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.*

<b>Reference Number</b>	<b>RQ0000019784</b>
<b>Version Number</b>	<b>v1.0</b>
<b>Date</b>	<b>24/10/2022</b>

<b>1.</b>	<b>Requirement</b>
<b>1.1</b>	<b>Title</b>
	Graphene Based Terahertz Sensing – Phase III Continuation
<b>1.2</b>	<b>Summary</b>
	Redacted under FOIA Section 26 – Defence
<b>1.3</b>	<b>Background</b>
	Following a successful completion of Phases I, II and III of the project “Graphene Based Smart Terahertz Lenses”, Dstl wishes to continue the work with Manchester University into a “Phase III Continuation” stage.  Redacted under FOIA Section 26 – Defence
<b>1.4</b>	<b>Requirement</b>

	<p>Phase III Continuation should build on the work from Phase III to develop a working THz imaging system. The THz imaging system shall utilise graphene-based smart terahertz lenses in conjunction with novel image reconstruction strategies</p> <p>Redacted under FOIA Section 26 – Defence</p> <p>By the end of Phase III the following areas were identified as requiring further development/optimisation:</p> <ul style="list-style-type: none"> <li>• Detector sensitivity - the main limiting factor for an imaging system;</li> <li>• TFT array design - a new custom design is necessary to tailor performance to the aims of the project;</li> <li>• The speed of the back-plane electronics - Redacted under FOIA Section 26 – Defence</li> </ul> <p>Redacted under FOIA Section 26 – Defence</p> <p>Redacted under FOIA Section 26 – Defence</p> <p>This work will be for a period 24 months. Target start date is 2 January 2023.</p>
<b>1.5</b>	<b>Options or follow on work</b> <i>(if none, write 'Not applicable')</i>
	<p>Subject to a review at the end of this work in December 2024, Dstl may fund a technology development phase.</p>

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  <i>(Commercial to enter later)</i>
D - 1	Monthly progress report detailing work completed, in the form of a 'Quad Chart'.	Starting from T0 (contract award) and subsequently throughout duration of contract.	1-page quad chart. (.pptx)	n/a	Redacted under FOIA Section 43 – Commercial Interest	As per quad chart provided by Dstl.	DEFCON 705 Full User rights.
D-2	Presentation of progress at quarterly progress meetings through the 24 months of the contract.	Starting from T0+3 months, dates for these quarterly progress meetings to be mutually agreed	Presentation (.pptx)	n/a	Redacted under FOIA Section 43 – Commercial Interest	The presentation shall detail the technical work completed; the knowledge and know-how gained; conclusions of work conducted; and recommendation for work to be done in the remaining time of the contract.  The demonstration is to be mutually agreed depending on progress, and could include devices at different stages of their	DEFCON 705 Full User rights for the presentation.  n/a for the demonstration.

		following contract award.				fabrication and their performance parameters at that point.	
D - 3	Technical Progress Report at 6 monthly intervals starting at T0+6 months. Delivery and acceptance of these reports are tied to payments.	Starting from T0+6 months and subsequently throughout duration of contract. Deliverable should be no later than 5 working days prior to the end of the 6 monthly interval.	MS Word	n/a	Redacted under FOIA Section 43 – Commercial Interest	The technical report(s) should detail the technical work completed; the knowledge and know-how gained; conclusions of work conducted; and recommendation for work to be done in the remaining time of the contract, and for the final technical report at T0+24months, any following work.	DEFCON 705 Full User rights.
D - 4	Presentation and demonstration of progress at 12 months after contract award. This demonstration	Date of the presentation and demonstration to be	Presentation (.pptx)	4-5 for the	Redacted under FOIA Section 43 –	The presentation shall detail the technical work completed; the knowledge and know-how gained; conclusions of work conducted; and recommendation of work for the next 12	DEFCON 705 Full User rights for the presentation.

	shall complement the Technical Progress Report delivered at T0+12 months after contractor award and forms part of the payment schedule.	mutually agreed, but anticipated to be no later than 10 working days before the end of the 12 <sup>th</sup> month of the contract.		demo	Commercial Interest	months if there are any deviations to the work plan.  The demonstration is to be mutually agreed depending on progress, and could include devices showing their range of operating parameters.	n/a for the demonstration.
D - 5	At the end of the contract T0+24 months, a fully assembled THz imager shall be delivered to Dstl, along with software codes to operate the system. The imager will be retained by Dstl  Presentation and demonstration of progress 24 months	Date of the presentation and demonstration to be mutually agreed, but anticipated to be no later than 10 working days before the end of the	MS Word	5-6 for the demo	Redacted under FOIA Section 43 – Commercial Interest	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.  The demonstration is to be mutually agreed depending on progress, and should include an integrated THz imager showing its range of operating parameters.	DEFCON 705 Full User rights for the presentation  n/a for the demonstration.

	<p>after contract award. This demonstration shall complement the Technical Progress Report delivered at T0+24 months after contractor award and forms part of the payment schedule.</p>	<p>24<sup>th</sup> month of the contract.</p>					
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**\*Technology Readiness Level required**

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

<b>1.7</b>	<b>Standard Deliverable Acceptance Criteria</b>
	As per Framework T&Cs.
<b>1.8</b>	<b>Specific Deliverable Acceptance Criteria</b>
	Demonstrations will take place at contractor's premises, or at a location to be mutually agreed.

<b>2.</b>	<b>Quality Control and Assurance</b>
<b>2.1</b>	<b>Quality Control and Quality Assurance processes and standards that must be met by the contractor</b>
	<input checked="" type="checkbox"/> <b>ISO9001</b> (Quality Management Systems) <input type="checkbox"/> <b>ISO14001</b> (Environment Management Systems) <input type="checkbox"/> <b>ISO12207</b> (Systems and software engineering — software life cycle) <input type="checkbox"/> <b>TickITPlus</b> (Integrated approach to software and IT development) <input type="checkbox"/> <b>Other:</b> (Please specify below)
<b>2.2</b>	<b>Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement</b>
	n/a

<b>3.</b>	<b>Security</b>	
<b>3.1</b>	<b>Highest security classification</b>	
	<b>Of the work</b>	Redacted under FOIA Section 43 – Commercial Interest
	<b>Of the Deliverables/ Output</b>	Redacted under FOIA Section 43 – Commercial Interest
<b>3.2</b>	<b>Security Aspects Letter (SAL)</b>	
	Not applicable If yes, please see SAL reference- <i>Enter iCAS requisition number once obtained</i>	
<b>3.3</b>	<b>Cyber Risk Level</b>	
	Very low	
<b>3.4</b>	<b>Cyber Risk Assessment (RA) Reference</b>	
	282665548  If stated, this must be completed by the contractor before a contract can be awarded. In accordance with the Supplier Cyber Protection Risk Assessment (RA) Workflow please complete the Cyber Risk Assessment available at <a href="https://www.gov.uk/guidance/supplier-cyber-protection-service">https://www.gov.uk/guidance/supplier-cyber-protection-service</a>	

<b>4.</b>	<b>Government Furnished Assets (GFA)</b>				
GFA to be Issued - No  <i>If 'yes' – add details below. If 'supplier to specify' or 'no,' delete all cells below.</i>					
<b>GFA No.</b>	<b>Unique Identifier/ Serial No</b>	<b>Description:</b> <i>Classification, type of GFA (GFE for equipment for example), previous MOD</i>	<b>Available Date</b>	<b>Issued by</b>	<b>Return Date or Disposal Date (T0+)</b>  <i>Please specify which</i>

		<i>Contracts and link to deliverables</i>			
N/A					

<b>5.</b>	<b>Proposal Evaluation criteria</b>
<b>5.1</b>	<b>Technical Evaluation Criteria</b>

The table below contains the technical criteria against which all proposals will be scored.

ID	Criteria	Score
1	The proposal demonstrates a clear understanding of the current system's performance shortfalls in relation to the required use cases of a THz imaging capability, as described in section 1.4 of this document.	0-10
2	In the proposal, credible options are presented for significantly improving upon the current detector sensitivity.	0-10
3	Redacted under FOIA Section 26 – Defence	0-10
4	Redacted under FOIA Section 26 – Defence	0-10
5	The proposal contains a detailed plan of activities targeted towards achieving those performance enhancements necessary to ensure a successful demonstration will be delivered within the time scale of the project.	0-10
6	The proposal includes a project plan, including details of timings, resources, any dependencies between the different tasks and any critical paths and decision points.	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 or 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.

<b>5.</b>	<b>Proposal Evaluation criteria</b>
<b>5.1</b>	<b>Technical Evaluation Criteria</b>
	<p>Note: A score of <b>less than 4</b> (minor shortfall) against any of the criteria defined above will render the proposal non-compliant.</p>
<b>5.2</b>	<b>Commercial Evaluation Criteria</b>
	<p><i>Commercial Assistance needed here before or after a requisition is raised. Framework evaluation criteria as per T&amp;C's may apply.</i></p>