

Title of Requirement	Redacted under FOI Exemption
Requisition No.	RQ0000024688 – PO/DstI0000017350
SoR Version	0.3

Redacted under FOI Exemption

b) Adaptability

Defence needs to respond to the Future Operating Environment (FOE) by appropriately deploying/employing its personnel. We would like to receive proposals that investigate with regard to Redacted under FOI Exemption

- Operating model - the effectiveness of workforce models which reduce continual overheads by operating a core management function and 'buying in' specialist capabilities for fixed period of time; consider the advantages and disadvantages of this approach.
- Recruit versus train - the merits and challenges of an organisation growing their own niche skills talent (especially a bottom fed model) versus recruiting in talent.
- Accessing niche skills - effectiveness of current methods of identifying and accessing niche skills (from both internal and external talent); what innovative methods could be used to improve this process?

2) Humans In Systems (4 PhD's)**a) Safety – Modernising safety assurance for Generation After Next (GAN) technologies and future Human Machine Interface (HMI)**

Despite dramatic advances in digital and networked enabled technologies, the human operator will likely be expected to provide an essential and enduringly reliable safety assurance function in Defence applications for years to come. We are interested in funding doctoral research to investigate the challenges of assuring the human component of safety critical systems within Defence applications. A particular area of interest is in understanding on how to apply learning from the success of current human reliability models, and the use of traditional HMI technologies, to the assurance of effects that will be delivered with technologies that we can already see shaping our future.

b) Resilience – Supporting resilience within GAN technologies operating within the FOE

We are interested in funding doctoral research to investigate resilience in complex systems, with particular interest in the presentation of information to the operator. The focus should be in the context of GAN Technologies which are likely to exist within the FOE; and ways in which resilience (and degraded operations) may be enhanced.

c) Gaming – Exploitation of design conventions and crossover opportunities between commercial gaming and defence

We are interested in investigating the transferability of developments in Graphical User Interfaces (GUI) / HMI from within the gaming industry, into defence. The gaming industry has developed many novel, highly usable GUIs, but many recent developments have not yet been tested for UK military applications. The research needs to consider the open question as to whether Gaming HMI, and the design of these systems (or specific aspects thereof) could be incorporated in training and other military applications with the aim of reducing the training burden.

d) Mixed Reality – Accelerating the exploitation of MR within future HMI development

There is an increasing trend in the use of augmented, mixed and virtual reality (AR/VR/MR) technologies in construction, manufacturing and architecture industries. However, its adoption in the defence sector is lagging behind. We are interested in funding research

Dstl sets out the expectation that any PhD submission that is selected for funding is expected to start before October 2023.

1.2 Requirement

Requirement: Fund up to 6x PhD studentships in one or more of the topic areas defined above:

In consideration of the above **Request** invites you to submit proposals for funding against the identified topics of interest, and the deliverables specified under Section 1.6 of this tasking form. In submitting a response please be aware of the following criteria that proposals must include and meet:

- A detailed technical proposal (maximum 6 pages);
- A short title and an abstract (200 words max);
- A single PowerPoint slide which summarises the scope of the proposed work;
- CV/s of supervisor/s in the UK (2 page maximum – it must list relevant experience and publications to the topic of interest);
- A completed Personal Particulars Research Workers Form for each student (if already identified) and supervisor/s who will work on the requirements;

[Redacted] sets out to confirm that the nominated research PhD student will be required to complete a Personal Particulars Research Workers Form prior to being given approval by **[Redacted]** to start work, and additional expectation include the individual:

- Attend an "Induction to Defence" day at one of the [redacted under FOI Exemption] in early 2024;
- Attend up to 2 days a year supporting [redacted under FOI Exemption]
- The University will provide soft copies of the PhD Thesis and any publications (e.g., Conference and Journal papers) by the student.

Research Oversight and funding

A **Redacted under FOI Exemption** will be assigned as the main point of contact for the duration of the PhD. As part of this role, the TP will visit University twice a year for up to 2 days per visit. The visit dates are to be agreed between the Supervisor and the TP.

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1.3 Options or follow on work

- [illegible]

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1.4 Contract Management Activities

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1.5	Health & Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement
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1. **Redacted under FOI Exemption**

1.6	Deliverables & Intellectual Property Rights (IPR)				
Ref.	Title	Due by	Format	Expected classification (subject to change)	What information is required for deliverables
D1	Quarterly Progress and Technical Review	T0+3 Months	Presentation (.pptx)	Public	Presentation pack to include: • Update on technical progress
D2	Annual technical report	T0+12 Months	Written report	Public	Brief written report outlining
D3	End of the PhD - Thesis	End of thesis	University thesis	Public	PhD thesis

1.	Deliverable Acceptance Criteria
	<p>Redacted under FOI Exemption</p> <p>Redacted under FOI Exemption</p> <p>Redacted under FOI Exemption</p>

2	Evaluation Criteria												
2.1	Method Explanation												
	<p>Evaluation is based on technical compliance and affordability.</p> <p>The proposals will be evaluated by suitably qualified personnel and will be evaluated both technically and commercially according to the criteria below.</p> <p>Only technically strong proposals will be considered for funding. The academic/research groups or research centre and linkages criteria will be used to further assess the quality of the application(s). The benefit of funding multiple proposals at a research group/centre and the contributions offered outside the Dstl funding will be judged for single and multiple applications from each group/centre.</p> <p><u>Stage 1 – Compliance</u></p> <table border="1"> <thead> <tr> <th>Criteria</th><th>Pass (Compliant) / Fail (Non-Compliant)</th></tr> </thead> <tbody> <tr> <td>The Contractors proposal does not exceed the Authority's funding limit of Redacted under FOI Exemption</td><td>Pass / Fail</td></tr> <tr> <td>Proposal prices do not exceed the R-Cloud rates submitted upon Application and Acceptance</td><td>Pass / Fail</td></tr> <tr> <td>The Supplier has submitted a completed R-Cloud Tasking Form Part C as part of the submission including a completed Annex A Statement Relating to Good Standing and Annex B, Notification of Intellectual Property Rights (IPR) Restrictions or a confirmed NIL Return.</td><td>Pass / Fail</td></tr> <tr> <td>Redacted under FOI Exemption</td><td>Pass / Fail</td></tr> <tr> <td>The Proposal is valid for a minimum of 90 days</td><td>Pass / Fail</td></tr> </tbody> </table> <p>Only those Tenderers who pass all the above compliance criteria will be taken forward to Stage 2. Failure to achieve full compliance will exclude your tender from the Stage 2 evaluation process.</p> <p><u>Stage 2 – Technical Evaluation (Scoring)</u></p> <p><u>Tender Scoring Mechanism: Best technically affordable tender</u></p> <p>The evaluation shall be conducted under the Most Economically Advantageous Tender (MEAT) principles, with the application of an Absolute Method, defined as the Best technically affordable tender.</p>	Criteria	Pass (Compliant) / Fail (Non-Compliant)	The Contractors proposal does not exceed the Authority's funding limit of Redacted under FOI Exemption	Pass / Fail	Proposal prices do not exceed the R-Cloud rates submitted upon Application and Acceptance	Pass / Fail	The Supplier has submitted a completed R-Cloud Tasking Form Part C as part of the submission including a completed Annex A Statement Relating to Good Standing and Annex B, Notification of Intellectual Property Rights (IPR) Restrictions or a confirmed NIL Return.	Pass / Fail	Redacted under FOI Exemption	Pass / Fail	The Proposal is valid for a minimum of 90 days	Pass / Fail
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Redacted under FOI Exemption	Pass / Fail												
The Proposal is valid for a minimum of 90 days	Pass / Fail												

The contract shall be awarded to the tender with the highest, non-cost score that is within budget.

Any tenders received that are in excess of the proposed budget above will be automatically deemed non-compliant and will be excluded from the tender evaluation process.

Best technically affordable tender example

In this example, the assumed budget is £28k.

Tender	Cost (£kNPV)	Non-cost score	Technically compliant	Rank
A	20	62	Yes	2
B	24	85	Yes	1
C	29	100	Yes	Non-compliant

Tender C is over budget and is therefore deemed to be non-compliant. Tenders A and B are both compliant but tender B has the highest non-cost score and is awarded the contract.

2.2 Technical Evaluation Criteria

ID	Criteria	Score	Weighting
1	Scientific Quality and Innovation		
1.1	The Proposal has demonstrated evidence of how the PhD is applicable to Defence within the context of Future Workforce and Training programme.	0-10	X3
1.2	The proposal further evidences any novel methods and or techniques that will be utilised in undertaking the work.	0-10	X3
2	Proposed Approach and Relevance of the PhD		
2.1	The Proposal demonstrates a clear method for undertaking and delivering the work, and the activities identified are relevant to achieving the objectives of the programme	0-10	X2

3	Supplier PhD Management • Balance of skills of the project team • Time and commitment proposed.		
3.1	The Proposal demonstrates that the Requirement will be delivered and Supervised by suitably qualified and experience personnel (SQEP).	0-10	X1
3.2	The proposal includes a populated Risk Register for the performance and delivery of the PhD. The proposal has included clear mitigation of how these risks will be managed.	0-10	X1

Any bid scoring a 0 or 1 in any of the assessment criteria will not be considered for funding. Any bid scoring less than 50 in total will not be considered for funding.

Technical Evaluation Criteria	
Score	Definition
10	Exceeds the Authority's requirement
7	Fully meets the Authority's requirement
5	Adequately meets the Authority's requirement
3	Falls short of the Authority's requirements in a minor respect
1	Falls 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.

2.3	Commercial Evaluation Criteria
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The commercial evaluation shall be based on the following Pass / Fail questions (which form part of the Stage 1 Compliance Assessment above):

1. Has the bidder submitted one (1) full proposal (Technical and Commercial) including all price detail, and has the bidder submitted one (1) Full Technical proposal which excludes all commercial price information?
2. Has the bidder submitted the proposal as a Firm price?
3. Are Labour rates and price as per the rates uploaded to RCloud?
4. Has the bidder submitted one (1) completed copy of RCloud Form Part C – Task Response Form including completed SRGS at Annex A and DEFFORM 711 at Annex B?
5. Has the bidder completed Research Worker forms as necessary?

A fail on any of the above questions will result in your proposal being excluded from further evaluation and consideration.