

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

Title of Requirement	Microstructural characterisation to inform inputs within a probabilistic modelling framework for rapid assessment of new materials
Requisition No.	RQ0000034958
SoR Version	0.1

1.	Statement of Requirements
1.1	Summary and Background Information
	<p>Dstl is seeking a method that allows fundamental microstructural mechanisms, features and behaviours to be understood and applied at the macroscale in applied Finite Element Analyses (FEA). This will increase confidence in traditional, deterministic, FEA predictions and, when applied within a Probabilistic Modelling (ProbMod) framework, will allow Dstl to rapidly assess new materials and microstructures to support decision making and streamline exploitation of materials S&T as well as support a “materials by design” approach.</p> <p>FEA plays a key role in predicting and understanding how structures behave in their intended application. These models can efficiently highlight and optimise desirable properties/features of materials through rapid assessment of many configurations in the end-user application. This significantly reduces the burden of large campaigns of costly and time-consuming trial and error experimentation and allows us to focus on low TRL research.</p> <p>Currently, whilst sophisticated, such models still rely on simple empirical descriptions of the behaviour of the underlying materials. Dstl intend to use a deeper understanding of the material to improve our material models and methods, which can be reverse-engineered to better inform the design of new materials and to account for inherent material variation.</p> <p>Dstl is seeking an exploration of techniques that allow the material behaviours (for high deformation effects; defect aggregation and failure) seen at the microscale to be represented at the component scale.</p> <p>Research has been carried out in this area at low strain rates and the methods used to bridge different length scales are generally prohibitively computationally expensive. This work will cater for the extreme conditions these materials will be subjected to in Defence applications and will focus on extracting the necessary outputs for the component scale simulation to maintain high computational efficiency.</p>
1.2	Requirement
	<p><u>The best method for bridging TRLs is not fully understood and WP1 is designed to agree, based on the commercial offer, how this work will be conducted going forward.</u></p> <p><u>WP1: Multiscale modelling for high strain rate Defence applications literature review (3 months and ~ █████)</u></p>

Following SOR review and response. The background literature search will include details of (but not limited to):

- Microscale mechanisms and how they affect behaviour at continuum level?
- Microstructural characterisation techniques
- Fundamental physics required for different material classes
- Techniques used to bridge length scales and how these can be adapted for use in Defence applications
- Uncertainty propagation and quantification at different length scales
- Methods used to understand population and sample variability (strength + damage)
- Review feasibility of implementing mechanistic approaches using Artificial Intelligence
- Investigate whether standard material models cater for the behaviours exhibited?
- Investigate whether different methods required for different material classes?

D-1: Multiscale modelling for high strain rate Defence applications literature review:

The literature review will detail the findings and detailed comparison of the above criteria from the literature search. The review will include enough information to make a valid comparison of commonly used multiscale modelling techniques and TRL bridging laws as well as information on material property uncertainty and characterisation techniques. This information should be used to identify the most appropriate methods available to support Dstl's internal modelling activity.

WP2 – Multiscale modelling for high strain rate Defence applications (1 month and ~ [REDACTED]):

Following SOR review and response. A proposal will be generated, in consultation with Dstl, based on the outputs from the literature search to finalise the plan of work to be conducted in Option 1 and option 2. The strategy will include details of (but not limited to):

- Selection of a material (or materials) that can be used to demonstrate the process
- Details of the material's desired application (including strain rate)
- Characterisation of selected material
- Selection of technique to bridge TRLs to achieve applied (implementable) solutions
- Development of suitable failure and strength continuum models
- Verification and Validation (V&V) of continuum models
- Applied FEA model
- Reverse-engineer applied FEA model using probabilistic modelling to identify optimal failure and strength model parameters
- Use optimised parameters to optimise material structure
- Applied experimentation

The strategy will be robust such that the process can be validated against experimental data in order to defend any assumptions made about how this process can be used to develop new materials.

D-2 – Multiscale modelling for high strain rate Defence applications proposal:

The proposal will use the outputs from the literature search and expertise from the Contractor to construct a baseline process for multiscale modelling for high strain rate applications. This should include information on the reverse engineering process to design and optimise microstructures that improve performance. The proposal will include enough information and evidence to provide confidence that this will support Dstl internal modelling activity.

	<p>Dstl decision point 1 - Dstl review WP2 and can stop project at this point (before starting option 1) if Dstl consider that the desired outcome is not achievable</p>
<p>1.3</p>	<p>Options or follow on work</p>
	<p><u>Option 1– Demonstration of multiscale modelling approach (18 months and ~ ██████):</u></p> <p>The agreed proposal will be carried out to demonstrate that the method, focussing on bridging TRLs at different length scales, is suitable for high strain rate Defence applications (e.g. blast and ballistics).</p> <p>D-3a – Multiscale modelling demonstration report</p> <p>The report will include information on the multiscale modelling approach, characterisation, bridging TRLs, model validation and details on the outcomes. The report will include enough information and evidence to demonstrate the advantage of using this method over the models currently being used to represent material behaviour by Dstl. Details on how the models can be applied by Dstl is also an essential requirement.</p> <p>The findings of the report will be in the format whereby they can be published in the literature and/or shared with wider industrial partners.</p> <p>D-3b – Multiscale modelling demonstration presentation</p> <p>The method will be reported in the form of a presentation that will summarise the process and results.</p> <p><u>Option 2 – Demonstration of reverse engineering approach for material design and Accreditation and standards for best practice PrM in (21 months and ~ ██████):</u></p> <p>The agreed proposal will be carried out to demonstrate that the reverse engineering approach can be used to optimise microstructures to support the design of new materials.</p> <p>D-4 – Reverse engineering for material design report</p> <p>The report will follow on from the Multiscale modelling report (D-3a). The applied model will be reverse-engineered to optimise material micro-structures. The report will include enough information and evidence to demonstrate the process can be used to optimise microstructures and inform the design of materials. Details on how the models can be applied by Dstl is also an essential requirement.</p> <p>The findings of the report will be in the format whereby they can be published in the literature and/or shared with wider industrial partners</p> <p>D-5 – Standard for multiscale modelling in high strain rate applications</p> <p>The final deliverable will be a standard written to define the process that should be followed for multiscale modelling of materials in high strain-rate applications. This should include enough detail for the process to be followed by SMEs in Government, Industry and Academia.</p>

1.4	Contract Management Activities
	The contractor shall track the progress of the work, and provide monthly updates. The updates shall detail the progress made as well as any issues/risks that become apparent. The update may take the form of a report or a virtual/face to face meeting.
1.5	Health & Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement
	Per framework. The contractor should make COSHH data available as required.

1.6 Deliverables & Intellectual Property Rights (IPR)						
Ref.	Title	Due by	Format	Expected classification	What information is required in the deliverable	IPR Condition
<i>D-0</i>	Monthly progress and technical review	Monthly Review	PowerPoint	OFFICIAL	<p>Presentation pack to include, but not limited to:</p> <ul style="list-style-type: none"> • Review of deliverables • Update on technical progress • Progress report against project schedule • Review of risks/issues <p>Any Other Business (AOB)</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.
<i>D-1</i>	Multiscale modelling for high strain rate Defence applications literature review	0+3	.pdf	OFFICIAL	<p>Assessment of characterisation techniques at various length scales</p> <p>Comparison of commonly used multi-scale modelling techniques, bridging TRLs and assessment of applicability at high strain rate</p> <p>Information on material property uncertainty and characterisation techniques.</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.

D-2	Multiscale modelling for high strain rate Defence applications proposal	0+4	.pdf	OFFICIAL	<p>Detailed plan on how to use multiscale modelling for high strain rate applications</p> <p>Reverse engineering process to design and optimise microstructures</p> <p>Evidence to provide confidence that this will support Dstl internal modelling activity.</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.
D-3a	Multiscale modelling report	0+25	.pdf	OFFICIAL	<p>Detailed record of the multiscale modelling approach, characterisation and bridging TRLs</p> <p>Demonstration of uncertainty propagation through length scales</p> <p>Validation of model development stages</p> <p>Demonstration of model use at the macro-scale in an applied scenario</p> <p>Benchmark against conventional macroscopic models</p> <p>Details on how the approach can be applied by Dstl (or future subcontractors)</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.

<i>D-3b</i>	Multiscale modelling presentation	0+25	.pptx	OFFICIAL	<p>Overview of the multiscale modelling approach, characterisation and technique used to bridge TRLs</p> <p>Overview of uncertainty propagation through length scales</p> <p>Summary of model use at the macroscale in an applied scenario</p> <p>Summary of advantages of this process</p> <p>Discussion on limitations of applicability (e.g. material class, threshold strain rate etc.)</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.
<i>D-4</i>	Reverse engineering for material design report	0+43	.pdf	OFFICIAL	<p>Demonstration of how the applied model can be reverse-engineered to optimise material micro-structures</p> <p>Provide evidence that this process can inform the design of materials</p> <p>Details on how this can be used by MoD (or future subcontractor)</p> <p>Discussion on limitations of applicability (e.g. material class, threshold strain rate etc.)</p>	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.

D-5	Standard for multi-scale modelling in high strain rate applications	0+46	.pdf	OFFICIAL	Define the process that should be followed for multiscale modelling of materials in high strain-rate application	This work is DEFCON 705 but it is expected that the contractor will provide some baseline data in a limited rights versions of the reporting.
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1.7	Deliverable Acceptance Criteria
	<p>Milestone payment invoices should not be submitted until the deliverable has been accepted in writing (email) by Dstl. All deliverables will be subject to inspection by the Dstl Technical Authority (Sub Work Package Technical Lead) including a demonstration that the deliverable functions according to the Dstl technical requirements and the supplier’s technical proposal.</p> <ol style="list-style-type: none"> 1. Outputs are to be delivered to Dstl, Porton Down and be subject to the acceptance of the Authority’s Technical Leads. The Authority will accept or reject deliverables within 30 days of acknowledged receipt. In the case of rejection the Authority will provide the reasons for rejection and the necessary actions to be taken to enable acceptance. 2. Documentation is to 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 MoD; Documentary deliverables to be provided in soft copy form transmitted electronically or on physical media. Hard copies are optional. <p>Report deliverables are to describe the work performed under the Contract in sufficient detail to explain comprehensively the work undertaken and results achieved including all relevant technical details of any hardware, software, process.</p>

2	Evaluation Criteria										
2.1	Method Explanation										
	<p>Technically highest compliant affordable score.</p> <p>Technically highest compliant affordable score. The budget for the core work for this requirement is [REDACTED]. The budget for the options work is [REDACTED]</p> <p>The set weighting for the technical and social value questions will be 90% technical and 10% social value.</p> <p>The Commercial questions will be answered on a PASS/ FAIL basis.</p> <p>Variant bids will NOT be accepted for this competition</p>										
2.2	Technical Evaluation Criteria										
	<p>Marking scheme:</p> <p>Technical assessors and stakeholders will use the following marking scheme.</p> <table border="1" data-bbox="230 1035 2128 1262"> <thead> <tr> <th data-bbox="230 1035 342 1126">ID</th> <th data-bbox="342 1035 1055 1126">Evaluation Question</th> <th data-bbox="1055 1035 1753 1126">Evaluation Criteria</th> <th data-bbox="1753 1035 2128 1126">Weighting</th> </tr> </thead> <tbody> <tr> <td data-bbox="230 1126 342 1262">1</td> <td data-bbox="342 1126 1055 1262">Provide evidence (up to 3 examples) of your knowledge and experience of physics-based constitutive models for impact, crash and dynamics applications</td> <td data-bbox="1055 1126 1753 1262">100% - The Response provides evidence of staff / project team detailing their experience of physics-based models in three of the specified applications.</td> <td data-bbox="1753 1126 2128 1262">3%</td> </tr> </tbody> </table>			ID	Evaluation Question	Evaluation Criteria	Weighting	1	Provide evidence (up to 3 examples) of your knowledge and experience of physics-based constitutive models for impact, crash and dynamics applications	100% - The Response provides evidence of staff / project team detailing their experience of physics-based models in three of the specified applications.	3%
ID	Evaluation Question	Evaluation Criteria	Weighting								
1	Provide evidence (up to 3 examples) of your knowledge and experience of physics-based constitutive models for impact, crash and dynamics applications	100% - The Response provides evidence of staff / project team detailing their experience of physics-based models in three of the specified applications.	3%								

			<p>60% - The Response provides evidence of staff / project team detailing their experience of physics-based models in two of the specified applications</p> <p>30% - The Response provides evidence of staff / project team detailing their experience of physics-based models in one of the specified applications.</p> <p>0% - No evidence provided.</p>	
2	Provide evidence (up to 3 examples from recent publications) of your knowledge in 1) fundamental material behaviours and 2) microstructural mechanics, including 3) cracking of metals	<p>100% - The Response provides evidence of staff / project team detailing their experience and understanding of fundamental material behaviours, microstructural mechanics and cracking of materials.</p> <p>60% - The Response provides evidence of staff / project team detailing their experience of and understanding in two of the specified areas.</p> <p>30% - The Response provides evidence of staff / project team detailing their experience in one of the specified areas.</p> <p>0% - No evidence provided.</p>	9%	
3	Provide evidence (up to 3 examples from recent publications) of your experience in specimen manufacture for microscale evaluation	<p>100% - Three examples provided for specimen manufacture for microscale evaluation.</p> <p>60% - Two examples provided for specimen manufacture for microscale evaluation.</p>	9%	

			<p>30% - One examples provided for specimen manufacture for microscale evaluation.</p> <p>0% - No evidence provided.</p>	
4	Provide evidence (up to 3 examples from recent publications) of your track record of developing or parametrising models across length scales, including crystal plasticity models incorporating material invariant parameters	<p>100% - Three examples provided to demonstrate track record for developing or parametrising models across length scales, including crystal plasticity models incorporating material invariant parameters.</p> <p>60% - Two examples provided to demonstrate track record for developing or parametrising models across length scales, including crystal plasticity models incorporating material invariant parameters</p> <p>30% - One example provided to demonstrate track record for developing or parametrising models across length scales, including crystal plasticity models incorporating material invariant parameters</p> <p>0% - No evidence provided to demonstrate track record for developing or parametrising models across length scales, including crystal plasticity models incorporating material invariant parameters</p>	13%	
5	Provide evidence (up to 3 examples from recent publications) of your track record in analytical treatment of face-centred cubic (FCC) metals	<p>100% - Three examples provided to demonstrate experience in the analytical treatment of FCC metals.</p> <p>60% - Two examples provided to demonstrate experience in the analytical treatment of FCC metals.</p>	9%	

			<p>30% - One example provided to demonstrate experience in the analytical treatment of FCC metals.</p> <p>0% - No evidence provided to demonstrate experience in the analytical treatment of FCC metals.</p>	
6	Provide evidence (up to 3 examples from recent publications) of experience applying Machine Learning in multiscale analysis	<p>100% - Three examples provided to demonstrate application of machine learning in multiscale analysis.</p> <p>60% - Two examples provided to demonstrate application of machine learning in multiscale analysis.</p> <p>30% - One example provided to demonstrate application of machine learning in multiscale analysis.</p> <p>0% - No evidence provided to demonstrate application of machine learning in multiscale analysis.</p>	6%	
7	Provide evidence (up to 3 examples from recent publications) of treatment of sensitivity, uncertainty and stochastics within multiscale analysis	<p>100% - Three examples provided to demonstrate treatment of sensitivity, uncertainty and stochastics within multiscale analysis.</p> <p>60% - Two examples provided to demonstrate treatment of sensitivity, uncertainty and stochastics within multiscale analysis.</p> <p>30% - One example provided to demonstrate treatment of sensitivity, uncertainty and stochastics within multiscale analysis.</p>	9%	

			<p>0% - No evidence provided to demonstrate treatment of sensitivity, uncertainty and stochastics within multiscale analysis.</p>	
8	Provide evidence (up to 3 examples from recent publications) of understanding manufacturing of prototype concepts	<p>100% - Three examples provided to demonstrate understanding manufacturing of prototype concepts.</p> <p>60% - Two examples provided to demonstrate understanding manufacturing of prototype concepts.</p> <p>30% - One example provided to demonstrate understanding manufacturing of prototype concepts.</p> <p>0% - No evidence provided to demonstrate understanding manufacturing of prototype concepts.</p>	9%	
9	Provide a description of your proposed approach to using multiscale modelling in high strain rate applications , including a Gantt chart describing timeline within the initial contract period spanning 12 months and breakdown of work into appropriate sub-tasks	<p>100% - Response specifies high strain rate and contains both Gantt chart and sub-task breakdown.</p> <p>60% - Response specifies high strain rate and contains either Gantt chart OR sub-task breakdown.</p> <p>30% - Response specifies high strain rate and contains Gantt chart and sub-task breakdown but no high strain rate.</p> <p>0% - No evidence provided.</p>	6%	

10	Provide a description of the characterisation equipment and facilities to support the generation data for model development/parametrisation . This evidence should include a description of any in-house or sub-contracted manufacturing capabilities and a description of any computational capability including references to relevant hardware and software capabilities.	<p>100% - The response provides evidence of suitable and currently in-house numerical and experimental capabilities.</p> <p>50% - The response provides evidence of suitable and current access to (not in-house) numerical and experimental capabilities.</p> <p>0% – The response provides no evidence against criteria listed.</p>	6%
11	Provide a description of your proposed approach to use multiscale modelling approaches to optimise material microstructure and design of materials . This should include statements demonstrating 1) an understanding of influential microstructural features, 2) how these can be included in a multiscale modelling framework 3) how microstructural analysis tools can be used to inform design of materials	<p>100% - The response provides evidence against all of the criteria listed.</p> <p>60% - The response provides evidence against two of the criteria listed.</p> <p>30% - The response provides evidence against one of the criteria listed.</p> <p>0% - The response does not provide evidence for any of the criteria listed.</p>	6%
12	Provide a description of your proposed approach to propagate uncertainty in material behaviour through multiscale modelling approach . This should include a statement to 1) demonstrate understanding probabilistic modelling 2) demonstrate understanding of material variability at the component scale.	<p>100% - The response provides evidence against all of the criteria listed.</p> <p>50% - The response provides evidence against one of the criteria listed.</p> <p>0% - The response does not provide evidence for any of the criteria listed.</p>	6%
13	Please provide information detailing any known risks, assumptions, dependencies and exclusions with regards to the work. This should include information such as 1) Lead times to procure	<p>100% - The response provides evidence against all of the criteria listed.</p>	3%

	any components, 2) access to equipment, 3) need for/access to Government Furnished Assets/Information (GFX) and 4) Environmental and safety considerations for operating the equipment.	<p>60% - The response provides evidence against at least two of the criteria listed.</p> <p>30% - The response provides evidence against at least one of the criteria listed.</p> <p>0% - The response does not provide evidence for any of the criteria listed.</p>	
14	Please provide details of the organisations' approach to arranging meetings and reporting on project progress . This evidence should include details of 1) preferred contact method (in-person and/or via telepresence), 2) format of interim deliverables such as sprint reviews etc., 3) frequency of update meetings and 4) amount of contact time required with stakeholders/customers.	<p>100% - The response provides evidence against all criteria listed.</p> <p>75% - The response provides evidence against three of the criteria listed.</p> <p>50% - The response provides evidence against two of the criteria listed.</p> <p>25% - The response provides evidence against one of the criteria listed.</p> <p>0% - The response does not provide evidence against any of the criteria.</p>	3%
15	Please provide details on the organisations' approach to quality assurance . This evidence should include details of any 1) accreditation status with relevant project management organisations. (PMI, Prince2, APM etc.), 2) details of any accreditation status with relevant technical professional bodies (IET, IoP etc.), 3) details of any ability to perform health and safety accreditation of develop products/solutions/systems in house and 4) details of any other relevant training/experience.	<p>100% - The response provides evidence against all criteria listed.</p> <p>80% - The response provides evidence against at least 4 of the criteria listed.</p> <p>60% - The response provides evidence against at least 3 of the criteria listed.</p> <p>40% - The response provides evidence against at least 2 of the criteria listed.</p>	3%

20% - The response provides evidence against at least one of the criteria listed.

0% - The response does not provide any evidence against criteria listed.

Non Scored technical questions

ID	Evaluation Question
1	How many staff have appropriate clearance?
2	Please provide the technical background of Staff
3	Please provide your approach to internal quality controls

Note: Dstl reserves the right to fund more than one compliant bid.

Note: Bids receiving less than 50% of the available technical score will be considered to be non-compliant.

2.3	Commercial Evaluation Criteria		
<p>Please confirm that the proposed FIRM price and within budget.</p>	<p>Your response must show</p> <ul style="list-style-type: none"> -The proposed price must exclude VAT. -The proposed price must be a FIRM price. -The proposed price is inclusive of bid costs. - The proposed price is below [REDACTED]. 	<p>Weighting or Pass or Fail</p> <p>Pass/ Fail</p>	<p>Pass</p> <p>The proposed price:</p> <ul style="list-style-type: none"> - Is FIRM priced. - Excludes VAT. - And is inclusive of bid costs. <p>The proposed price is below [REDACTED]</p> <p>Fail</p> <p>The proposed price:</p> <ul style="list-style-type: none"> - is not FIRM priced or - is inclusive of VAT or - is exclusive of bid costs.

				- The proposed price is above ██████
	<p>Please provide a price breakdown that excludes VAT. This may include some of the following headings:</p> <ul style="list-style-type: none"> - Direct labour cost (man hours and wage rates) - Materials - Brought-out parts - Specials Jigs, Tools and Test Equipment <li style="padding-left: 20px;">– Overheads - Profits etc. 	<p>Your response must</p> <ul style="list-style-type: none"> - Each breakdown must show the calculations that lead to the headings total cost. -Any additional costs not covered in the provided headings should be noted down. 	<p>Pass/ Fail</p>	<p style="text-align: center;">Pass</p> <p>- The response provides the headings in sufficient detail to provide a full price breakdown.</p> <p style="text-align: center;">Fail</p> <p>- The response does not provide the headings in sufficient detail to provide a full price breakdown.</p>
	<p>Please confirm in writing that the price quoted will be valid for a period of sixty (60) Calendar days.</p>	<p>Your response must confirm in writing that the price quoted is valid for 60 calendar days.</p>	<p>Pass/ Fail</p>	<p style="text-align: center;">Pass</p> <p>- The bid confirms in writing that the price provided will be valid for sixty (60) days.</p> <p style="text-align: center;">Fail</p>

				<p>- The response does not confirm in writing the price will be valid for sixty (60) days.</p>
	<p>Please provide a FIRM price for the options listed in the Statement of Requirement (SoR)</p>	<p>Your response must show</p> <ul style="list-style-type: none"> - A proposed price for the options discussed in the SoR - The proposed prices must be FIRM priced - The proposed prices must exclude VAT. - Within the [REDACTED] budget 	<p>Pass/ Fail</p>	<p>Pass</p> <ul style="list-style-type: none"> - Your response provides the following - A proposed price for the options discussed in the SoR and - This is FIRM prices and - Is exclusive of VAT and - Within the [REDACTED] budget <p>Fail</p> <ul style="list-style-type: none"> - your response does not provide - A completed price for the options discussed in the SoR or - The price is not FIRM priced or - The price includes VAT or

				-Is not within the [REDACTED] budget
	Please can your response confirm the acceptance of the R-Cloud terms and conditions as well any special conditions detailed in the tasking form.	<p>Your response must</p> <p>Provide confirmation that you accept the R-Cloud terms and conditions as well any special conditions detailed in the tasking form.</p>	Pass/ Fail	<p>Pass</p> <p>– Your response confirms your acceptance of the R-Cloud terms and conditions as well any special conditions detailed in the tasking form.</p> <p>Fail</p> <p>-Your response does not confirm the acceptance of the R-Cloud terms and conditions as well any special conditions detailed in the tasking form.</p>
	Please provide a completed Supplier Assurance Questionnaire and a completed Security Aspects Letter	<p>Your response Must</p> <ul style="list-style-type: none"> - Include a fully completed Supplier Assurance Questionnaire and - A fully completed Security Aspects Letter 	Pass/ Fail	<p>Pass</p> <ul style="list-style-type: none"> - Your response contains - a fully completed Supplier Assurance Questionnaire and

				<p>A fully completed Security Aspects Letter</p> <p>Fail</p> <ul style="list-style-type: none"> - Your response does not contain a fully completed Supplier Assurance Questionnaire or - A fully completed Security Aspects Letter
	<p>Please provide written confirmation your organisation is willing to complete a Research Workers Form if you are chosen for contract award</p>	<p>Your response must show the following:</p> <ul style="list-style-type: none"> - A commitment to complete a Research Workers Form if you are chosen for contract award 	<p>Pass/ Fail</p>	<p>Pass</p> <ul style="list-style-type: none"> - Your response confirms your commitment to complete a Research Workers Form if you are chosen for contract award. <p>Fail</p> <ul style="list-style-type: none"> - Your response does not confirm your commitment to complete a Research Workers Form if you are chosen for contract award.

	<p>Provide full details of the points of contacts for commercial, project management and technical, for the proposed contract duration.</p>	<p>Your response must show the following:</p> <ul style="list-style-type: none"> -The points of contacts for commercial, project management and technical, for the proposed contract duration. 	<p>Pass/ Fail</p>	<p>Pass</p> <p>-Your response outlines the points of contacts for commercial, project management and technical, for the proposed contract duration.</p> <p>Fail</p> <p>-Your response does not provide the points of contacts for commercial, project management and technical, for the proposed contract duration.</p>
<p>Commercial Evaluation</p>				

The Commercial Criteria shall be reviewed on a strict PASS / FAIL basis. Failure in any of the Commercial Criteria shall result in a non-compliant bid.			
Social Value Questions			
Question	Evaluation Criteria	Weighting or Pass or Fail	Scoring
Please confirm how you will reduce the disability employment gap and also tackle workforce inequality?	<p>Your response must demonstrate the following:</p> <ol style="list-style-type: none"> 1) Demonstrate action to increase the representation of disabled people in the contract workforce. 2) Demonstrate action to identify and tackle inequality in employment, skills and pay in the contract workforce. 3) Support in-work progression to help people, including those from disadvantaged or minority groups, to move into higher paid work by developing new skills relevant to the contract. 	3% out of 10%	<p>100% - The tender's response addresses all points from 1) – 4)</p> <p>75% - The tender's response addresses 3 of the points outlined in 1) – 4)</p> <p>50% - The tender's response addresses 2 of the points outlined in 1) – 4)</p>

		<p>4) Demonstrate action to identify and manage the risks of modern slavery in the delivery of the contract, including in the supply chain</p> <p>5)</p>		<p>25% - The tender’s response addresses 1 of the points outlined in 1) – 4)</p> <p>0% - The tender’s response addresses none of the points outlined in 1) – 4)</p>
	<p>Please confirm how you will ensure effective stewardship of the environment through the delivery of this contract?</p>	<p>Response must clearly demonstrate:</p> <p>1) How you will deliver additional environmental benefits in the performance of the contract including working towards net zero greenhouse emissions.</p> <p>2) Influence staff, suppliers, customers and communities through the delivery of the contract to support environmental protection and improvement.</p>	<p>4% out of 10%</p>	<p>100% - The response fully addresses both components of 1) and 2), explaining in detail how they will contribute to achieving these aims</p> <p>50% - The response fully addresses one component of 1) or 2), explaining in detail how they will contribute to achieving these aims</p> <p>0% - The response has not fully addressed either of the two components</p>
	<p>Please confirm how you will increase supply chain resilience and capacity</p>	<p>Your response must clearly demonstrate how you will:</p> <p>1) Create a diverse supply chain to deliver the contract including new businesses and entrepreneurs, start-ups and SMEs.</p>	<p>3% out of 10%</p>	<p>100% - The tender’s response addresses all of the points outlined in 1) – 3)</p>

		<p>2) Demonstrate collaboration throughout the supply chain, and a fair and responsible approach to working with supply chain partners in delivery of the contract.</p> <p>3) Demonstrate action to identify and manage cyber security risks in the delivery of the contract including in the supply chain.</p>		<p>60% - The tender's response addresses two of the points outlined in 1) – 3)</p> <p>30% - The tender's response addresses one of the points outlined in 1) – 3)</p> <p>0% - The tender's response addresses none of the points outlined in 1) – 3)</p>
<p>Note: Bids receiving less than 50% of the available Social Value score will be considered to be non-compliant.</p>				