

Statement of Requirement (SoR)

For: Business consultancy ☒ Corporate Procurement ☐

Reference Number	
Version Number	0.1
Date	17/11/2023

1.	Requirement
1.1	Title
	Code-independent training on engineering analysis & simulation using FEA (Finite Element Analysis), CFD (Computational Fluid Dynamics) and related technologies.
1.2	Summary
	<p>Dstl requires a Supplier to provide code-independent training on engineering analysis & simulation using FEA, CFD and related technologies.</p> <p>Covering all aspects of training ranging from beginner to expert. From Basic introductions on FEA and CFD, through to bespoke courses covering advance topics on analysis & simulation related technologies.</p>
1.3	Background
	<p>Regular training is required for Numerical Simulation Engineers currently working at Dstl. With the skill level of attendees ranging from Beginner to Expert.</p> <p>Training is required in all aspects of engineering analysis & simulation using FEA, CFD and related technologies. From basic introductions on FEA and CFD, through to bespoke courses covering analysis & simulation related technologies, such as Process Integration</p>

	and Design Optimization, Verification & Validation in Engineering Simulation, and Advanced Dynamic FEA and CFD.
1.4	Requirement
	<p>Dstl requires a Supplier that can provide Training Packages (TP) on a range of topics associated with engineering analysis & simulation using FEA, CFD and related technologies.</p> <p>TP2023.1 will be initially let with the Contract. This is the only guaranteed TP within this Contract, with further Options being implemented when required at the sole discretion of Dstl. There is no commitment given for any additional Options to be taken up by Dstl.</p> <p>Pricing should be provided as a Firm Price for TP2023.1</p> <p>Options for subsequent Financial Years (FY) (which could be either FEA or CFD Training) may be requested at the start of the relevant FY, or as required. See section 1.5 for more details.</p> <p>TP2023.1 Requirement (initial):</p> <p>The Supplier is required to provide on-site training, at Dstl Porton Down, on Finite Element Analysis. A 5 day course, for 12 attendees on the following Finite Element Analysis topics:</p> <ul style="list-style-type: none"> - A Practical Introduction to FEA - Process Integration and Design Optimization <p>Details of the courses are to be suggested by the Supplier, with possible topics to include:</p> <ul style="list-style-type: none"> - A Practical Introduction to FEA <ul style="list-style-type: none"> o Background to FEA o Overview of Element Types o Constraints o Loading Types o Multi Point Constraints (MPCs) o Analysis objective o CAD geometry o Engineering Assessment o Verification and Validation

	<ul style="list-style-type: none"> ○ Other - Process Integration and Design Optimization <ul style="list-style-type: none"> ○ Optimization within a design cycle ○ Simulation Process Integration ○ Optimization: Basics and Single- and Multi-objective optimization ○ Topology Optimization ○ Design of Experiments (DoE) ○ Parameter Optimization ○ Response Surface/Meta-model methods ○ Robust design methodologies
1.5	Options or follow on work
	<p>It is expected that regular training courses will be required by Dstl over the next three years. Requested courses could be requested to be either on-site (at Dstl Porton Down) or on-line, and could have between 1 to 15 attendees each.</p> <p>Options for following Financial Years (FY) (which could be either FEA or CFD training) will be requested at the start of the relevant FY, or as required.</p> <p>The approximate date upon which each Option will be instigated (if required) is as follows:</p> <p>FY2023-2024 – 1 Option expected (TP2023.2)</p> <p>FY2024-2025 – up to 6 Options expected (in Q1, Q2 x2, Q3, Q4 x2) (TP2024.1 – TP2024.6)</p> <p>FY2025-2026 – up to 6 Options expected (in Q1, Q2 x2, Q3, Q4 x2) (TP2025.1 – TP2025.6)</p> <p>An Example of CFD training could include: a code independent introduction to CFD theory and application, advanced CFD theory and application, basic or specialist turbulence modelling, heat transfer and particle tracking.</p> <p>The Supplier's proposal should include example prices for these Optional courses, i.e. 1 attendee on-line, 15 attendees on-line, 1 attendee on-site, and 15 attendees on-site.</p>

1.6	Deliverables & Intellectual Property Rights (IPR)					
Ref.	Title	Due by	Format	Expected classification (subject to change)	What information is required in the deliverable	IPR DEFCON/ Condition <i>(Commercial to enter later)</i>
TP2023.1	Training course	T0+5 Months	In-person training course	O	Course notes to be provided after the course	DEFCON 705 shall apply
TP2023.2 – RP2026.6	Training course	1 month from activation	In-person or remote training course	O	Course notes to be provided after the course	DEFCON 705 shall apply

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

1.7	Deliverable Acceptance Criteria
	Course successfully delivered at Dstl Porton Down (or remotely)

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

3.	Security				
3.1	Highest security classification				
	<table> <tr> <td>Of the work</td><td>Official</td></tr> <tr> <td>Of the Deliverables/ Output</td><td>Official</td></tr> </table>	Of the work	Official	Of the Deliverables/ Output	Official
Of the work	Official				
Of the Deliverables/ Output	Official				
3.2	Security Aspects Letter (SAL)				

	Not applicable If yes, please see SAL reference-
3.3	Cyber Risk Level
	Not applicable
3.4	Cyber Risk Assessment (RA) Reference
	N/A 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 here

4. Government Furnished Assets (GFA)					
GFA to be Issued - Choose an item.					
<i>If 'yes' – add details below. If 'supplier to specify' or 'no,' delete all cells below.</i>					
GFA No.	Unique Identifier/ Serial No	Description: <i>Classification, type of GFA (GFI for information for example), previous MOD Contracts and link to deliverables</i>	Available Date	Issued by	Return or Disposal Date <i>Please specify which</i>
N/A	N/A	N/A	N/A	N/A	N/A

5.	Blank
5.1	
5.2	

6.	Defcons
Defcon:	Covering:
76	Contractor's Personnel at Government Establishments
532B	Protection of Personal Data (Where Personal Data is being processed on behalf of the Authority)
539	Transparency
658	Cyber