

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

<b>Title of Requirement</b>	<b>Persuasion Planning Frameworks</b>
<b>Requisition No.</b>	<b>1000166760</b>
<b>SoR Version</b>	<b>0.1</b>

<b>1.</b>	<b>Statement of Requirements</b>
<b>1.1</b>	<b>Summary and Background Information</b>
	<p>This research is intended to inform MoD and wider government understanding of how to engage and inform, influence or change the behaviour of overseas audiences. Specifically the research will develop guidance alongside a supporting framework that will aid information activity practitioners in utilising persuasive techniques to achieve a range of effects aimed at a range of overseas audiences.</p> <p>“We live in a data-rich information age in which the combined power of exponential growth in computer capability, data, and digital connectivity is fundamentally shaping almost every facet of modern life. Those who could adapt have thrived, others have clung to old methods and withered. Information, in all its manifestations, must change the way Defence execute business and prosecute warfare, both at home and overseas in an era of constant competition. Defence must harness this digital horsepower or be left behind; we have reached the tipping point. Information is no longer just an enabler, it is a fully-fledged national lever of power, a critical enabler to understanding, decision-making and tempo, and a ‘weapon’ to be used from strategic to tactical level for advantage.</p> <p>The smart use of information through the mass customisation of messaging, narrative and persuasion, can vastly extend reach and deliver disproportionate influence on targeted audiences. It is underpinned by core digital technologies and digitally savvy people. This digital race – human and machine – is increasingly geopolitical in nature. Currently we are being challenged in a ‘grey-zone’ short of armed conflict by agile state and non-state actors – notably Russia – who understand our vulnerabilities and seek to exploit them through multifarious asymmetric approaches and the flouting of rules-based norms.</p> <p>Central to these strategic contests are ‘information battles’; battles in which information is ‘weaponised’ and ones in which we increasingly lack the initiative. To regain the initiative and achieve information advantage we must rapidly up our digital game, fundamentally shift the way we think, act, invest, and move with pace through the incremental development of new capabilities. Defence, as part of a national and allied effort, must become a potent and resilient strategic actor; postured for constant competition both home and away. This requires a cultural transformation and a conceptual foundation that puts information advantage at the heart of 21st Century deterrence and campaign design. Information advantage must become part of our doctrinal lexicon and joint action practice; a bedrock upon which a range of physical, virtual and cognitive effects will be built, including the use of information as an effecter in its own right.”</p> <p>Air Marshal E J Stringer CB CBE Director General Joint Force Development and Defence Academy - Joint Concept Note 2/18 Information Advantage <a href="https://www.gov.uk/government/publications/information-advantage-jcn-218">https://www.gov.uk/government/publications/information-advantage-jcn-218</a></p> <p>In order to inform the development of some of the capabilities required to deliver Information Advantage this research aims to identify and evaluate how persuasion can be used to achieve a range of information and influence effects aimed at overseas audiences.</p>
<b>1.2</b>	<b>Requirement</b>

## Research Scope

The research will develop guidance and a supporting framework that will aid information activity practitioners in utilising persuasive techniques to achieve a range of information operations effects aimed at a range of overseas audiences.

Annex A provides a high level overview of Defence Information Activities requirements at the Strategic, Operational and Tactical levels, and provides an analysis of regions / countries of interest taken from the Integrated Review of Security, Defence Development and Foreign Policy.

The Annex also contains a list of information and influence Effects UK Defence may wish to achieve, and persuasion techniques can clearly be used to support the achievement of some of these.

The main Information Operation Effects are shown in the table below, along with their definitions:

Information Operation Effects	Definition
Coerce	<b>Persuade</b> (an unwilling person) to do something by using force or threats.
Compel	Force or oblige to do something.
Contain	To control or restrain. In Info Ops this refers to restraining the spread of information, a message or an effect in the media or audience or on an information system e.g. by <b>persuading</b> someone not to share information.
Convince	Cause to believe firmly in the truth of something. <b>Persuade</b> to do something. E.g. overcoming an argument, bringing to belief, consent or a course of action.
Corrupt	Make unreliable by errors or alterations.
Deceive	Deliberately cause (someone) to believe something that is not true. In Info Ops, deception seeks to mislead adversary decision-makers by manipulating their perception of reality and <b>persuading</b> them to adopt a particular course of action.
Deter	Discourage (someone) from doing something by instilling fear of the consequences e.g. by <b>persuading</b> someone that there will be consequences if they act in a certain way
Diminish	Make or become less. In Information Operations this includes the will, understanding or capability of an actor.
Discredit	Harm the good reputation of. In Information Operations this includes the reputation, credibility and / or authority of an actor or argument e.g. by <b>persuading</b> others to support this effect.

	Empower	Give authority or power to - e.g. using information to take advantage of or create a favourable situation for, tactical, operational or strategic purposes.
	Encourage	Give support, confidence or hope to.
	Exploit	Make use and derive benefit from (a resource). E.g. using information to take advantage of, or create a favourable situation for, tactical, operational or strategic purposes e.g. by <b>persuading</b> an audience to share information to achieve the effect.
	Expose	Make (something) visible by uncovering it. E.g. revealing information that offers an advantage.
	Influence	The capacity to have an effect on the character or behaviour of someone or something, or the effect itself. In Info Ops, influence is an outcome and refers to the behaviour, attitudes and perceptions of an actor following the conduct of Info Ops e.g. via <b>persuasion</b> .
	Manipulate	To handle or control with dexterity. E.g. managing the actor to create friendly advantage often through persuasion or discussion.
	Mislead	Cause to have a wrong impression about someone or something.
	Negate	Nullify or make ineffective. E.g. countering the effects of adversary information activities or the information itself.
	Prevent	Keep from happening or arising. To make unable to do something. E.g. persuading an actor not to take a particular course of action.
	Promote	Further the progress of; support or encourage e.g. via <b>persuasion</b> .
	Reassure	Allay the doubts and fears of. In Info Ops this means restoring confidence and dispelling fear.
	Reinforce	Strengthen or support. Give added strength to. E.g. using information to maintain and increase support for specific ideas, actors, organisations or activities.
<p>The definitions in the above table also include some suggestions on where persuasion techniques could be employed, at least in part, to achieve the Effect.</p> <p>However, this is not an exhaustive list of the potential applications of persuasion to achieve different Effects and serves only as an illustration. The contractor shall:</p>		

1. Review the Effects list to establish where persuasion could be used to support delivery of an Effect.
2. Where persuasion could be utilised to achieve an Effect, establish the most suitable persuasion techniques and approaches that can be applied for each of these – and importantly, ones to avoid.
3. Develop basic practitioner guidance including step-by-step frameworks on how to **persuade** i.e. what are the components of persuasion and how can they be applied to achieve each of the different Effects.

Where possible the guidance will provide simple illustrative examples of how different persuasion techniques can be designed and employed for various communications channels, for example the design of social media messaging, video, audio, posters, cartoon, memes, person-to-person contacts etc.

The research will identify and evaluate in which circumstances different persuasion approaches should be employed (and which shouldn't) depending the specific context within which the communications activities are to be conducted, including the type of audience targeted.

Dstl has identified a number of potentially important contextual factors which are listed below:

- The **level of attribution** of the communications e.g. whether communications are delivered directly or obviously by UK Government / Defence or via third parties where attribution is not immediately obvious
- The **audiences' attitude** to the UK and UK Defence i.e. whether the audience is hostile, neutral, or friendly
- The level of **audience interest in the topic** and particularly how to persuade disinterested audiences or audiences not interested in the subject or topic
- **Uninformed audiences** i.e. audiences that know little about the organisation attempting to persuade them e.g. if communications are around NATO how can you persuade audiences that have little or no real understanding of what NATO is or does?
- The **specific target audience** we are trying to persuade e.g. whether it is a national population as whole versus a specific population segment or demographic group, or a smaller group versus an individual etc.
- The **cultural characteristics of the audience** e.g. how cultural factors can impact on the effectiveness of different persuasion approaches
- The **medium by which the persuasion** is delivered e.g. the online and offline channels that are used.

The contractor shall critically review these factors and suggest other or additional important considerations in deciding which persuasion strategy is most suitable to achieve a specific Effect.

However, we realise consideration of such factors (particularly when considering combinations of factors) could add significantly to the complexity of developing guidance and supporting frameworks. However, we wish the outputs to be as context specific as possible, within the limitations of feasibility and budget.

### Research Approach

The Contractor shall design a research approach to achieve the stated requirements. However, as a minimum, the research approach shall include:

- A review of relevant published research relating to persuasion in the social science field
- A comparative review of persuasive campaigns in different settings, with a focus how those campaigns differ depending on circumstance (i.e. audience, setting, desired effect)
- Highlight key differences between attitude/beliefs and behaviours, and how campaigns target each differently.
- Focus on campaigns that may be of relevance or be applicable to Defence (see Annex A)

	<ul style="list-style-type: none"> <li>• Include as a minimum: academic publications; research industry published research; industry published research</li> </ul> <p>The contractor should not be limited to the mandated approach outlined above and is free to propose additional research strands and outputs, for example the contractor may suggest primary research, such as quantitative data collection or qualitative approaches, as part of their proposed approach or real world testing of frameworks and guidance.</p> <p><b>Reporting Requirements</b></p> <p>Table 1.6 provides a breakdown on Deliverables for this research. Key deliverables are described below:</p> <p><u>Guidance and supporting framework</u></p> <p>The key output is the development of persuasion planning Framework(s) and supporting guidance aimed at both those new to information operations and current practitioners.</p> <p>In order to support Information Operations capabilities Defence must be able to exploit persuasion in information operations design, the user guidance must therefore provide clear and non-technical guidance on how to implement persuasion techniques effectively in different influence settings and for different Effects.</p> <p>The framework should follow a step-by-step process that considers a range of factors in the design and implementation of influence activities using persuasive effect and be illustrated with simple examples to aid with persuasion design.</p> <p>The guidance will include case studies that clearly show how different persuasive strategies were used, and why these strategies were chosen to achieve best effect in that circumstance.</p> <p><u>Two-page summaries</u></p> <p>A two-page non-technical summary will be produced for each specific effect employing persuasion strategies.</p> <p>The summaries will outline persuasion strategies for each Effect, and be illustrated with a relevant case study.</p>
<b>1.3</b>	<b>Options or follow on work</b> <i>(if none, write 'Not applicable')</i>
	<b>Not Applicable</b>
<b>1.4</b>	<b>Health &amp; Safety, Environmental, Social, Ethical, Regulatory or Legislative aspects of the requirement</b>
	<b>Not Applicable</b>

1.5	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  (Commercial to enter later)
1	Start-up Meeting Presentation	Presentation 2 working days prior to meeting.  Meeting within 2 weeks of contract award (CA).	MS PowerPoint	NA	Redacted under FOIA Section 23 - National Security	Presentation pack to include but not limited to: • Proposed activity, resourcing and timelines. • Review of risk management plan. • Review of intended deliverables and deadlines.	DEFCON 705  Wish to circulate across UK Govt.
2	Technical Report	T+5 Months	MS Word	NA	Redacted under FOIA Section 23 - National Security	A short technical report (no more than 20 pages). To include, though not limited to:  a. Introduction and background to the research b. The overview of methodology used c. High level findings from the research d. Overview of case studies e. A standalone Executive Summary f. Conclusions and recommendations, where appropriate, for further research and development within this area.	As above
3	Persuasion Planning	T+5 Months	MS Word / MS Power Point, Excel	NA	Redacted under FOIA Section 23 - National Security	As specified within 1.4. Requirement	As above

	Framework and guidance						
4	Two-page summaries	T+5 Months	To be confirmed	NA	Redacted under FOIA Section 23 - National Security	As specified within 1.4. Requirement	As above
5	Customer Presentation& Closure Meeting	<p>Presentation 5 working days prior to meeting.</p> <p>Meeting held by T+6 months</p> <p>Post meeting slides 5 working days post Start-up meeting.</p>	MS PowerPoint	NA	Redacted under FOIA Section 23 - National Security	<p>To include, though not limited to:</p> <ul style="list-style-type: none"> <li>a. Introduction and background to the research</li> <li>b. The overview of methodology used</li> <li>c. High level findings from the research</li> <li>d. Overview of case studies</li> <li>e. A standalone Executive Summary</li> <li>f. Conclusions and recommendations, where appropriate, for further research and development within this area.</li> <li>g. Demonstration of the framework/guide</li> </ul>	As above

<b>1.6</b>	<b>Deliverable Acceptance Criteria</b>
	<p>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 MoD.</p> <p>Final Reports: shall describe the entire 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 or system developed there under. The technical detail shall be sufficient to permit independent reproduction of any such process or system.</p> <p>All Reports shall be free from spelling and grammatical errors and shall be set out in accordance with the Statement Of Requirement above.</p> <p>Failure to comply with the above may result in the Authority rejecting the deliverables and requesting re-work before final acceptance.</p>

2	Evaluation Criteria					
2 . 1	Method Explanation					
	<p>This requirement will be competed and awarded on the basis of the Value for Money Index (VFM Index) evaluating Technical and Price using a lowest price per technical point scored. This will be ascertained by dividing each bidder's quoted price by their own final moderated technical score. All bids received by the closing date will be assessed against the tender evaluation process detailed below.</p> <p>The Authority will use an evaluation model consisting of three criteria as follows:</p> <ul style="list-style-type: none"><li>• Commercial: PASS / FAIL</li><li>• Technical</li><li>• Pricing</li></ul>					
2 . 2	Technical Evaluation Criteria					
	<p>Technical evaluation will be carried out by a team of between 3 to 5 assessors who will review the technical proposals independently and then bring their scores to a moderation meeting. The moderation meeting will be chaired by the Dstl Project Manager.</p> <p>The moderation meeting will discuss each Tenderers response in turn and attribute a moderated technical score to each of the technical criteria and a final score calculated. Technical criteria is provided overleaf.</p> <p>Please see beneath for further information on how each limb will be scored:</p>					
	<table><tr><td>Ref</td><td>Criteria</td><td>Available Score</td><td>Weighting</td><td>Total Available Score</td></tr></table>	Ref	Criteria	Available Score	Weighting	Total Available Score
Ref	Criteria	Available Score	Weighting	Total Available Score		



T1	The proposal clearly demonstrates that the Contractor understands the requirement.	0-5	1	5
T2	The proposal provides details of key risks, dependencies, assumptions and any relevant ethical issues the Contractor has identified.	0-5	1	5
T3	The proposal clearly demonstrates that the Contractor has the expertise and knowledge to successfully deliver the requirement.	0-5	2	10
T4	The proposal clearly demonstrates that the personnel the Contractor has nominated to work on the requirement have the relevant experience to successfully deliver it.	0-5	2	10
T5	The proposal clearly demonstrates that the Contractors proposed approach will fully address all the key research questions / mandatory requirements stated in the RCA. Proposal should include the following: a detailed work breakdown structure, schedule, roles and responsibilities.	0-5	6	30
				60

### Technical Scoring Guide - Definition of Terms:

Word or phase	Meaning
Comprehensive	Including or dealing with all or nearly all elements or aspects
Close to comprehensive	Including or dealing with slightly less elements or aspects than comprehensive
Satisfactory	Acceptable
Limited	Missing some minor / important elements
Inadequate	Missing some major / important elements

#### T1. The proposal clearly demonstrates that the Contractor understands the requirement.

Score	Key Indicators
5 = Exceeds	<ul style="list-style-type: none"> <li>Demonstrates a comprehensive understanding of the Authority's requirements and objectives, – illustrating knowledge that goes significantly beyond that presented in this Statement of Requirement;</li> <li>Provides excellent insights into how the context and associated requirements may evolve - going well beyond the material presented in the statement of requirement.</li> </ul>
4 = Fully meets	<ul style="list-style-type: none"> <li>Demonstrates a close to comprehensive understanding of the Authority's requirements – illustrating knowledge that goes beyond that presented in this Statement of Requirement;</li> <li>Provide good insights into how the context and associated requirements may evolve - going beyond the material presented in the statement of requirement.</li> </ul>
3 = Adequately meets	<ul style="list-style-type: none"> <li>Demonstrates an understanding of the Authority's requirements;</li> <li>Provide some insights into how the context and associated requirements may evolve - going beyond the material presented in this statement of requirement.</li> </ul>
2 = Fails to meet in a minor respect	<ul style="list-style-type: none"> <li>Has shortfalls in demonstrating an understanding of the question area / requirement – for example, simply mirroring the information presented in this Statement of Requirement;</li> <li>Offers little insight into how the context and associated requirements may evolve.</li> </ul>
	<ul style="list-style-type: none"> <li>Fails to demonstrate understanding of the question area / requirement;</li> </ul>

	1 = Fails to meet in a major respect	<ul style="list-style-type: none"> <li>Offers no insights into how the context and associated requirements may evolve.</li> </ul>
	<b>T2. The proposal provides details of key risks, dependencies, assumptions and any relevant ethical issues.</b>	
	<b>Score</b>	<b>Key Indicators</b>
	5 = Exceeds	<ul style="list-style-type: none"> <li>Provides a comprehensive overview of key risks, dependencies, assumptions.</li> </ul>
	4 = Fully meets	<ul style="list-style-type: none"> <li>Provides a close to comprehensive overview of key risks, dependencies, assumptions.</li> </ul>
	3 = Adequately meets	<ul style="list-style-type: none"> <li>Provides a satisfactory overview of key risks, dependencies, assumptions.</li> </ul>
	2 = Fails to meet in a minor respect	<ul style="list-style-type: none"> <li>Provides a limited overview of key risks, dependencies, assumptions.</li> </ul>
	1 = Fails to meet in a major respect	<ul style="list-style-type: none"> <li>Provides an inadequate overview of key risks, dependencies, assumptions.</li> </ul>
	<b>T3. The proposal clearly demonstrates that the Contractor has the expertise and knowledge to successfully deliver the requirement.</b>	
	<b>Score</b>	<b>Key Indicators</b>
	5 = Exceeds	<ul style="list-style-type: none"> <li>Demonstrates comprehensive expertise of relevance to the requirement.</li> </ul>
	4 = Fully meets	<ul style="list-style-type: none"> <li>Demonstrates close to comprehensive expertise of relevance to the requirement.</li> </ul>
	3 = Adequately meets	<ul style="list-style-type: none"> <li>Demonstrates satisfactory expertise of relevance to the requirement.</li> </ul>
	2 = Fails to meet in a minor respect	<ul style="list-style-type: none"> <li>Demonstrates limited expertise of relevance to the requirement.</li> </ul>
	1 = Fails to meet in a major respect	<ul style="list-style-type: none"> <li>Demonstrates inadequate expertise of relevance to the requirement.</li> </ul>
	<b>T4. The proposal clearly demonstrates that the personnel the Contractor has nominated to work on the requirement have the relevant experience to successfully deliver it.</b>	
	<b>Score</b>	<b>Key Indicators</b>
	5 = Exceeds	<ul style="list-style-type: none"> <li>Demonstrates that the project team has comprehensive expertise and relevant experience to successfully deliver this requirement.</li> </ul>
	4 = Fully meets	<ul style="list-style-type: none"> <li>Demonstrates that the project team has close to comprehensive expertise and relevant experience to successfully deliver this requirement.</li> </ul>
	3 = Adequately meets	<ul style="list-style-type: none"> <li>Demonstrates that the project team has satisfactory expertise and relevant experience to successfully deliver this requirement.</li> </ul>
	2 = Fails to meet in a minor respect	<ul style="list-style-type: none"> <li>Demonstrates that the project team has limited expertise and relevant experience to successfully deliver this requirement.</li> </ul>
	1 = Fails to meet in a major respect	<ul style="list-style-type: none"> <li>Demonstrates that the project team has inadequate expertise and relevant experience to successfully deliver this requirement.</li> </ul>
	<b>T5. The proposal clearly demonstrates that the Contractors proposed approach will fully address the key research questions / mandatory requirements stated in the RCA. Proposal should include the following: a detailed work breakdown structure, schedule, roles and responsibilities.</b>	
	<b>Score</b>	<b>Key Indicators</b>
	5 = Exceeds	<ul style="list-style-type: none"> <li>Provides a comprehensively detailed technical approach, illustrating how it may evolve during the life of the contract;</li> <li>Comprehensively addresses all of the key research questions / mandatory requirements;</li> <li>Provides significant additional relevant information and clear insights;</li> <li>Provides strong examples and reasoning to back up any arguments presented, including reference sources;</li> <li>Demonstrates excellent awareness of key challenges and provides significant detail on how they may be addressed.</li> </ul>

4 = Fully meets	<ul style="list-style-type: none"> <li>Provides a comprehensively detailed technical approach;</li> <li>Comprehensively addresses all of the key research questions / mandatory requirements;</li> <li>Provides some additional relevant information or insights;</li> <li>Provides some examples and reasoning to back up any arguments presented, including reference sources;</li> <li>Demonstrates good awareness of key challenges and how they may be addressed.</li> </ul>
3 = Adequately meets	<ul style="list-style-type: none"> <li>Provides a satisfactorily detailed technical approach;</li> <li>Satisfactorily addresses all of the key research questions / mandatory requirements;</li> <li>Provides little additional relevant information or insights;</li> <li>Provides few examples and reasoning to back up any arguments presented, including reference sources;</li> <li>Demonstrates awareness of some of the key challenges and how they may be addressed.</li> </ul>
2 = Fails to meet in a minor respect	<ul style="list-style-type: none"> <li>Provides limited detail in the technical approach;</li> <li>Limited consideration of the key research questions / mandatory requirements;</li> <li>Provides no additional relevant information or insights;</li> <li>Provides insufficient examples, and/ or little reasoning, to back up any arguments presented;</li> <li>Demonstrates only limited awareness of key challenges and how these may be addressed.</li> </ul>
1 = Fails to meet in a major respect	<ul style="list-style-type: none"> <li>Provides an inadequately detailed technical approach;</li> <li>Inadequate consideration of the key research questions / mandatory requirements;</li> <li>Provides no additional relevant information or insights;</li> <li>Provides no examples or reasoning, to back up any arguments presented;</li> <li>Demonstrate no awareness of key challenges and how these may be addressed.</li> </ul>

The weighted scores on each limb will be added together to give a final technical score. Each technical assessor will perform an individual evaluation and then a final moderated technical score will be arrived at in the moderation meeting.

### Pricing

The price of each proposal will subsequently be divided by the final moderated technical score to arrive at the lowest price per technical point scored. The bidder with the lowest price per technical point scored will be adjudged as the winner.

Example:

Supplier A submits a proposal costing £150,000. Their proposal receives a final moderated score of 50.

$£150,000/50 = £3000$  per technical point scored.

Supplier B submits a proposal costing £125,000. Their proposal receives a final moderated score of 40.

$£125,000/40 = £3125$  per technical point scored.

In this scenario, Supplier A would be the winner as their price is lower per technical point scored.

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## Commercial Evaluation Criteria

Evaluation of Commercial bids will be undertaken against responses to the sub-criteria detailed below and scored in accordance with the 'Commercial Scoring Definitions' underneath.

The Authority reserves the right to reject any Tender if a supplier scores a 'Fail' in any of the criteria below.

Ref	Sub-Criteria Description	Scoring Range	Sub-Criteria Weighting	Maximum Weighted Score
C1	Please submit your full firm price breakdown for all costs to be incurred, including: <ul style="list-style-type: none"> <li>• What rates are being used for what Grade</li> <li>• Quantity of manpower hours per Grade</li> <li>• Travel &amp; Subsistence costs</li> <li>• Journal publication fees</li> <li>• Any Materials costs</li> <li>• Any Facility costs</li> <li>• Any sub-contractor costs</li> <li>• Any other costs</li> </ul>	Pass/Fail	n/a	Pass/Fail
C2	Compliance with the Task specific terms and conditions as stated within the Statement of Requirement and Tasking Form.	Pass/Fail	n/a	Pass/Fail
<b>Subtotal Available Weighted Mark</b>				<b>Pass/Fail</b>

The score (Pass/Fail) awarded to each of the Commercial Sub-criteria will be in accordance with the following definitions:

Score	Definition
	Fully meets the Authority's requirement.
<b>Pass</b>	Provision and acceptance of the sub-criteria information in the format requested, which is clear, unambiguous and transparent.
	Unacceptable/Nil Return.
<b>Fail</b>	Tenderer did not respond to the question or the response wholly failed to demonstrate an ability to meet the sub-criteria requirement.