



Contract No: 701547457 (Formerly referred to as
FsASTC/00138)

For: C17 – Synthetic Training Service

SCHEDULE L
DEF STAN 00-056
TAILORING AND COMPLIANCE MATRIX

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1. Introduction

- 1.1. The Authority requires that Boeing Defence UK (BDUK) provide a description of how tailoring of the safety management requirements of DEF STAN 00-056 might be required using the Tailoring Guidance provided in DEF STAN 00-056 Part 2, Annex B, and presenting the outcome of the process in the Tailoring Matrix as described in Appendix 1 to Annex B. References to Sections and/or Paragraphs contained within the matrix pertain to areas of the S&EMP where a particular requirement is dealt with unless otherwise stated.
- 1.2. Tailoring is the process of determining the range and depth of the safety activities required and is dependent upon the scope, size, complexity, lifecycle phase and the contract arrangements of a particular project. The standard may be tailored in the following ways:
 - Remove - Removal of a clause or clauses from the contract
 - Replace - Replacing a clause with an alternative acceptable means of compliance
 - Make Specific - Revise a clause in order to address a particular scenario or to address a MOD specific capability requirement or domain regulation
 - Add - Additional requirement clauses or sub-clauses may be added to DEF STAN 00-056.
- 1.3. At this stage, BDUK has responded to the Authority's requirements fully; however, it is recognised that there may be subsequent opportunities to tailor the specified safety activities, pending agreement with the Authority.

2. Schedule L – DEFSTAN 00-056 Tailoring Matrix

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
6	The Contractor shall operate an SMS that defines the framework for the Contractor's organisation to direct, control and monitor its safety management activities.	Mandatory	Yes	BDUK will operate a Safety and Environmental Management System. Described in Section 5.
6.1	The Contractor shall define and implement a coherent approach to management of all safety-relevant activities, throughout the life of the Contract and document their approach in an SMP.	Mandatory	Yes	Described throughout in the S&EMP.
6.1.1	The Contractor shall identify civil, open or other standards, or good practice, where they are used in full or partial fulfilment of the requirements of this Standard, and document the means by which any differences to this Standard will be resolved.	Mandatory	Yes	S&EMP identifies areas where software integrity evidence (Section 6.5.7) will be evaluated against appropriate civil standards.
6.1.2	The Contractor should show that use of civil, open or other standards or good practice is appropriate for their Contract.	Non -mandatory	Yes	Where civil standards are followed, it will be justified as appropriate in the Safety & Environmental Assessment Report (S&EAR).
6.1.3	The Contractor should analyse the civil, open or other standards or good practice which they intend to apply to the contract; identify the divergences with this Standard; applicable	Non -mandatory	Yes	Where civil standards are followed, it will be justified as appropriate in the S&EAR.

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	regulations and legislation; and document the results of the analysis and their proposed means of resolving the divergences between them in the SMP.			
6.1.4	The Contractor should ensure that the SMP covers all safety-relevant activities to a level of detail that is reasonably practicable, so as to determine what activities are to be performed, by whom, at what time, and with what methods and tools, throughout the Contract.	Non-mandatory	Yes	S&EMP covers activities to a level of detail appropriate for the phase of the activity.
6.1.5	The Contractor should ensure that the SMP covers the work of all Sub-Contractors, including the mechanisms that the Contractor will use for oversight of Sub-Contractor work, such as auditing.	Non- mandatory	Yes	Safety requirements will be derived and flowed to suppliers (subcontractors) through statements of work. Suppliers will be subject to audit and included in System Safety Working Groups.
6.1.6	Where the Contract includes provision of a service the Contractor should agree with the MOD the balance between the activities managed through the service SMP and through other relevant plans, drawing on the service SMP as the key plan for the safety aspects of the delivery, prior to commencement of the service.	Non- mandatory	Yes	C-17 STS is for provision of equipment and provision of a training service as covered in the scope of this S&EMP.
6.1.7	Where the Contractor has an SMS in place, the SMP should draw on that system.	Non- mandatory	Yes	Safety and environmental management systems described in this S&EMP.

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6.1.8	Where the Contractor does not have an SMS in place, the SMP should address the core principles of systems engineering and safety management.	Non- mandatory	N/A	Compliance with 6.1.7 renders this requirement non-applicable.
6.2	The Contractor shall agree the SMP with the MOD.	Mandatory	Yes	S&EMP will be submitted with the tender response and agreed prior to contract award
6.2.1	The Contractor should define an SMP as part of the tendering process, and formalise and agree the plan with the MOD at Contract award.	Non- mandatory	Yes	This S&EMP is produced as part of Boeing's Integrated Business Assurance Process (IBAP) process and will be agreed with the Authority when necessary.
6.3	The Contractor shall review and update the SMP to reflect changes throughout the life of the Contract.	Mandatory	Yes	The S&EMP will be updated annually and as required and agreed with Authority
6.3.1	The Contractor should review the SMP on a regular basis, depending on the scale and stage of the Contract or on significant events, e.g. change in supplier, introduction of a new technology or changes to risk mitigation strategy, and agree the SMP changes with the MOD before implementation.	Non- mandatory	Yes	BDUK shall implement a change management process

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6.3.2	When the Contract includes support, the Contractor should ensure that all changes in design and their implementation are managed through the SMP, or in subsidiary plans, together with mechanisms for safe and effective distribution and installation of those changes.	Non- mandatory	Yes	In service support arrangements will be captured through change management procedures.
6.4	The Contractor shall report progress against the SMP to all stakeholders as identified in the SMP, and shall report on any necessary actions to correct deviations from the SMP.	Mandatory	Yes	The S&EAR DIDs shall include a description of progress against the safety programme defined in the S&EMP
6.4.1	The Contractor should ensure that Progress Reports highlight significant safety issues and proposed remedial actions, as well as documenting progress against planned tasks.	Non- mandatory	Yes	The S&EAR DIDs shall include a description of progress against the safety programme defined in the S&EMP
7.1	Any deviations from the requirements of this Standard shall be formally agreed between the MOD and the Contractor prior to their implementation, and documented in the SMP.	Mandatory	Yes	The S&EMP, including this compliance matrix, shall be agreed with the Authority prior to contract award.
7.1.1	Where there are conflicts between the requirements of this Standard and other requirements, a means of resolving the conflicts shall be agreed between the MOD and the Contractor.	Mandatory	Yes	The S&EMP, including this compliance matrix and any standard conflicts, shall be agreed with the Authority prior to contract award.

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				Emergent issues shall be raised and discussed at the planned safety meetings
7.1.2	In the response to an ITT, the tenderer should specify how they intend to meet the requirements of this Standard.	Non- mandatory	Yes	The S&EMP will be submitted as part of the response to the ITN, including this compliance matrix.
7.1.3	The tenderer should provide a compliance matrix for this Standard with their response to the ITT, showing: a) Which clauses will be or have been fully complied with. b) Which clauses will not be or have not been fully complied with, and why, including a description of any alternative approaches and why they are acceptable.	Non- mandatory	Yes	The S&EMP, including this compliance matrix.
7.1.4	For any intended deviations, the tenderer should indicate how their approach will meet the intent of this Standard or explain why compliance is not considered to be necessary.	Non- mandatory	Yes	The S&EMP, including this compliance matrix.
7.2	The Contractor shall identify and document all relevant safety legislation, regulations and standards applicable to the PSS delivery.	Mandatory	Yes	Defined at this stage in Section 6.2.1
7.2.1	The Contractor shall work with the MOD to identify and agree relevant MOD policy	Mandatory	Yes	S&EMP currently adopts MOD policy. Additional policy may be identified

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	appropriate to the scope of supply and scope of analysis, addressing the domain and the technology used.			following engagement with the Authority safety manager at a later phase in the programme.
7.2.2	The Contractor should agree with the MOD, all legislation, regulations and standards applicable to the scope of supply and scope of analysis, addressing the domain and the technology used.	Non- mandatory	Yes	S&EMP currently adopts MOD policy. Additional policy may be identified following engagement with the Authority safety manager prior to contract award.
7.3	Where work is Sub-Contracted, the Contractor shall ensure and provide assurance that the relevant requirements of this Standard are met throughout the supply chain.	Mandatory	Yes	Safety requirements will be derived and flowed to suppliers through statements of work. Suppliers will be subject to audit.
7.3.1	The Contractor should identify their requirements to Sub-Contractors, appropriate to the Contractor's scope of supply and scope of analysis.	Non- mandatory	Yes	Safety requirements will be derived and flowed to suppliers through statements of work. Suppliers will be subject to audit
7.3.2	The Contractor should place requirements on Sub-Contractors to ensure that the Contractor's compliance to the relevant requirements of the Standard are met.	Non- mandatory	Yes	Safety requirements will be derived and flowed to suppliers through statements of work Suppliers will be subject to audit
7.3.3	The Contractor should identify deliverables and audit mechanisms to provide assurance that the requirements of the Standard are met throughout the supply chain, and record the	Non- mandatory	Yes	Suppliers will be subject to audit

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	evidence to demonstrate compliance in the information set.			
7.4	Where there are multiple deliverable PSS, the Contractor shall apply the clauses of this Standard relevant to each PSS element, grouping common PSS elements where appropriate, and document the approach adopted in the SMP.	Mandatory	Yes	Meetings between the Authority safety manager and the BDUK C-17 STS safety team are documented in section 6.1 where specific requirements can be discussed.
7.4.1	The Contractor and the MOD should discuss and agree where it is necessary to apply specific requirements of the Standard across each deliverable PSS.	Non- mandatory	Yes	The S&EMP currently defines that BDUK will produce a S&EAR and other DIDs as specified in [Ref, 14] for the C-17 STS system
7.4.2	Safety Case Reports and Information Set Safety Summaries (ISSSs) should be produced for each related PSS so that they are “self-contained” from a safety perspective.	Non- mandatory	Yes	The S&EARs will incorporate safety evidence from BDUK suppliers and meet the intent of this requirement.
7.5	The Contractor shall provide the MOD with visibility of the safety engineering, support and safety management activities throughout the life of the Contract.	Mandatory	Yes	Satisfied through provision of DIDs (section 4.6) and through feedback at the safety meetings defined in section 4.1 of the S&EMP
7.5.1	The Contractor shall define and agree with MOD an information set which is sufficient to enable all safety relevant design and safety analysis activities to be reviewed and repeated.	Mandatory	Yes	BDUK shall provide all the required safety DIDs

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7.5.2	The Contractor shall ensure that the information set is kept up to date as the design and analysis evolves, and that it is managed in a suitable configuration management framework. (E.g. Defence Standard 05-57 [Ref, 34]).	Mandatory	Yes	BDUK shall conduct change management as defined in Section 8. The safety assessment will develop per programme milestones and requirements.
7.5.3	The Contractor shall maintain consistency between the information set and the configuration of deliverable PSS.	Mandatory	Yes	BDUK shall conduct change management as defined in Section 8.
7.5.4	The Contractor shall preserve the information set for the period or periods specified in the Contract.	Mandatory	Yes	BDUK shall preserve the information set for the period specified by any future contract with the Authority.
7.5.5	The Contractor shall ensure that the information set remains accessible as techniques, methodologies and tools change, through the life of the Contract.	Mandatory	Yes	BDUK shall conduct change management as defined in Section 8.
7.5.6	The Contractor shall pass information to the MOD, Regulators and any other organisations identified in the Contract, where that information is necessary for other parties to be able to fulfil their safety responsibilities with regard to the deliverable PSS, or interfacing or interacting PSS.	Mandatory	Yes	BDUK shall produce and provide the safety DIDs specified in section 6.3.
7.5.7	The Contractor should seek to be inclusive in defining the information set, to ensure that data	Non- mandatory	Yes	BDUK shall seek to ensure that the information set is inclusive.

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	and information that might have a safety role are included.			
7.5.8	The Contractor should define, and agree with the MOD, processes for information management, including periodic review of media, compatibility with current tools (both specialist and general purpose) and devise means of migrating data as appropriate to ensure that it remains both accessible and usable.	Non- mandatory	Yes	Will be agreed with the Authority prior to contract award.
7.5.9	Where the Contractor anticipates difficulties, or very high costs, in preserving access to parts of the information set they should discuss approaches and options with the MOD.	Non- mandatory	Yes	Will be agreed with the Authority, if necessary.
7.5.10	The Contractor should consider obsolescence of the technologies used for preserving the information set.	Non- mandatory	Yes	Will be considered as required in the Integrated Support Plan
7.6	The Contractor shall produce documentary deliverables relevant to safety, including interim versions, as Contracted	Mandatory	Yes	BDUK shall produce all the safety DIDs (section 6.3).
7.6.1	The Contractor shall agree with the MOD the format and content for all Contracted safety-related deliverables in the scope of supply and document this information in the SMP.	Mandatory.	Yes	BDUK shall comply with the DIDs. Templates for the DIDs covering format and content will be submitted with the response to the ITN and can be

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				considered in discussion with the Authority prior to contract award.
7.6.2	The Contractor should define deliverable formatting and content taking into account the DIDs and the requirements of any civil, open or other standards being used, as identified in the SMP.	Non- mandatory	Yes	BDUK shall comply with the DIDs. Templates for the DIDs covering format and content will be submitted with the response to the ITN and can be considered in discussion with the Authority prior to contract award.
7.6.3	The Contractor should develop and update the deliverable plans, reports and summaries at appropriate stages of the Contract as defined in the SMP.	Non- mandatory	Yes	Deliverables shall be developed and updated as described in Table 4 of the SEMP in section 6.61.
7.7	The Contractor shall agree with the MOD, the PSS and safety-related documentation to be delivered and record this information in the SMP.	Mandatory	N/A	This can be agreed with the Authority prior to contract award.
7.7.1	The Contractor should define the boundaries and operating environment including any known interfacing or interacting PSS, whether extant or planned.	Non- mandatory	Yes	High-level safety boundary diagram is provided in Figure 2 (S&EMP). More detailed diagrams showing the safety control functions between elements of the system shall be included in subsequent issues of the S&EMP.

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7.7.2	The Contractor should define the PSS to include all relevant elements across the Defence Lines of Development, as Contracted.	Non- mandatory	Yes	This can be defined with the Authority prior to contract award.
7.7.3	The Contractor should record the definition of the PSS, and the results of activities within the scope of analysis, in the information set and update it throughout the Contract to ensure that it accurately reflects the status of the design, safety analysis and engineering activities.	Non- mandatory	Yes	BDUK shall conduct change management as defined in Section 8.
8.1	The Contractor shall define the roles and responsibilities of those individuals responsible for safety within the scope of contract and document them in the SMP.	Mandatory	Yes	Roles and responsibilities are defined within Section 5.4.
8.1.1	The Contractor shall identify the normal point of contact for safety matters within the safety organisation	Mandatory		The normal point of contact shall be C-17 STS safety engineer.
8.1.2	The Contractor shall demonstrate how responsibility is delegated to ensure safety is treated with appropriate authority within the organisation and on the Contract.	Mandatory	Yes	
8.1.3	The Contractor should keep the definition of roles and responsibilities of those individuals responsible for safety up to date.	Non- mandatory	Yes	Safety issues can be escalated to the BDUK Safety Lead as required.

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8.1.4	The Contractor should identify and record, in the information set, competency requirements for each role.	Non- mandatory	Yes	BDUK performs competence management in accordance with S&EMP Section 5.6
8.2	The Contractor shall contribute to Safety Committees and other liaison activities to ensure effective coordination of safety with the MOD and other stakeholders.	Mandatory	Yes	BDUK intends to contribute to safety committees and other liaison activities as defined in S&EMP
8.2.1	The Contractor shall provide visibility of the information set to the Safety Committee to enable it to oversee safety management, safety engineering and safety-related support activities.	Mandatory	Yes	BDUK shall provide the safety DIDs as required
8.2.2	The Contractor shall support the Safety Committee in recommending, endorsing or providing guidance on issues with a potential safety impact and in assuring the results of work, within the scope of analysis, either directly or through subsidiary committees.	Mandatory		BDUK intends to support safety committees and other liaison activities as defined in S&EMP
8.2.3	The Contractor shall support the Safety Committee in any additional roles/tasks as agreed with the MOD and recorded in the SMP.	Mandatory	Yes	BDUK intends to support safety committees and other liaison activities as defined in S&EMP
8.2.4	Where there is an MOD Safety Committee, the Contractor should participate in its work	Non- mandatory	Yes	BDUK intends to support safety committees and other liaison activities as defined in S&EMP

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
8.2.5	Where there is no appropriate committee, the Contractor should work with the MOD to establish a Safety Committee that includes relevant stakeholders and define the constitution and Terms of Reference in the SMP.	Non- mandatory	Yes	BDUK intends to support safety committees and other liaison activities as defined in S&EMP
8.2.6	Where appropriate the Safety Committee should delegate work to subsidiary committees or working groups, and document the policy on delegation of responsibility and escalation of issues in the SMP. These sub-committees may be largely staffed by Contractor personnel.	Non- mandatory	Yes	BDUK shall support the safety committee and subsidiary safety meetings as defined in S&EMP
8.2.7	Where there is concurrent work on interfacing or interacting PSS, the Safety Committee should collaborate with other Safety Committees to manage interfaces, and should refine the scope of analysis if necessary to minimise gaps in analysis, or overlaps and duplication of effort.	Non- mandatory	Yes	This S&EMP and the S&EMPs provided by suppliers shall be used to define SMS interface arrangements..
8.2.8	Where the Contract involves support, the Safety Committee should approve proposed changes to all PSS before they are implemented and ensure the proposed changes comply with domain regulatory requirements.	Non- mandatory	N/A	To be agreed with the Authority prior to contract award.

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8.2.9	The Contractor should record all their support to the Safety Committee and safety-related meetings.	Non- mandatory	Yes	BDUK shall support the safety committee and subsidiary safety meetings as defined in S&EMP All meetings shall be recorded in minutes.
8.3	The Contractor shall ensure that Contractor Safety Auditors (CSAs) are independent from those areas within the Contractor's organisation, or any Sub-Contractors, that are subject to Contractor safety audit.	Mandatory	Yes	Internal safety audits of C-17 STS programme shall be performed by areas of the BDUK organisation separate from those conducting the C-17 STS programme in accordance with the internal safety audit process.
8.4	The Contractor shall ensure that all safety-relevant tasks within their scope of contract are carried out and managed by individuals, teams or organisations that are competent to perform those tasks.	Mandatory	Yes	BDUK shall ensure that all individuals, teams or organisations are competent.
8.4.1	The Contractor should record the evidence of competence, on an individual, team and organisational basis, in the information set	Non- mandatory	Yes	Competence of the involved individuals, teams and organisations is covered in section 3.4 and shall be argued in the S&EAR DIDs.
8.4.2	The Contractor should undertake competence management, for all project staff, drawing on	Non- mandatory	Yes	BDUK shall ensure that all individuals, teams or organisations are competent.

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	publicly available competence frameworks, where possible.			
8.4.3	Contractors should ensure that competent personnel are appointed to all posts that affect safety and confirm details in the relevant section of the SMP and in the Safety Case	Non- mandatory	Yes	BDUK shall ensure that all individuals, teams or organisations are competent.
9.1	The Contractor shall cooperate, and coordinate safety activities, with all relevant organisations identified in the SMP.	Mandatory	Yes	The BDUK S&EMP and the S&EMPs provided by suppliers shall be used to define SMS interface arrangements.
9.1.1	The Contractor should define processes for managing organisational interfaces, e.g. to suppliers or to operators of peer PSS, and document them in the SMP. These processes should cover the full scope of contract.	Non- mandatory		The BDUK S&EMP and the S&EMPs provided by suppliers shall be used to define SMS interface arrangements.
9.1.2	The Contractor should ensure timely and accurate communication with all relevant organisations identified in the SMP and participate in relevant Safety Committees to ensure coordination of safety management and engineering activities.	Non- mandatory	Yes	BDUK shall support timely and accurate communication through the safety committee and subsidiary safety meetings
9.2	The Contractor shall record, as part of the information set, all assumptions and information necessary to enable safe integration or	Mandatory	Yes	The S&EMP and subsequent S&EAR DIDs shall contain all assumptions and information necessary to make the

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	interoperation with other PSS, including in a system of systems.			argument that the C-17 STS integrated system is acceptably safe.
9.2.1	The Contractor shall identify and record, as part of the information set, their assumptions about any known interfacing or interacting PSS, whether extant or planned, to enable them to carry out safety-related activities within the scope of contract.	Mandatory	Yes	The S&EAR DIDs shall contain all assumptions and information necessary to make the argument that the C-17 STS integrated system is acceptably safe.
9.2.2	The Contractor shall record, as part of the information set, assumptions which other organisations are entitled to make about their deliverable PSS.	Mandatory	Yes	BDUK shall review and incorporate assumptions made by suppliers into the overall C-17 STS system S&EAR.
9.2.3	The Contractor should define and manage the technical interfaces to each element which can be operated in a system of systems.	Non- mandatory	Yes	All interfaces will be defined and managed, but this will be undertaken in later phases of the project.
9.3	The Contractor shall assess information provided by the MOD or other Contractors for interacting PSS and take steps to resolve any inconsistencies in the assumptions made at interfaces, in discussion with the MOD if necessary.	Mandatory	Yes	BDUK shall review all safety information provided by suppliers and incorporate assumptions made by sub suppliers into the overall C-17 STS system S&EAR. Inconsistencies shall be reported and resolved through the PESC or other working groups defined in the S&EMP.
9.3.1	The Contractor should seek to reconcile assumptions made at boundaries with other PSS to ensure safe operation of the whole,	Non- mandatory	Yes	BDUK shall review all safety information provided by suppliers and incorporate assumptions made into the overall C-17

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	recognising that changes may need to be made in PSS still under development, to cater for limitations of other system elements.			STS S&EAR. Inconsistencies shall be reported and resolved through the PSP or other working groups defined in the S&EMP.
10.1	The Contractor shall carry out safety audits as specified in the SMP, to assure the implementation of the SMP.	Mandatory	Yes	BDUK shall implement safety audits as described in the S&EMP
10.1.1	A Safety Audit Report shall be produced, following each safety audit, which fully describes the findings of the safety audit.	Mandatory	Yes	BDUK shall implement safety audits as described in the S&EMP in accordance with BDUK Internal Audit Process (BPI-705)
10.1.2	All audit findings should be assessed for significance and the need for remedial action identified	Non- mandatory	Yes	BDUK shall implement safety audits as described in the S&EMP in accordance with BDUK Internal Audit Process (BPI-705)
10.1.3	The Contractor should ensure that all Sub-Contract activity is audited.	Non- mandatory	Yes	BDUK shall perform supplier audits as defined in S&EMP
10.2	The Contractor shall allow an Independent Safety Auditor, if one is appointed, reasonable access to the information set.	Mandatory	Yes	BDUK shall grant access subject to ITAR descriptions as defined in the S&EMP.
10.2.1	Where restrictions on access to elements of the information set, required for safety audit, are unavoidable, e.g. foreign export controls, the	Non- mandatory	Yes	BDUK shall grant access subject to ITAR descriptions as defined in the S&EMP.

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	Contractor should identify and communicate them to the MOD at the earliest opportunity.			Where access cannot be granted the Authority shall be informed.
10.3	The Contractor shall identify and implement timely remedial actions to rectify any agreed non-conformities or other issues found in safety audits.	Mandatory	Yes	BDUK shall rectify audit findings in accordance with BDUK Internal Audit Process (BPI-705)
10.3.1	The Contractor should agree the remedial actions with the MOD through the Safety Committee, and any other relevant stakeholders, as appropriate.	Non- mandatory	Yes	BDUK shall agree audit finding remedial actions with the Authority via the Project Safety Panel
10.3.2	The Contractor should update the SMP, if appropriate, to reflect the agreed remedial actions	Non- mandatory	Yes	If necessary Audit remedial actions shall drive changes to the SMP or other procedures and processes
11.1	The Contractor shall clearly identify, record and track Safety Requirements throughout the Contract.	Mandatory	Yes	BDUK shall identify, track and record safety requirements (including derived requirements) throughout the contract. Initial safety requirements are discussed in the S&EMP.
11.1.1	The Contractor shall document the process for identifying, recording and tracking Safety Requirements in the SMP.	Mandatory	Yes	Safety requirements are discussed in the S&EMP.
11.1.2	The Contractor shall identify and record Derived Safety Requirements resulting from MOD policy, regulations and standards appropriate to	Mandatory	Yes	Safety requirements are discussed in the S&EMP.

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	the scope of supply and scope of analysis, addressing the domain and the technology used, relevant to the Contract.			
11.1.3	The Contractor shall identify and record all Derived Safety Requirements arising from safety engineering and safety analysis activities.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.1.4	The Contractor shall identify and record Safety Requirements to ensure Design Integrity.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.1.5	The Contractor should identify and record all Safety Requirements, including Top Level Safety Requirements, in the information set.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.1.6	The Contractor should identify and record all Derived Safety Requirements needed to ensure control of risks associated with hazards, and potential risks associated with identified failure modes whether they are to mitigate the effects of the hazards or failure modes, or to make them less likely to occur.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.1.7	The Contractor should identify and record Derived Safety Requirements on properties of the PSS, where necessary to manage risk.	Mandatory	Yes	Safety requirements are discussed in the S&EMP

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11.1.8	The Contractor should identify and record Derived Safety Requirements on processes, e.g. to show independence of elements of the PSS, where necessary to manage risk.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.2	The Contractor shall maintain records to show traceability between each Safety Requirement, the source of the requirements including safety analysis and mitigation for hazards or potential accidents.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.2.1	The Contractor should record the evidence which shows that each Safety Requirement (including Derived Safety Requirements) has been validated as being correct and complete in the information set.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.2.2	The Contractor should record the evidence which shows that each Safety Requirement (including Derived Safety Requirements) has been met, or documents any shortfall in the information set.	Mandatory	Yes	Safety requirements are discussed in the S&EMP
11.2.3	The Contractor should record the evidence such that it can be included in, or referenced from, the Hazard Log.	Mandatory	Yes	Table 4 of S&EMP

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.3	The Contractor shall identify all hazards and associated potential accidents, from all credible causes, within the scope of analysis.	Mandatory	Yes	Table 4 of S&EMP
11.3.1	The Contractor should employ systematic analysis processes for identification of hazards and accidents as defined in the SMP.	Non- mandatory	Yes	Table 4 of S&EMP
11.3.2	The Contractor should ensure that human factors are considered where they may be a contributory cause of a hazard.	Non- mandatory	Yes	Table 4 of S&EMP
11.3.3	The Contractor should ensure that cyber security is considered where security breaches may be a contributory cause of a hazard.	Non- mandatory	Yes	Section 6.8 of S&EMP
11.3.4	The Contractor should ensure that systematic and random failures are considered where they may be a contributory cause of a hazard.	Non- mandatory	Yes	Both random and systematic failures will be considered. Both probabilistic and Safety Integrity Level (SIL) requirements will be defined and the system assessed against these targets using appropriate analysis techniques.
11.3.5	The Contractor should ensure that the undesired impact of normal functions is considered; this is especially important for Contractors carrying out systems integration.	Non- mandatory	Yes	Both failures and undesired impact of normal functions shall be considered in the hazard analysis.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.4	The Contractor shall ensure that the status of the control of all hazards is visible throughout the Contract.	Mandatory	Yes	Hazards and status shall be recorded in the Hazard Log DIDs and reported in the S&EAR DIDs. An initial hazard log has been included as part of DID 21 for the submission to the Authority.
11.4.1	The Contractor shall implement a Hazard Log.	Mandatory	Yes	Hazards and status shall be recorded in the Hazard Log and reported in the S&EAR DIDs.
11.4.2	The Contractor shall ensure that Hazard Log Reports are delivered as defined in the SMP.	Mandatory	Yes	Hazards and status shall be recorded in the Hazard Log and reported in the S&EAR DIDs.
11.4.3	The Contractor should update the Hazard Log throughout the Contract to ensure that it accurately reflects the status of the design, hazard analysis, safety analysis and safety engineering activities.	Non- mandatory	Yes	The Hazard Log shall be updated throughout the contract and reported in the S&EAR DIDs at each phase.
11.5	The Contractor shall undertake the design of the PSS so as to meet all Safety Requirements.	Mandatory	Yes	Safety Requirements (including derived requirements) shall be identified and drive system design..
11.5.1	The Contractor shall identify mitigation strategies to minimise safety risk and meet Safety Requirements.	Mandatory	Yes	Where necessary risk reduction strategies shall be identified and drive system design.
11.5.2	The Contractor shall select and implement a combination of mitigation strategies for hazards	Mandatory	Yes	Risk reduction options shall be selected and implemented according to the

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	or failure modes that contribute to a hazard, according to the following precedence.			precedence defined in Defence Standard 00-056 Issue 7.
11.5.3	The Contractor shall demonstrate the effectiveness of the process for identifying and selecting mitigation strategies, and shall record the rationale, including the application of the ALARP principle, for the selection of each mitigation strategy in the information set.	Mandatory	Yes	The rationale for each selected risk reduction option shall be recorded.
11.5.4	The Contractor shall manage identified mitigation strategies through Derived Safety Requirements, taking into account design decisions and any potential shortfalls in meeting Top Level Safety Requirements.	Mandatory	Yes	BDUK shall derive safety requirements from the safety analysis and use these derived requirements to drive design.
11.5.5	The Contractor should identify Derived Safety Requirements which represent the partitioning and allocation of Safety Requirements to parts of the PSS.	Non- mandatory	Yes	Section 6.5 of S&EMP.
11.5.6	Where there are identified shortfalls, the Contractor should meet the mitigating Derived Safety Requirements where practicable, enabling any identified shortfalls to be eliminated or where elimination is not possible, reduced so far as is reasonably practicable.	Non- mandatory	Yes	Section 6.5
11.5.7	Where the shortfall does not directly impact safety, e.g. a non-conformance with an agreed	Non- mandatory	Yes	Section 6.5

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	process standard, the Contractor should use engineering judgement to identify the most appropriate mitigation strategies and agree them with the Safety Committee.			
11.5.8	The Contractor should record the results of applying the mitigation strategies and ALARP, the evidence that Safety Requirements are met, and any residual shortfalls against Safety Requirements in the information set.	Non- mandatory	Yes	Results from risk mitigation will be recorded in the Hazard Log and presented in the S&EARs, along with arguments explaining the residual risk is ALARP.
11.6	The Contractor shall carry out, using processes as defined in the SMP, safety analysis to identify how failures or defects in the design might contribute to hazards or accidents.	Mandatory	Yes	Section 6.2 of S&EMP
11.6.1	The Contractor shall ensure that safety analysis covers all technologies, applicable to the PSS, and is carried out through the design decomposition to a sufficient level of detail to address all credible causes of hazards, accidents or failure modes that contribute to a hazard or accident.	Mandatory	Yes	Analysis covers all aspects including hardware failure, unsafe normal system functions, programmable elements, human factors and security..
11.6.2	The Contractor should use the results of the safety analysis to identify Derived Safety Requirements.	Non- mandatory	Yes	BDUK will derive safety requirements from the safety analysis and use these derived requirements to drive design.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.6.3	The Contractor should document the results of the safety analysis in the information set.	Non- mandatory	Yes	The results of the safety analysis shall be documented in the S&EAR.
11.6.4	The Contractor should ensure that the safety analysis results remain consistent with the design.	Non- mandatory	Yes	BDUK will ensure through change management that changes in the design or in operational requirements will be reflected in the safety analysis. S&EMP section 6.
11.7	The Contractor shall identify potential failure modes, from all credible causes, which might contribute to a hazard in the PSS, or in any known interfacing or interacting PSS, whether extant or planned.	Mandatory	Yes	Analysis covers all aspects including hardware failure, unsafe normal system functions, programmable elements, human factors and security.
11.7.1	The Contractor shall ensure that the status of control of all identified failure modes that contribute to a hazard is visible throughout the Contract	Mandatory	Yes	Will be documented in the Hazard Log.
11.7.2	The Contractor shall include, in the information set, information about the identified failure modes.	Mandatory	Yes	Will be documented in the Hazard Log and Hazard Analysis and subsequently reported in the S&EAR.
11.7.3	The Contractor shall include in the ISSS, information on the status of identified failure modes.	Mandatory	Yes	Will be documented in the Hazard Log and Hazard Analysis and subsequently reported in the S&EAR.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.7.4	The Contractor shall estimate the likelihood of occurrence and opportunities for mitigation for all identified failure modes that contribute to a hazard and record the results in the information set.	Mandatory	Yes	Will be documented in the Hazard Log and Hazard Analysis and subsequently reported in the S&EAR.
11.7.5	The Contractor should employ systematic safety analysis processes for identification of failure modes which might contribute to a hazard in the PSS as defined in the SMP.	Non- mandatory	Yes	Section 6.2 of S&EMP
11.7.6	The Contractor should ensure that human factors are considered where they may be a contributory cause of a failure mode (see Def Stan 00-250).	Non- mandatory	Yes	Section 6.2 of S&EMP
11.7.7	The Contractor should ensure that cyber security is considered where security breaches may be a contributory cause of a failure mode.	Non- mandatory	No	TBC
11.7.8	The Contractor should ensure that systematic failures are considered where they may be a contributory cause of a failure mode.	Non- mandatory	Yes	Analysis covers all aspects including hardware failure, unsafe normal system functions, programmable elements, human factors and security.
11.7.9	The Contractor should ensure that the undesired impacts of normal functions are considered; this is especially important for Contractors carrying out systems integration.	Non- mandatory	Yes	Both failures and undesired impact of normal functions shall be considered in the hazard analysis.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.7.10	The Contractor should update information on identified failure modes throughout the Contract to ensure that it accurately reflects the status of the design, safety analysis and safety engineering activities.	Non- mandatory	Yes	The safety analysis shall be kept current with the design. Section 8, change management.
11.7.11	The Contractor should use qualitative estimates where it is not practicable to quantify likelihood.	Non- mandatory	Yes	BDUK will use qualitative or quantitative risk estimation as appropriate on a case by case basis.
11.7.12	The Contractor should identify potential mitigations for the failure modes that contribute to a hazard where this is practicable; in particular they should identify any observable attributes of the PSS which could be used as triggers for mitigations.	Non- mandatory	Yes	BDUK will identify risk reduction mitigations as defined in the S&EMP
11.7.13	The Contractor should consider human factors where they may provide risk mitigation	Non- mandatory	Yes	Section 6.8 of S&EMP
11.7.14	The Contractor should record the results of the failure mode assessment in the information set.	Non- mandatory	Yes	Will be included in the Hazard Log and Hazard Analysis and subsequently reported in the S&EAR.
11.7.15	The Contractor should record all assumptions, data, judgements and calculations underpinning the risk estimation in the information set.	Non- mandatory	Yes	All evidence to support the S&EAR DIDs (including assumptions, data, judgements and calculations) will be recorded and referenced in the S&EARs.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.8	The Contractor shall carry out risk estimation to determine systematically the severity of the harm and the likelihood of occurrence for all identified hazards and accidents, utilising the results of the hazard analysis and safety analysis and record the results in the Hazard Log.	Mandatory	Yes	S&EMP Table 4
11.8.1	The Contractor, with the agreement of the MOD, should use qualitative estimates for risk assessment, where it is not practical to quantify severity or likelihood.	Mandatory	Yes	BDUK will use qualitative or quantitative risk estimation as appropriate on a case-by-case basis.
11.8.2	The Contractor should consider human factors where they may provide risk mitigation, and the human element is within the scope of analysis.	Non- mandatory	Yes	Human Factors will be considered.
11.8.3	The Contractor should record assumptions, data, judgments and calculations underpinning the risk estimation in the information set, such that they can be reviewed and reconstructed.	Non- mandatory	Yes	All evidence to support the S&EAR DIDs (including assumptions, data, judgements and calculations) will be recorded and referenced in the S&EARs.
11.9	The Contractor shall evaluate Risk to Life, for all identified hazards and accidents, and compliance with relevant legislation, standards, regulations and requirements derived from MOD Policy, as defined in the SMP and record the results in the information set.	Mandatory	Yes	BDUK shall evaluate risk in accordance with a criteria derived from the targets defined in the SRD.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
11.9.1	The Contractor should evaluate risks against the criteria agreed in the SMP.	Non- mandatory	Yes	BDUK shall evaluate risk in accordance with a criteria derived from the targets defined in the SRD.
11.9.2	The Contractor should record all assumptions, data, judgements and calculations underpinning the evaluations in the information set, such that they can be reviewed and reconstructed.	Non- mandatory	Yes	All evidence to support the S&EAR DIDs (including assumptions, data, judgements and calculations) will be recorded in the information set and referenced in the S&EAR ISSS.
11.9.3	The Contractor should use the evidence produced to evaluate compliance with relevant legislation, standards, regulations and requirements derived from MOD policy	Non- mandatory	Yes	Standards compliance shall form part of the safety argument in the S&EAR.
11.9.4	The Contractor should record the risk and compliance evaluation results in the information set.	Non- mandatory	Yes	Will be reported in recorded in the information set and referenced in the ISSS.S&EAR and meet the intent of the requirement.
11.10	The Contractor shall carry out safety and systems engineering activities, including but not limited to test, to provide evidence that all Safety Requirements, including Derived Safety Requirements, have been met.	Mandatory	Yes	Will be reported in the S&EAR and Hazard Analysis in accordance with the safety programme in section 6.
11.10.1	The Contractor shall undertake systems engineering activities which are capable of detecting counter-evidence.	Mandatory	Yes	A systematic systems engineering, certification, qualification process will be employed. Any failures or issues resulting

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
				from this process will be evaluated for counter evidence. (
11.10.2	The Contractor should identify the most effective method, or methods, for showing satisfaction of requirements, or providing counter-evidence, and include this information in the SMP.	Non- mandatory	Yes	Sections 6 describes an effective means of showing satisfaction of a requirement.
11.10.3	Whilst there might be general identification of techniques early in the process, the Contractor should ensure that the methods chosen are appropriate to the specific Derived Safety Requirements identified.	Non- mandatory	Yes	Sections 6 describes an effective means of showing satisfaction of a requirement.
12	Where practicable and where there is clear evidence that in-service safety will benefit, the Contractor shall incorporate a health monitoring and reporting system with an open and accessible interface standard in the design for the PSS.	Non-mandatory	N/A	Currently no plan for health monitoring and reporting system planned within scope of the task. Requirement will be evaluated following safety analysis.
13.1	The Contractor shall produce an ISSS as defined in the SMP.	Mandatory	Yes	As per Defence Standard 00-056 ISSS is required where the contract includes the supply of a product or service that is to be integrated into a larger PSS. In this case C-17 STS is the larger PSS so an ISSS will cover the products supporting C-17 STS.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
13.1.1	The Contractor shall ensure that the ISSS contains sufficient information from the information set to enable a system integrator or operator to discharge their safety responsibilities.	Mandatory	Yes	As per Defence Standard 00-056 ISSS is required where the contract includes the supply of a product or service that is to be integrated into a larger PSS. In this case C-17 STS will cover the products supporting C-17 STS.
13.1.2	The Contractor shall ensure that the ISSS contains information on assumptions and limitations regarding the safe use of the PSS.	Mandatory	Yes	As per Defence Standard 00-056 ISSS is required where the contract includes the supply of a product or service that is to be integrated into a larger PSS. In this case C-17 STS will cover the products supporting C-17 STS.
13.1.3	The Contractor shall ensure that the ISSS includes a justification of the scope of the information provided.	Mandatory	Yes	As per Defence Standard 00-056 ISSS is required where the contract includes the supply of a product or service that is to be integrated into a larger PSS. In this case C-17 STS will cover the products supporting C-17 STS.
13.1.4	The Contractor should ensure that the ISSS is delivered incrementally, as Contracted and as defined in the SMP, to give the MOD visibility of progress in safety engineering and safety analysis.	Non- mandatory	Yes	As per Defence Standard 00-056 ISSS is required where the contract includes the supply of a product or service that is to be integrated into a larger PSS. In this case C-17 STS will cover the products supporting C-17 STS.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
13.2	The Contractor shall produce a Safety Case or Safety Cases for a PSS as defined in the SMP.	Mandatory	Yes	BDUK shall produce an S&EAR for the C-17 STS and as required by the DIDs.
13.2.1	The Contractor shall ensure that the Safety Case consists of a structured argument, supported by a body of evidence that provides a compelling, comprehensible and valid case that a system is safe for a given application in a given environment.	Mandatory	Yes	BDUK shall produce an S&EAR for the C-17 STS and as required by the DIDs. This will include a Goal Structured Notation Safety Argument.
13.2.2	The Contractor shall ensure that the evidence for the Safety Case is drawn from the information set.	Mandatory	Yes	BDUK shall produce an S&EAR for the C-17 STS and as required by the DIDs. See section 4.2
13.2.3	The Contractor shall address the life of the PSS, as defined in the SMP	Mandatory	Yes	The safety assessment will address all phases up to disposal as contracted..
13.2.4	The Contractor shall ensure that the Safety Case identifies how to address any residual shortfalls in meeting Safety Requirements.	Mandatory	Yes	BDUK shall produce an S&EAR for the C-17 STS and as required by the DIDs. Any identified shortfalls in requirements shall be addressed in the S&EAR.
13.2.5	The Contractor shall provide evidence to demonstrate the competence of individuals and organisations responsible for tasks that have a bearing on safety.	Mandatory	Yes	BDUK has a system to manage competence. The competence of individuals working the safety programme shall be demonstrated as part of the safety argument in the S&EAR.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
13.2.6	The Contractor shall develop, maintain and refine the Safety Case as defined in the SMP and in developing the Safety Case the Contractor shall address the full lifecycle (CADMID/T) of the PSS.	Mandatory	Yes	BDUK shall provide the S&EAR DIDs as defined in Section 6.6
13.2.7	Where practicable, the Contractor should provide objective evidence.	Non- mandatory	Yes	BDUK S&EAR will be based on planned and available objective evidence.
13.2.8	The Contractor should provide diverse evidence, to ensure that that the overall safety argument is not compromised by errors or uncertainties in individual pieces of evidence	Non- mandatory	Yes	BDUK will provide diverse evidence where practicable, particularly for any higher risk elements of the system.
13.2.9	The Contractor should demonstrate that the arguments and evidence in Safety Cases are sound, comprehensive and trustworthy.	Non- mandatory	Yes	The arguments and evidence provided in the S&EAR DIDs will be agreed with the Authority through the various safety meetings and through approval of reports.
13.2.10	The Contractor should provide evidence to demonstrate the adequacy and suitability of the methods and techniques used for safety and risk analysis and in safety engineering.	Non- mandatory	Yes	Adequacy and suitability of the selected techniques will be argued in the S&EARs.
13.2.11	The Contractor should develop, maintain and refine the Safety Case through the life of the Contract.	Non- mandatory	Yes	BDUK will provide the S&EAR DIDs.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
13.2.12	The Contractor should provide evidence of competency of those whose work could impact safety and confidence in the Safety Case.	Non- mandatory	Yes	BDUK has a system to manage competence. The competence of individuals working on the safety programme shall be demonstrated as part of the safety argument in the S&EAR.
13.2.13	The Contractor should ensure that any related Safety Cases or information sets already in existence and identified in the scope of analysis are utilised and integrated as necessary.	Non- mandatory	Yes	BDUK will integrate supplier Safety Cases into the C-17 STS and Safety Cases as necessary.
13.3	The Contractor shall produce a Safety Case Report or Reports as defined in the SMP.	Mandatory	Yes	BDUK will provide the S&EAR DIDs.
13.3.1	The Contractor shall produce Safety Case Reports that incorporate the key elements of the safety argument and references to evidence so that, in principle, it would be possible to access the complete Safety Case, starting from the Report, or counter-evidence where it has been identified.	Mandatory	Yes	BDUK will provide the S&EAR DIDs.
13.3.2	Where there are shortfalls in the evidence the Contractor shall ensure that the Safety Case Report provides the rationale for operating the PSS, and the ways of mitigating the residual risk.	Mandatory	Yes	Residuals Risks and risk controls shall be defined in the Hazard Log and the S&EAR along with any necessary Limitations, Warnings, Cautions and Advice.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
13.3.3	The Contractor shall ensure that the Safety Case Report contains information on assumptions and limitations regarding the safe use of the PSS.	Mandatory	Yes	Assumptions and Limitations will be recorded in the S&EAR.
13.3.4	The Contractor shall produce Command Summaries, as defined in the SMP, documenting the assumptions and limitations for safe in-service use of the PSS.	Mandatory	Yes	A command summary shall be produced.
13.3.5	The Contractor should ensure that any related Safety Case Reports or ISSSs already in existence and identified in the scope of analysis are utilised and integrated as necessary.	Non- mandatory	Yes	BDUK shall integrate GFI and supplier Safety Cases into the C-17 STS and Safety Cases as necessary.
13.3.6	The Contractor should deliver the Reports incrementally, as Contracted, to give the MOD visibility of progress in safety engineering and safety analysis.	Non- mandatory	Yes	BDUK shall provide the S&EAR DIDs and will support safety committees and working groups.
14.1	The Contractor shall produce records which show the build state definition (configuration) of each PSS element supplied.	Mandatory	Yes	See Change Management and Configuration Management Plan.
14.1.1	The Contractor shall ensure that all stakeholders identified in the SMP as needing to be kept up to date regarding the build state to ensure or preserve safety are provided with the build state definition.	Mandatory	Yes	Section 8 Change Management refers to the Change Management and Configuration Management Plans.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
14.1.2	The Contractor should ensure that all parts employed are as specified in design, or provide information to enable an assessment of the impact of change where the original parts are not available or have changed.	Non- mandatory	Yes	Section 8 Change Management and Configuration Management Plans.
14.1.3	The Contractor should ensure that the build state definition is specific to each delivered instance of a PSS, so that specific instance is properly managed.	Non- mandatory	Yes	Section 8 Change Management. The build state shall be referenced in the S&EAR.
14.2	The Contractor shall define in the SMP, a change control system so that the safety impact of any planned or unplanned change can be identified and assessed.	Mandatory	Yes	Section 8 Change Management. Safety will be included in the Configuration Management Plan as a key part of the change management process.
14.3	Where changes are anticipated, e.g. for managing obsolescence, the Contractor shall develop and implement plans for proactively identifying and addressing those changes to ensure the continued safety of the PSS.	Mandatory	Yes	Section 8 Change Management. Safety will be included in the Configuration Management Plan as a key part of the change management process.
14.3.1	The Contractor should consider all relevant change drivers, including modified operating requirements, the availability of new technologies, as well as supply chain issue such as changes to legislation, obsolescence or ageing components, and put in place plans for	Non- mandatory	Yes	Section 8 Change Management. Safety will be included in the Configuration Management Plan as a key part of the change management process.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	dealing with all of these issues and coordinating plans to minimise the impact of change.			
14.4	The Contractor shall manage all changes under their control so as to preserve safety as in the original design intent or to improve the safety of the deliverable PSS.	Mandatory	Yes	Section 8 Change Management. Safety will be included in the Configuration Management Plan as a key part of the change management process.
14.4.1	The Contractor shall review and update the information set and ISSS, as defined in the SMP, to ensure that they remain valid.	Mandatory	Yes	Section 8 Change Management and section 9.1.
14.4.2	The Contractor shall review and update the Safety Case and Safety Case Report, as defined in the SMP, to ensure that they remain valid.	Mandatory	Yes	Section 8 Change Management. Updates will be conducted to align with project milestones (see section 4.6).
14.4.3	The Contractor should update the design where there are agreed changes to the Safety Requirements, updating the information set accordingly.	Non- mandatory	Yes	Section 8 Change Management.
14.4.4	The Contractor should update the hazard analysis and safety analysis as necessary for all changes, both intended and unplanned, updating the information set accordingly.	Non- mandatory	Yes	Section 8 Change Management.
14.4.5	Following any change which has an adverse effect on safety, the Contractor should propose,	Non- mandatory	Yes	Section 8 Change Management.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	agree and implement further revisions to the design so as to preserve safety.			
14.5	The Contractor shall supply updated PSS and associated information, as defined in the SMP, to enable safety to be preserved.	Mandatory	Yes	Section 8 Change Management.
14.5.1	The Contractor shall supply appropriate installation instructions to enable changes to be made safely to the in-service PSS.	Mandatory	Yes	Section 8 Change Management.
14.5.2	The Contractor shall update the build state definition for each modified PSS, so that it reflects the modified build state and provide an audit trail of those modifications	Mandatory	Yes	Section 8 Change Management and the Configuration Management Plan.
14.6	The Contractor shall monitor changes to in-service PSS that are visible to them, including using the results of normal reporting, to identify cases where the changes may have undesired safety impacts.	Mandatory	Yes	Section 8 Change Management and the Configuration Management Plan.
14.6.1	Where undesired safety impacts are identified, the Contractor shall notify the relevant stakeholders and, where practicable, recommend mitigation to control Risk to Life	Mandatory	Yes	Section 8 Change Management.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
14.6.2	To ensure visibility of changes, the Contractor should agree with the MOD the monitoring channels to be used; these should be recorded in the SMP.	Mandatory	Yes	Section 8 Change Management and the Configuration Management Plan which will be updated following contract award.
14.7	The Contractor shall incorporate any new or modified PSS into the in-service system, as defined in the SMP, so as to maintain or improve safety.	Mandatory	Yes	Section 8 Change Management.
14.7.1	The Contractor shall provide information to other relevant stakeholders, including the MOD in all cases, to enable them to assess the impact of changes made to the in-service system.	Mandatory	Yes	Section 8 Change Management.
14.7.2	The Contractor should assess supplied PSS, together with installation instructions, and develop and implement plans for safe installation and maintenance.	Non- mandatory	Yes	Section 8 Change Management and Hazard Analysis.
14.7.3	The Contractor should ensure that the installation plans address changeover from the old to new PSS, to ensure that safety is managed throughout the change and, so far as is reasonably practicable, to ensure that a reversion to the previous configuration could be carried out should this prove necessary.	Non- mandatory	Yes	Section 8 Change Management and the Configuration Management Plan.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
14.7.4	Where temporary modifications have been made to manage risk the Contractor should ensure that they are removed once a permanent resolution has been implemented.	Non- mandatory	Yes	Section 8 Change Management.
14.7.5	The Contractor should agree with relevant stakeholders what changes are to be made, including any necessary deviations from the original installation instructions, to enable them to discharge their obligations, e.g. to maintain an accurate record of the build state.	Non- mandatory	Yes	Section 8 Change Management.
15.1	The Contractor shall coordinate the management of safety-related in-service data where the deliverable PSS interface or interact with other PSS.	Mandatory	Yes	See section 11.
15.1.1	The Contractor should exchange in-service data, or the results of analysing the data, with the stakeholders responsible for the operation of interfacing and interacting PSS where they might be able to use it to help sentence problems, and to determine remedial action.	Non- mandatory	Yes	See section 11.
15.2	The Contractor shall define and operate a process for recording and analysing relevant data from operation of the PSS (including accident and incident reporting data), to control	Mandatory	Yes	See section 9.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	in-service Risk to Life and to inform the stakeholders responsible for support activities.			
15.2.1	The Contractor shall review the Safety Case, in the light of the recorded data to identify areas where operations vary from predictions or assumptions, e.g. the actual Risk to Life is significantly higher than the estimated Risk to Life, or a PSS is operated outside declared limitations.	Mandatory	Yes	The S&EAR will be updated and reviewed in accordance with S&EMP.
15.2.2	The Contractor shall sentence the results of analysis of the data and the review of the Safety Case to determine situations which indicate the need for remedial action and, once agreed with the MOD, shall implement those actions within their sphere of responsibility.	Mandatory	Yes	See sections 7 and 9.
15.2.3	The Contractor shall inform all relevant stakeholders where they have identified the need for remedial action, and provide those stakeholders with sufficient information to enable them to take appropriate action.	Mandatory	Yes	Section 6.3 covers safety reporting and will be updated in agreement with the Authority.
15.2.4	The Contractor should define and operate a process for collecting, analysing and documenting safety-relevant in-service data including but not limited to usage and environment.	Non- mandatory	Yes	Section 6.3 covers safety reporting and will be updated in agreement with the Authority.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
15.2.5	The Contractor should define and operate a process for collecting, analysing and documenting defect or failure data.	Non- mandatory	Yes	Section 6.3 also covers safety reporting and will be updated in agreement with the Authority.
15.2.6	The Contractor should define and operate a process for collecting incident, accident and near miss reports, and comparable data from other operations available to the Contractor or supplied by the MOD.	Non- mandatory	Yes	Section 6 covers safety reporting and will be updated in agreement with the Authority.
15.2.7	The Contractor should analyse all collected data addressing both individual events and longer-term trends, to identify those events which require action.	Non- mandatory	Yes	Section 6 safety reporting and will be updated in agreement with the Authority.
15.3	The Contractor shall define and operate a process, agreed with the MOD, for sentencing and prioritising reported data from the in-service use of the PSS to identify remedial action to preserve or improve safety.	Mandatory	Yes	Safety Criteria can be used together with safety meetings to agree sentencing and remedial action. This can also be included within the meeting ToRs.
15.3.1	The Contractor should liaise with the MOD to establish, or interface to, a Failure Reporting Analysis and Corrective Action Systems (FRACAS) or equivalent, to ensure that support is based on as accurate and timely data from operations, as is practicable.	Non- mandatory	Yes	DRACAS system will be implemented and developed in later revisions of the S&EMP in agreement with the Authority.
15.3.2	The Contractor should analyse reported defects, errors or failures, including human	Non- mandatory	Yes	DRACAS system will be implemented and developed in later revisions of the

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	errors, across all Defence Lines of Development, for their impact on safety to identify remedial action to preserve or improve safety.			S&EMP and its scope in agreement with the Authority.
15.3.3	The Contractor should analyse reported incident, accident and near miss reports, and comparable data from other operations available to the Contractor or supplied by the MOD, for their root causes to identify remedial action to improve safety.	Non- mandatory	Yes	DRACAS system which will be implemented and developed in later revisions of the S&EMP in agreement with the Authority.
15.3.4	Where the Contractor supports in-service PSS which are in use by multiple stakeholders, the Contractor should, so far as is reasonably practicable, use information relating to the PSS to efficiently and effectively manage safety.	Non- mandatory	Not applicable	Not applicable at present.
15.4	The Contractor shall implement remedial actions to preserve or improve safety, agreed with the MOD and prioritized accordingly.	Mandatory	Yes	Section 6 covers safety reporting and will be updated in agreement with the Authority.
15.4.1	The Contractor should plan remedial actions taking into account the need for efficient change management, to enable updates to the in-service PSS with minimum disruption.	Non- mandatory	Yes	See Section 8 for change management which can be updated in agreement with the Authority.

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
15.4.2	The Contractor should plan remedial actions taking into account the need to deal with foreseeable changes, as well as those driven by analysis of in-service events.	Non- mandatory	Yes	See Section 8 for change management which can be updated in agreement with the Authority.
16.1	The Contractor shall produce a Safety Case Report and Command Summary and deliver them to the MOD for approval before commencement of services.	Mandatory	Yes	See Table 4 (S&EMP) for safety deliverables.
16.1.1	The Contractor shall maintain the Safety Case, Safety Case Report and Command Summary so they are accurate representations of the service.	Mandatory	Yes	S&EMP shows the planned issues of the safety assessment reports. In-service updates of the safety assessment are covered in sections 6.2 and 9.3.
16.1.2	The Contractor should produce Command Summaries so that each provision of the service can be properly assessed and controlled in terms of risk.	Non- mandatory	N/A	Table 4 (S&EMP) shows the planned issues of the Command Summary.
16.1.3	The Contractor should provide information to support domain specific processes providing essential information for the duty holder responsible for the service to manage Risk to Life.	Non- mandatory	N/A	Not applicable at present, but will be discussed and agreed with the Authority.
16.2	The Contractor shall produce plans for management of service operations, covering all	Mandatory	Yes	S&EMP shows the planned issues of the safety assessment reports. In-service

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	reasonably foreseeable situations including abnormal and emergency situations.			updates of the safety assessment are covered in sections 6.2 and 9.3.
16.2.1	The Contractor should ensure that the plans cover the safety of the full range of normal services and operations, including but not limited to defining standard operating procedures, resourcing, training, and oversight arrangements.	Non- mandatory	N/A	Table 4 (S&EMP) shows the planned issues of the Command Summary.
16.2.2	The Contractor should ensure that the plans cover the safety of emergency situations, including but not limited to defining emergency response, coordination and decision making, including liaison with the service duty holder and relevant stakeholders.	Non- mandatory	Yes	Emergency response Planning is covered in section 12.
16.2.3	The Contractor should ensure that these plans cover safe update, including ways of making changes on continuously running systems, if necessary, building on installation instructions supplied from support, as appropriate.	Non- mandatory	Yes	See Section 8 for change management which can be updated in agreement with the Authority.
16.2.4	The Contractor should ensure that the communications plan, detailed in the SMP, includes processes for delivery of in-service data and build state definition.	Non- mandatory	N/A	A communications plan is not required at present, although the S&EMP does include numerous reporting mechanisms. Not applicable at present.
16.3	The Contractor shall support the MOD in managing predicted or emergent Risk to Life	Mandatory	Yes	This S&EMP covers all phases of the project lifecycle and there are reviews

00-056 Sect	00-056 Issue 7 Requirement	Mandatory/Non-Mandatory	Compliant (Yes/No/N/A)	Justification
	arising from hazards and accidents associated with the service, according to the ALARP principle, throughout the Contract life, and as defined in the Safety Case Report.			and updates to various deliverables listed in Table 4 to ensure that Risk to Life is managed appropriately throughout the contract life.
16.3.1	The Contractor shall cooperate with the duty holders for interfacing or interacting services or operations to enable effective management of Risk to Life.	Mandatory	Yes	This S&EMP covers all phases of the project lifecycle and there are reviews and updates to various deliverables listed in Table 4 which will be agreed with the Authority, to ensure that Risk to Life is managed appropriately throughout the contract life.
16.3.2	Where necessary and with the duty holder agreement, the Contractor shall implement immediate action to manage Risks to Life until a longer-term resolution is identified.	Mandatory	Yes	The safety reporting mechanisms in the S&EMP and in-service safety management should will be agreed with the Authority to ensure immediate action to manage Risks to Life is appropriate.

2. List of Definitions, Acronyms and Abbreviations

2.1. Defined Terms and Definition

2.1.1. Please see BDUK Defined Terms document.

2.2. Acronyms

Table 1: Abbreviations

Acronym	Explanation
ALARP	As Low As Reasonably Practicable
BDUK	Boeing Defence United Kingdom
CADMID/T	Concept, Assessment, Demonstration Manufacture In-Service Disposal/Termination
CSA	Contractor Safety Audit
DEF STAN	Defence Standard
DID	Data Item Description
DRACAS	Defect Reporting Analysis and Corrective Actions Systems
FRACAS	Failure Reporting Analysis and Corrective Actions Systems
GFI	Government Furnished Information
ISSS	Information Set Safety Summary
ITN	Invitation to Negotiate
ITT	Invitation to Tender
MOD	Ministry of Defence

PSS	Products Services and/or Systems
S&EAR	Safety and Environmental Assessment Report
S&EMP	Safety and Environmental Management Plan
SIL	Safety Integrity Level
SMP	Safety Management Plan
SMS	Safety Management System
SRD	System Requirement Document
STS	Synthetic Training System
ToR	Terms of Reference