Defence Standard 00-56 Part 1 MAA Air Domain Compliance

Para	Defence Standard 00-056 Part 1	Tailoring Statement
Safety Management System		
6	Clause Extant	
Safety Management Plan		
6.1	Clause Extant	
6.1.1	Clause Extant	
6.1.2	Clause Extant	replace "should" with "shall"
6.1.3	Clause Extant	replace "should" with "shall"
6.1.4	Clause Extant.	replace "should" with "shall"
6.1.5	Clause Extant.	replace "should" with "shall"
6.1.6	Clause Extant	replace "should" with "shall"
6.1.7	Clause Extant	replace "should" with "shall"
6.1.8	The contractor **shall** have and implement an SMS, but where the Contractor does not have safety engineering system in place, the SMP should address the core principles of systems engineering.	
Agreement		
6.2	Clause Extant	
6.2.1	Clause Extant	replace "should" with "shall"
Review and Update		
6.3	Clause Extant	
6.3.1	The Contractor **shall** review the SMP on a regular basis, depending on the scale and stage of the Contract or on significant events, eg change in supplier, introduction of a new technology or changes to risk mitigation strategy, and agree the SMP changes with the MOD before implementation.	replace "regular basis" with "annual basis"
6.3.2	Clause Extant.	replace "should" with "shall"
6.3.2.1	Where changes to design are made they shall be in accordance with the MAA RA5000 Series.	
Progress Reports		
6.4	Clause Extant	
6.4.1	Clause Extant	
7	**General Requirements**	
Deviation from Requirements		
7.1	Clause Extant	
7.1.1	Clause Extant	
7.1.2	In the response to an ITT, the tenderer **shall** specify how they intend to meet the requirements of this Standard.	
7.1.3	The tenderer **shall** 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.	
7.1.4	For any intended deviations, the tenderer **shall** indicate how their approach will meet the intent of this Standard or explain why compliance is not considered to be necessary.	
Legislation, Regulations, Standards and Policy		
7.2	Clause Extant	
7.2.1	The Contractor shall work with the MOD to identify and agree relevant MOD policy appropriate to the scope of supply and scope of analysis, addressing the domain and the technology used.	
7.2.2	The Contractor **shall** 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.	
Sub-Contracting		
7.3	Clause Extant	
7.3.1	Clause Extant	replace "should" with "shall"
7.3.2	Clause Extant	replace "should" with "shall"
7.3.3	The Contractor **shall** identify deliverables and audit mechanisms to provide assurance that the requirements of the Standard are met throughout the supply chain, and record the evidence to demonstrate compliance in the information set.	
Multiple Deliverables		
7.4	Clause Extant	
7.4.1	Clause Extant	replace "should" with "shall"
7.4.2	Safety Assessment Reports and Information Set Safety Summaries (ISSSs) should be produced for each related PSS so that they are "self- contained" from a safety perspective	Where appropriate the ISSS can be part of the safety assessment report.
Information Management		
7.5	Clause Extant	
7.5.1	Clause Extant	
7.5.2	Clause Extant	
7.5.3	Clause Extant	
7.5.4	Clause Extant	
7.5.5	Clause Extant	
7.5.6	Clause Extant	
7.5.7	Clause Extant	replace "should" with "shall"
7.5.8	Clause Extant	replace "should" with "shall"
7.5.9	Clause Extant	replace "should" with "shall"
7.5.10	Clause Extant	replace "should" with "shall"
7.6	**Documentary Deliverables**	MOD might agree another set of deliverables.

a)	Command Summary.	Not applicable to the contract.
b)	Information Set Safety Summary.	To be included as part of the SAR.
c)	Safety Audit Plan.	
d)	Safety Audit Report.	
e)	Safety Assessment Report.	
f)	Hazard Log Report.	
g)	Safety Management Plan.	
h)	Progress Reports.	Add "the scope of the Safety Progress Report may be included within scope of other (agreed) management reporting and within SAR updates"
7.6.1	Clause Extant	
7.6.2	Clause Extant	Project DIDs may already define required format and content
7.6.3	Clause Extant	replace "should" with "shall"
Agreement of Deliverables		
7.7	Clause Extant	
7.7.1	Clause Extant	
7.7.2	The Contractor **shall** define the PSS to include all relevant elements across the Defence Lines of Development, as Contracted.	
7.7.3	Clause Extant	replace "should" with "shall"
8	**Roles and Responsibilities**	
Safety Organisation		
8.1	Clause Extant	
8.1.1	Clause Extant	
8.1.2	Clause Extant	
8.1.3	The Contractor **shall** keep the definition of roles and responsibilities of those individuals responsible for safety up to date.	
8.1.4	The Contractor **shall** identify and record, in the information set, competency requirements for each role.	
Safety Committees		
8.2	Clause Extant	
8.2.1	Clause Extant	
8.2.2	Clause Extant	
8.2.3	Clause Extant	
8.2.4	Where there is an MOD Safety Committee, the Contractor **shall** participate in its work.	
8.2.5	Clause Extant	
8.2.6	Clause Extant	

8.2.7	Where there is concurrent work on interfacing or interacting PSS, the Safety Committee **shall** collaborate with other Safety Committees to manage interfaces, and **shall** refine the scope of analysis if necessary to minimise gaps in analysis, or overlaps and duplication of effort.	
8.2.8	Clause Extant	replace "should" with "shall"
8.2.9	The Contractor **shall** record all their support	
Contractor Safety Audit Independence		
8.3	Clause Extant	
Competencies		
8.4	Clause Extant	
8.4.1	The Contractor **shall** record the evidence of competence, on an individual, team and organisational basis, in the information set.	
8.4.2	Clause Extant	replace "should" with "shall"
8.4.3	Contractors **shall** 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 Assessment**.	
9	**Interfaces**	
Organisational Interfaces		
9.1	Clause Extant	
9.1.1	Clause Extant	replace "should" with "shall"
9.1.2	Clause Extant	replace "should" with "shall"
Technical Interfaces		
9.2	Clause Extant	
9.2.1	Clause Extant	
9.2.2	Clause Extant	
9.2.3	Clause Extant	replace "should" with "shall"
External Interacting Interfaces		
9.3	Clause Extant	
9.3.1	Clause Extant	replace "should" with "shall"
10	**Safety Audits**	
Audits and Reports		
10.1	The Contractor shall carry out safety audits as specified in the SMP, to assure the implementation of the SMS.	
10.1.1	Clause Extant	
10.1.2	All audit findings **shall** be assessed for significance and the need for remedial action identified.	
10.1.3	The Contractor **shall** ensure that all Sub-Contract activity is audited.	
Independent Safety Audit		
10.2	Clause Extant	
10.2.1	Clause Extant	
Remedial Action		
10.3	Clause Extant	

10.3.1	The Contractor **shall** agree the remedial actions with the MOD through the Safety Committee, and any other relevant stakeholders, as appropriate.	
10.3.2	The Contractor **shall** update the SMP, if appropriate, to reflect the agreed remedial actions.	
SAFETY ENGINEERING		
11	**Safety Requirements, Hazard and Risk Analysis**	
Safety Requirements		
11.1	Clause Extant	
11.1.1	Clause Extant	
11.1.2	Clause Extant	
11.1.3	Clause Extant	
11.1.4	Clause Extant	
11.1.5	Clause Extant	replace "should" with "shall"
11.1.6	Clause Extant	replace "should" with "shall"
11.1.7	Clause Extant	replace "should" with "shall"
11.1.8	Clause Extant	replace "should" with "shall"
Safety Requirements Management		
11.2	Clause Extant	
11.2.1	Clause Extant	replace "should" with "shall"
11.2.2	Clause Extant	replace "should" with "shall"
11.2.3	The Contractor **shall** record the evidence such that it can be included in, or referenced from, the Hazard Log.	
Hazards and Accidents		
11.3	Clause Extant	
11.3.1	The Contractor **shall** employ systematic analysis processes for identification of hazards and accidents as defined in the SMP.	
11.3.2	The Contractor **shall** ensure that human factors are considered where they may be a contributory cause of a hazard.	
11.3.3	Clause Extant	replace "should" with "shall"
11.3.4	Clause Extant	replace "should" with "shall"
11.3.5	Clause Extant	replace "should" with "shall"
Hazard Tracking		
11.4	Clause Extant	
11.4.1	Clause Extant	
11.4.2	The Contractor shall ensure that the Hazard Log and Hazard Log Reports are delivered as defined in the SMP.	
11.4.3	The Contractor **shall** 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.	
Design for Safety		
11.5	The Contractor shall undertake the design of the PSS so as to meet all Safety Requirements in accordance with the RA5000 Series.	

11.5.1	Clause Extant	
11.5.2	Clause Extant	
a)	Elimination.	
b)	Reduce the Risk to Life by engineering means.	
c)	Clause Extant	
11.5.3	Clause Extant	
11.5.4	Clause Extant	
11.5.5	Clause Extant	replace "should" with "shall"
11.5.6	Clause Extant	replace "should" with "shall"
11.5.7	Clause Extant	replace "should" with "shall"
11.5.8	The Contractor shall 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.	
Safety Analysis		
11.6	Clause Extant	
11.6.1	Clause Extant	
11.6.2	Clause Extant	replace "should" with "shall"
11.6.3	Clause Extant	replace "should" with "shall"
11.6.4	Clause Extant	replace "should" with "shall"
Failure Modes		
11.7	Clause Extant	
11.7.1	Clause Extant	
11.7.2	Clause Extant	
11.7.3	Clause Extant	
11.7.4	Clause Extant	
11.7.5	Clause Extant	replace "should" with "shall"
11.7.6	The Contractor **shall** ensure that human factors are considered where they may be a contributory cause of a failure mode (see Def Stan 00251).	
11.7.7	Clause Extant	replace "should" with "shall"
11.7.8	Clause Extant	replace "should" with "shall"
11.7.9	Clause Extant	replace "should" with "shall"
11.7.10	The Contractor **shall** 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.	
11.7.11	Clause Extant	
11.7.12	Clause Extant	replace "should" with "shall"
11.7.13	Clause Extant	replace "should" with "shall"
11.7.14	Clause Extant	replace "should" with "shall"
11.7.15	Clause Extant	replace "should" with "shall"
Risk Estimation		
11.8	Clause Extant	
11.8.1	Clause Extant	replace "should" with "shall"
11.8.2	Clause Extant	replace "should" with "shall"

11.8.3	The Contractor **shall** record assumptions, data, judgments and calculations underpinning the risk estimation in the information set, such that they can be reviewed and reconstructed.	
Risk and Compliance Evaluation		
11.9	Clause Extant	
11.9.1	The Contractor **shall** evaluate risks against the criteria agreed in the SMP.	
11.9.2	The Contractor **shall** record all assumptions, data, judgements and calculations underpinning the evaluations in the information set, such that they can be reviewed and reconstructed.	
11.9.3	Clause Extant	replace "should" with "shall"
11.9.4	Clause Extant	replace "should" with "shall"
Satisfaction of Requirements		
11.10	Clause Extant	
11.10.1	Clause Extant	
11.10.2	The Contractor **shall** identify the most effective method, or methods, for showing satisfaction of requirements, or providing counter-evidence, and include this information in the SMP. Note. In the DAE this may include Loss Models.	replace "should" with "shall"
11.10.3	Clause Extant	replace "should" with "shall"
Health Monitoring and Reporting System		
12	Clause Extant	
13	**Safety Reporting**	
Information Set Safety Summary		
13.1	Clause Extant	
13.1.1	Clause Extant	
13.1.2	Clause Extant	
13.1.3	Clause Extant	
13.1.4	Clause Extant	replace "should" with "shall"
Safety Case		
Safety Assessment		
13.2	The Contractor shall produce a **Safety Assessment (as defined in MAA02)** or **Safety Assessment**s for a PSS as defined in the SMP. Note. The DAE has one safety case "The Air System Safety Case". It is supported by a number of Safety Assessments (defined in MAA02).	
13.2.1	The Contractor shall ensure that the **Safety Assessment** 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.	
13.2.2	The Contractor shall ensure that the evidence for the **Safety Assessment** is drawn from the information set.	
13.2.3	Clause Extant	

13.2.4	The Contractor shall ensure that the **Safety Assessment** identifies how to address any residual shortfalls in meeting Safety Requirements.	
13.2.5	Clause Extant	
13.2.6	The Contractor shall develop, maintain and refine the **Safety Assessment** as defined in the SMP and in developing the **Safety Assessment** the Contractor shall address the full lifecycle (CADMID/T) of the PSS.	
13.2.7	The contractor shall provide objective evidence. If production of objective evidence is not practicable, an alternative form of acceptable evidence shall be agreed with the MOD.	
13.2.8	Clause Extant	
13.2.9	The Contractor should demonstrate that the arguments and evidence in **Safety Assessment**s are sound, comprehensive and trustworthy.	replace "should" with "shall"
13.2.10	Clause Extant	replace "should" with "shall"
13.2.11	The Contractor should develop, maintain and refine the **Safety Assessment** through the life of the Contract.	
13.2.12	The Contractor should provide evidence of competency of those whose work could impact safety and confidence in the **Safety Assessment**.	
13.2.13	The Contractor should ensure that any related **Safety Assessment**s or information sets already in existence and identified in the scope of analysis are utilised and integrated as necessary.	
Safety Case Reports		
Safety Assessment Reports		
13.3	The Contractor shall produce a **Safety Assessment** Report or Reports as defined in the SMP.	Mandatory.
13.3.1	The Contractor shall produce **Safety Assessment** 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 Assessment**, starting from the Report, or counter-evidence where it has been identified.	
13.3.2	Where there are shortfalls in the evidence the Contractor shall ensure that the **Safety Assessment** Report provides the rationale for operating the PSS, and the ways of mitigating the residual risk.	
13.3.3	The Contractor shall ensure that the **Safety Assessment** Report contains information on assumptions and limitations regarding the safe use of the PSS.	
13.3.4	Clause Extant	

13.3.5	The Contractor should ensure that any related **Safety Assessment** Reports or ISSSs already in existence and identified in the scope of analysis are utilised and integrated as necessary.	replace "should" with "shall"
13.3.6	Clause Extant	replace "should" with "shall"
14	**Supply and Change Management**	
	Build State Definition	
14.1	Clause Extant	
14.1.1	Clause Extant	
14.1.2	Clause Extant	replace "should" with "shall"
14.1.3	Clause Extant	replace "should" with "shall"
	Change Control	
14.2	Clause Extant	
	Planning for Change	
14.3	Clause Extant	
14.3.1	Clause Extant	replace "should" with "shall"
	Safety of Changes	
14.4	Clause Extant	
14.4.1	Clause Extant	
14.4.2	The Contractor shall review and update the **Safety Assessment** and **Safety Assessment** Report, as defined in the SMP, to ensure that they remain valid.	
14.4.3	Clause Extant	replace "should" with "shall"
14.4.4	The Contractor **shall** update the hazard analysis and safety analysis as necessary for all changes, both intended and unplanned, updating the information set accordingly.	
14.4.5	Following any change which has an adverse effect on safety, the Contractor **shall** propose, agree and implement further revisions to the design so as to preserve safety.	
14.4.5.1	For management of modifications to air systems, the Contractor **shall** implement the procedures laid down in the RA5000 Series.	
	Safe Update	
14.5	Clause Extant	
14.5.1	Clause Extant	
14.5.2	Clause Extant	
14.5.2.1	Air systems and air system components shall only be modified using the processes laid down in the RA5000 Series.	
	Monitoring Change	
14.6	Clause Extant	
14.6.1	Clause Extant	
14.6.2	Clause Extant	replace "should" with "shall"
	Incorporating Change	
14.7	Clause Extant	
14.7.1	Clause Extant	

14.7.2	The Contractor **shall** assess supplied PSS, together with installation instructions, and develop and implement plans for safe installation and maintenance.	
14.7.3	Clause Extant	replace "should" with "shall"
14.7.4	Where temporary modifications have been made to manage risk the Contractor **shall** ensure that they are removed once a permanent resolution has been implemented.	
14.7.5	Clause Extant	replace "should" with "shall"
	SAFETY IN-SERVICE	
15	**Supporting Systems In-Service**	
	Management of Safety-Related In-Service Data	
15.1	Clause Extant	
15.1.1	Clause Extant	replace "should" with "shall"
	Monitoring and Reporting	
15.2	Clause Extant	
15.2.1	The Contractor shall review the **Safety Assessment**, in the light of the recorded data to identify areas where operations vary from predictions or assumptions, eg the actual Risk to Life is significantly higher than the estimated Risk to Life, or a PSS is operated outside declared limitations.	
15.2.2	The Contractor shall sentence the results of analysis of the data and the review of the **Safety Assessment** 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.	
15.2.3	Clause Extant	
15.2.4	The Contractor **shall** define and operate a process for collecting, analysing and documenting safety-relevant in-service data including but not limited to usage and environment.	
15.2.5	The Contractor **shall** define and operate a process for collecting, analysing and documenting defect or failure data.	
15.2.6	The Contractor **shall** 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.	
15.2.6.1	The Contractor **shall** comply with aviation reporting process and procedures, as defined in the scope of contract, including but not limited to: Narrative Fault Reporting (F760); Unsatisfactory Feature Reports (F765); Serious Fault Signals; Defence Aviation Safety Occurrence Report.	
15.2.7	Clause Extant	replace "should" with "shall"
	In-Service Data Analysis	

15.3	Clause Extant	
15.3.1	Clause Extant	replace "should" with "shall"
15.3.1.1	For Air Systems and their components, as defined in MAA02, the Contractor **shall** 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.	
15.3.2	Clause Extant.	replace "should" with "shall"
15.3.3	Clause Extant	replace "should" with "shall"
15.3.4	Where the Contractor supports in- service PSS which are in use by multiple stakeholders, the Contractor **shall**, so far as is reasonably practicable, use information relating to the PSS to efficiently and effectively manage safety.	
	Remedial Action	
15.4	Clause Extant	
15.4.1	Clause Extant	replace "should" with "shall"
15.4.2	Clause Extant	replace "should" with "shall"
16	**Service Provision**	
	Safety Case Report	
	Safety Assessment Report	
16.1	The Contractor shall produce a **Safety Assessment** Report and deliver it to the MOD, and any relevant Regulators, for approval before commencement of services.	
16.1.1	The Contractor shall maintain the **Safety Assessment Report,** so it is an accurate representations of the service.	
16.1.2	~~Clause Extant~~	
16.1.3	~~The Contractor **shall** provide information to support domain specific processes providing essential information for the duty holder responsible for the service to manage Risk to Life.~~	Equipment linked to operational risk only.
	Service Provision Planning	
16.2	~~Clause Extant s.~~	
16.2.1	~~Clause Extant~~	
16.2.2	~~Clause Extant~~	
16.2.2.1	~~Where the service provided is airfield related the Contactor should comply with the provisions of the RA1400 Series.~~	
16.2.3	~~Clause Extant~~	
16.2.4	~~Clause Extant~~	
	Risk Management	

16.3	~~The Contractor shall support the MOD in managing predicted or emergent Risk to Life arising from hazards and accidents associated with the service, according to the ALARP principle, throughout the Contract life, and as defined in the~~ **Safety Assessment** ~~Report.~~	
16.3.1	~~Clause Extant~~	
16.3.2	~~Clause Extant~~	