



EAC

No. 19-2

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SMS gap analysis checklist and implementation plan

1. Initial gap analysis checklist

1.1 The initial gap analysis checklist can be used as a template to conduct the first step of an SMS gap analysis. This format with its overall “Yes/No/Partial” responses will provide an initial indication of the broad scope of gaps and hence overall workload to be expected. The questionnaire may be adjusted to suit the needs of the organization and the nature of the product or service provided. This initial information should be useful to senior management in anticipating the scale of the SMS implementation effort and hence the resources to be provided. This initial checklist would need to be followed up by an appropriate implementation plan as per Tables 5-A7-2 and 5-A7-3.

1.2. A “Yes” answer indicates that the organization meets or exceeds the expectation of the question concerned. A “No” answer indicates a substantial gap in the existing system with respect to the question’s expectation. A “Partial” answer indicates that further enhancement or development work is required to an existing process in order to meet the question’s expectations.

Note.— The SSP references in square [] brackets refer to guidance material in this manual relevant to the gap analysis question.

Table1. Gap analysis checklist

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analyzed or question to be answered</i>	<i>No.</i>
Component 1 — SAFETY POLICY AND OBJECTIVES			
Element 1.1 — Management commitment and responsibility			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a safety policy in place? [5.3.7 to 5.3.15; 5.5.3]	1.1-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the safety policy reflect senior management’s commitment regarding safety management? [5.3.7 to 5.3.15]	1.1-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety policy appropriate to the size, nature and complexity of the organization? [5.3.7 to 5.3.15]	1.1-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety policy relevant to aviation safety? [5.3.7 to 5.3.15]	1.1-4

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analysed or question to be answered</i>	<i>No.</i>
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety policy signed by the accountable executive? [5.3.7 to 5.3.15; 5.5.3]	1.1-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety policy communicated, with visible endorsement, throughout the [Organization]? [5.5.3]	1.1-6
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the [Organization]? [5.5.3]	1.1-7
Element 1.2 — Safety accountabilities			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Has [Organization] identified an accountable executive who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the [Organization], for the implementation and maintenance of the SMS? [5.3.16 to 5.3.26; 5.5.2]	1.2-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the accountable executive have full control of the financial and human resources required for the operations authorized to be conducted under the operations certificate? [5.3.16 to 5.3.26]	1.2-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the Accountable Executive have final authority over all aviation activities of his organization? [5.3.16 to 5.3.26]	1.2-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Has [Organization] identified and documented the safety accountabilities of management as well as operational personnel, with respect to the SMS? [5.3.16 to 5.3.26]	1.2-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a safety committee or review board for the purpose of reviewing SMS and safety performance? [5.3.27 to 5.3.33; Appendix 4]	1.2-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the safety committee chaired by the accountable executive or by an appropriately assigned deputy, duly substantiated in the SMS manual? [5.3.27 to 5.3.33; Appendix 4]	1.2-6
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the safety committee include relevant operational or departmental heads as applicable? [5.3.27 to 5.3.33; Appendix 4]	1.2-7
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are there safety action groups that work in conjunction with the safety committee (especially for large/complex organizations)? [5.3.27 to 5.3.33; Appendix 4]	1.2-8

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analysed or question to be answered</i>	<i>No.</i>
Element 1.3 — Appointment of key safety personnel			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Has [Organization] appointed a qualified person to manage and oversee the day-to-day operation of the SMS? [5.3.27 to 5.3.33; 5.5.2; Appendix 2]	1.3-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the qualified person have direct access or reporting to the accountable executive concerning the implementation and operation of the SMS? [5.3.27 to 5.3.33; 5.5.2; Appendix 2, 6.1]	1.3-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the manager responsible for administering the SMS hold other responsibilities that may conflict or impair his role as SMS manager? [Appendix 2, 6.4]	1.3-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the SMS manager's position a senior management position not lower than or subservient to other operational or production positions? [Appendix 2, 6.4]	1.3-4
Element 1.4 — Coordination of emergency response planning			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] have an emergency response/contingency plan appropriate to the size, nature and complexity of the organization? [Appendix 3]	1.4-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the emergency/contingency plan address all possible or likely emergency/crisis scenarios relating to the organization's aviation product or service deliveries? [Appendix 3, 4 f)]	1.4-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the ERP include procedures for the continuing safe production, delivery or support of its aviation products or services during such emergencies or contingencies? [Appendix 3, 4 e)]	1.4-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a plan and record for drills or exercises with respect to the ERP? [Appendix 3, 5 c)]	1.4-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the ERP address the necessary coordination of its emergency response/contingency procedures with the emergency/response contingency procedures of other organizations where applicable? [Appendix 3, 4 d)]	1.4-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] have a process to distribute and communicate the ERP to all relevant personnel, including relevant external organizations? [Appendix 3, 5 d)]	1.4-6

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analysed or question to be answered</i>	<i>No.</i>
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness? [Appendix 3, 5 f)]	1.4-7
Element 1.5 — SMS documentation			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a top-level SMS summary or exposition document which is approved by the accountable manager and accepted by the CAA? [5.3.36 to 5.3.38]	1.5-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the SMS documentation address the organization's SMS and its associated components and elements? [5.3.36 to 5.3.38; 5.4.1; Appendix 4]	1.5-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is [Organization] SMS framework in alignment with the regulatory SMS framework? [5.3.36 to 5.3.38; 5.4.1; Appendix 4]	1.5-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] maintain a record of relevant supporting documentation pertinent to the implementation and operation of the SMS? [5.3.36 to 5.3.38; 5.5.5]	1.5-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] have an SMS implementation plan to establish its SMS implementation process, including specific tasks and their relevant implementation milestones? [5.4.4]	1.5-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the SMS implementation plan address the coordination between the service provider's SMS and the SMS of external organizations where applicable? [5.4.4]	1.5-6
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the SMS implementation plan endorsed by the accountable executive? [5.4.4; 5.5.2]	1.5-7
2 — SAFETY RISK MANAGEMENT			
Element 2.1 — Hazard identification			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a process for voluntary hazards/threats reporting by all employees? [5.3.42 to 5.3.52; 5.5.4]	2.1-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the voluntary hazard/threats reporting simple, available to all personnel involved in safety-related duties and commensurate with the size of the service provider? [5.3.42 to 5.3.52]	2.1-2

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analysed or question to be answered</i>	<i>No.</i>
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] SDCPS include procedures for incident/accident reporting by operational or production personnel? [5.3.42 to 5.3.52; 5.5.4; Chapter 4, Appendix 3]	2.1-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is incident/accident reporting simple, accessible to all personnel involved in safety-related duties and commensurate with the size of the service provider? [5.3.42 to 5.3.52; 5.5.4]	2.1-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does [Organization] have procedures for investigation of all reported incident/accidents? [5.3.42 to 5.3.52; 5.5.4]	2.1-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are there procedures to ensure that hazards/threats identified or uncovered during incident/accident investigation processes are appropriately accounted for and integrated into the organization's hazard collection and risk mitigation procedure? [2.13.9; 5.3.50 f); 5.5.5]	2.1-6
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are there procedures to review hazards/threats from relevant industry reports for follow-up actions or risk evaluation where applicable? [5.3.5.1]	2.1-7
Element 2.2 — Safety risk assessment and mitigation			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a documented hazard identification and risk mitigation (HIRM) procedure involving the use of objective risk analysis tools? [2.13; 2.14; 5.3.53 to 5.3.61]	2.2-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the risk assessment reports approved by departmental managers or at a higher level where appropriate? [2.15.5; 5.3.53 to 5.3.61]	2.2-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for periodic review of existing risk mitigation records? [5.5.4]	2.2-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified? [5.5.4]	2.2-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure to prioritize identified hazards for risk mitigation actions? [5.5.4]	2.2-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a programme for systematic and progressive review of all aviation safety-related operations, processes, facilities and equipment subject to the HIRM process as identified by the organization? [5.5.4]	2.2-6

Status of implementation	Answer	Aspect to be analysed or question to be answered	No.
Component 3 — SAFETY ASSURANCE			
Element 3.1 — Safety performance monitoring and measurement			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are there identified safety performance indicators for measuring and monitoring the safety performance of the organization's aviation activities? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	3.1-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are the safety performance indicators relevant to the organization's safety policy as well as management's high-level safety objectives/goals? [5.3.66 to 5.3.73; 5.4.5; Appendix 6]	3.1-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Do the safety performance indicators include alert/target settings to define unacceptable performance regions and planned improvement goals? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	3.1-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is the setting of alert levels or out-of-control criteria based on objective safety metrics principles? [5.3.66 to 5.3.73; 5.4.5; Appendix 6]	3.1-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Do the safety performance indicators include quantitative monitoring of high-consequence safety outcomes (e.g. accident and serious incident rates) as well as lower-consequence events (e.g. rate of non-compliance, deviations)? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	3.1-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are safety performance indicators and their associated performance settings developed in consultation with, and subject to, the civil aviation authority's agreement? [5.3.66 to 5.3.73; 5.4.5.2; 5.5.4; 5.5.5]	3.1-6
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for corrective or follow-up action to be taken when targets are not achieved and alert levels are exceeded/breached? [5.4.5; Appendix 6, Table 5-A6-5 b)]	3.1-7
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Are the safety performance indicators periodically reviewed? [5.4.5; Appendix 6]	3.1-8
Element 3.2 — The management of change			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for review of relevant existing aviation safety-related facilities and equipment (including HIRM records) whenever there are pertinent changes to those facilities or equipment? [5.3.74 to 5.3.77; 5.5.4]	3.2-1

<i>Status of implementation</i>	<i>Answer</i>	<i>Aspect to be analysed or question to be answered</i>	<i>No.</i>
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for review of relevant existing aviation safety-related operations and processes (including any HIRM records) whenever there are pertinent changes to those operations or processes? [5.3.74 to 5.3.77; 5.5.4]	3.2-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for review of new aviation safety-related operations and processes for hazards/risks before they are commissioned? [5.5.4]	3.2-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for review of relevant existing facilities, equipment, operations or processes (including HIRM records) whenever there are pertinent changes external to the organization such as regulatory/industry standards, best practices or technology? [5.5.4]	3.2-4
Element 3.3 — Continuous improvement of the SMS			
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a procedure for periodic internal audit/assessment of the SMS? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	3.3-1
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a current internal SMS audit/assessment plan? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	3.3-2
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the SMS audit plan include the sampling of completed/existing safety risk assessments? [5.5.5]	3.3-3
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the SMS audit plan include the sampling of safety performance indicators for data currency and their target/alert settings performance? [5.4.5; 5.5.5]	3.3-4
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Does the SMS audit plan cover the SMS interface with subcontractors or customers where applicable? [5.4.1; 5.5.5]	3.3-5
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	Is there a process for SMS audit/assessment reports to be submitted or highlighted for the accountable manager's attention where appropriate? [5.3.80; 5.5.5]	3.3-6