



SMS Gap Analysis

Version Number: 1.0 **Dated: 11/30/2016**

Instructions

The following gap analysis template is provided to assist organizations (big or small) who are starting to implement an SMS or would like to review their current SMS status. This document is based upon the SMS structure and guidance as specified in the International Civil Aviation Organization (ICAO) Safety Management Manual with minor additions and/or changes. There are other SMS structures/best practices available, but the ICAO version tends to be the foundation for all standards. Users are encouraged to modify as necessary to meet their own organization's needs. The information obtained by completing this gap analysis will be useful to your organization for SMS implementation planning purposes as well as helping senior management understand the scope of necessary resources.

Each SMS Component and its associated Elements are provided on separate worksheets. Select the appropriate tab below to access the area for review. The SMS Components are (1.0) Safety Policy and Objectives; (2.0) Safety Risk Management; (3.0) Safety Assurance; (4.0) Safety Promotion.

An answer of "Yes", indicates the organization meets or exceeds the expectation of the question concerned. An answer of "No", indicates a substantial gap in the existing system with respect to the question's expectation. An answer of "Partial", indicates that further enhancement or development work is required to an existing process in order to fully meet the question's expectations.

Example Entry Below

Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.1-1	Is there a safety policy or statement in place?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially	<i>No existing policy In the process of drafting original document by the Accountable Executive. Examples provided to help draft policy.</i>	31-Oct-16	<i>Accountable Executive needs to complete and circulate to Safety Committee for additional input/feedback. Finalize, signature and distribute to all employees.</i>



Component 1.0 - Safety Policy and Objectives					
Element 1.1 - Management Commitment and Responsibility					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.1-1	Is there a safety policy or statement in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-2	Does the safety policy or statement reflect senior management's commitment regarding safety management and Just Culture?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-3	Is the safety policy or statement appropriate to the size, nature and complexity of the organization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-4	Is the safety policy or statement relevant to aviation and total operational safety?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-5	Is the safety policy or statement signed by the accountable executive?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-6	Is the safety policy or statement communicated, with visible endorsement, throughout the Organization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.1-7	Is the safety policy or statement periodically reviewed to ensure it remains relevant and appropriate to the Organization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 1.0 - Safety Policy and Objectives					
Element 1.2 - Safety Accountabilities					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.2-1	Has the 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-2	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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-3	Does the Accountable Executive have final authority over all aviation activities of his organization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-4	Has the Organization identified and documented the safety accountabilities of management as well as operational personnel, with respect to the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-5	Is there a safety committee or review board for the purpose of reviewing SMS and safety performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-6	Is the safety committee chaired by the accountable executive or by an appropriately assigned deputy, duly substantiated in the SMS manual?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.2-7	Does the safety committee include relevant operational or departmental heads as applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 1.0 - Safety Policy and Objectives					
Element 1.2 - Safety Accountabilities					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.2-8	Are there safety action groups that work in conjunction with the safety committee (especially for large/complex organizations)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 1.0 - Safety Policy and Objectives					
Element 1.3 - Appointment of Key Safety Personnel					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.3-1	Has the Organization appointed a qualified person to manage and oversee the day-to-day operation of the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.3-2	Does the qualified person have direct access or reporting to the accountable executive concerning the implementation and operation of the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.3-3	Does the manager responsible for administering the SMS hold other responsibilities that may conflict or impair his role as SMS manager.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.3-4	Is the SMS manager's position a senior management position not lower than or subservient to other operational or production positions?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 1.0 - Safety Policy and Objectives					
Element 1.4 - Coordination of Emergency Response Planning					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.4-1	Does the Organization have an emergency response/contingency plan appropriate to the size, nature and complexity of the organization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-2	Does the emergency/contingency plan address all possible or likely emergency/crisis scenarios relating to the organization's aviation product or service deliveries?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-3	Does the ERP include procedures for the continuing safe production, delivery or support of its aviation products or services during such emergencies or contingencies?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-4	Is there a plan and record for drills or exercises with respect to the ERP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-5	Does the ERP address the necessary coordination of its emergency response/contingency procedures with the emergency/response contingency procedures of other organizations where applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-6	Does Organization have a process to distribute and communicate the ERP to all relevant personnel, including relevant external organizations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.4-7	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			

Note: Organizations should consider a contingency for recovering aircraft after release by the investigating agency.



Component 1.0 - Safety Policy and Objectives					
Element 1.5 - SMS Documentation					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
1.5-1	Is there a top-level SMS summary or exposition document which is approved by the accountable manager and accepted by the Regulatory Authority?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-2	Does the SMS documentation address the organization's SMS and its associated components and elements?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-3	Is Organization SMS framework in alignment with the regulatory SMS framework?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-4	Does Organization maintain a record of relevant supporting documentation pertinent to the implementation and operation of the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-5	Does Organization have an SMS implementation plan to establish its SMS implementation process, including specific tasks and their relevant implementation milestones?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-6	Does the SMS implementation plan address the coordination between the service provider's SMS and the SMS of external organizations where applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
1.5-7	Is the SMS implementation plan endorsed by the accountable executive?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			

Examples of SMS Documentation: SMS Manual, Accountable Executive Safety Policy, Hazard/Occurrence Event Report, Hazard Register/Log, Risk Profile, Management of Change form, Pre-Flight Risk Analysis Tool, Ground Risk Analysis Tool, Internal Evaluation/Audit Checklists, Risk Assessment Matrix, Key Performance Indicators, etc.



Component 2.0 - Safety Risk Management					
Element 2.1 - Hazard Identification					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
2.1-1	Is there a process for voluntary hazards/threats reporting by all employees?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-2	Is the voluntary hazard/threats reporting simple, available to all personnel in the organization, commensurate with the size of the service provider and the have the ability to be anonymous when desired?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-3	Does Organization's Safety Data Collection and Processing Systems (SDCPS) include procedures for incident/accident reporting by all personnel?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-4	Is incident/accident reporting simple, accessible to all personnel in the organization, commensurate with the size of the service provider and the have the ability to be anonymous when desired?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-5	Does Organization have procedures for investigation of all reported incident/accidents?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-6	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? Are these hazards/threats as well as their identified mitigation effectively communicated to all personnel?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.1-7	Are there procedures to review hazards/threats from relevant industry reports for follow-up actions or risk evaluation where applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 2.0 - Safety Risk Management					
Element 2.2 - Safety Risk Assessment and Mitigation					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
2.2-1	Is there a documented hazard identification and risk mitigation (HIRM) procedure involving the use of objective risk analysis tools?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.2-2	Is the risk assessment reports approved by departmental managers or at a higher level where appropriate?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.2-3	Is there a procedure for periodic review of existing risk mitigation records?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.2-4	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.2-5	Is there a procedure to prioritize identified hazards for risk mitigation actions?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
2.2-6	Is there a program 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 3.0 - Safety Assurance					
Element 3.1 - Safety Performance Monitoring and Measurement					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
3.1-1	Are there identified safety performance indicators for measuring and monitoring the safety performance of the organization's aviation activities?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-2	Are the safety performance indicators relevant to the organization's safety policy as well as management's high-level safety objectives/goals?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-3	Do the safety performance indicators include alert/target settings to define unacceptable performance regions and planned improvement goals?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-4	Is the setting of alert levels or out-of-control criteria based on objective safety metrics principles?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-5	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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-6	Are safety performance indicators and their associated performance settings developed in consultation with, and subject to, the civil aviation authority's agreement?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-7	Is there a procedure for corrective or follow-up action to be taken when targets are not achieved and alert levels are exceeded/ breached?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.1-8	Are the safety performance indicators periodically reviewed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 3.0 - Safety Assurance					
Element 3.2 - The Management of Change					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
3.2-1	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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.2-2	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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.2-3	Is there a procedure for review of new aviation safety-related operations and processes for hazards/risks before they are commissioned?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.2-4	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?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 3.0 - Safety Assurance					
Element 3.3 - Continuous Improvement of the SMS					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
3.3-1	Is there a procedure for periodic internal audit/assessment of the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.3-2	Is there a current internal SMS audit/assessment plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.3-3	Does the SMS audit plan include the sampling of completed/existing safety risk assessments?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.3-4	Does the SMS audit plan include the sampling of safety performance indicators for data currency and their target/alert settings performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.3-5	Does the SMS audit plan cover the SMS interface with subcontractors or customers where applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3.3-6	Is there a process for SMS audit/assessment reports to be submitted or highlighted for the accountable manager's attention where appropriate.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 4.0 - Safety Promotion					
Element 4.1 - Training and Education					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
4.1-1	Is there a program to provide SMS training/familiarization to personnel involved in the implementation or operation of the SMS?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
4.1-2	Has the accountable executive undergone appropriate SMS familiarization, briefing or training?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
4.1-3	Are personnel involved in conducting risk mitigation provided with appropriate risk management training or familiarization?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
4.1-4	Is there evidence of organization-wide SMS education or awareness efforts?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			



Component 4.0 - Safety Promotion					
Element 4.2 - Safety Communication					
Element No.	Aspect or Item to be Reviewed	Answer	Status of Implementation / Description of Gap	Target Date	Action/Task Required to Fill Gap
4.2-1	Does the Organization participate in sharing safety information with relevant external industry product and service providers or organizations, including the relevant aviation regulatory organizations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
4.2-2	Is there evidence of a safety (SMS) publication, circular or channel for communicating safety (SMS) matters to employees?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
4.2-3	Are the Organization's SMS manual and related guidance material accessible or disseminated to all relevant personnel?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			