	Advisory Circular
	CAA-AC-SMS001A
	June, 2022

SMS IMPLEMENTATION PLANNING

1.0   PURPOSE

1.1   This Advisory Circular provides guidance to assist service providers in developing an SMS implementation plan that defines their organization's approach to the management of safety.

1.2   This AC provides guidance for development of an SMS implementation plan that will enable the service provider to comply with the regulatory requirements for establishment of a SMS.

1.1   This Advisory Circular supersedes **CAA-AC-SMS001** of **September, 2014**.

2.0   REFERENCES

2.1   The Civil Aviation Act;

2.2   The Civil Aviation (Safety Management) Regulations, as amended;

3.0   INTRODUCTION

3.1   In implementing SMS, a service provider shall, as part of the SMS documentation, develop, adhere to and maintain an SMS implementation plan. The SMS implementation plan shall define the approach the service provider will adopt for managing safety in a manner that will meet the organization's safety objectives.

3.2   The SMS implementation plan shall address the coordination between the SMS of the service provider and the SMS of other organizations the service provider must interface with during the provision of services.

4.0   SYSTEM DESCRIPTION

4.1   The Service Provider's System

      4.1.1   The development of an SMS implementation plan starts with a detailed and accurate description of the service provider's established system and operation. A system review and description of the SMS elements and their interface with existing systems and processes is the first step in defining the scope and applicability of the SMS. This exercise provides an opportunity to identify any gaps related to the service provider's SMS components and elements. A system

description serves to identify the features of the product, the service or the activity so that SRM and safety assurance can be effective.

4.1.2   Most organizations are made up of a complex network of interfaces and interactions involving different internal departments as well as different external organizations that all contribute to the safe operation of the organization. The use of a system description enables the organization to have a clearer picture of its many interactions and interfaces. This will enable better management of safety risk and safety risk controls if they are described and help in understanding the impact of changes to the SMS processes and procedures.

4.1.3   When considering a system description, it is important to understand that a "system" is a set of things working together as parts of an interconnecting network. In an SMS, it is any of an organization's products, people, processes, procedures, facilities, services, and other aspects (including external factors), which are related to, and can affect, the organization's aviation safety activities. Often, a "system" is a collection of systems, which may also be viewed as a system with subsystems. These systems and their interactions with one another make up the sources of hazards and contribute to the control of safety risks. The important systems include both those which could directly impact aviation safety and those which affect the ability or capacity of an organization to perform effective safety management.

4.1.4   Because each organization is unique, there is no "one size fits all" method for SMS implementation. It is expected that each organization will implement an SMS that works for its unique situation. Each organization should define for itself how it intends to go about fulfilling the fundamental requirements. To accomplish this, it is important that each organization prepare a system description that identifies its organizational structures, processes, and business arrangements that it considers important to safety management functions. Based on the system description, the organization should identify or develop policy, processes, and procedures that establish its own safety management requirements.

4.1.5   When an organization elects to make a significant or substantive change to the processes identified in the system description, the changes should be viewed as potentially affecting its baseline safety risk assessment. Thus, the system description should be reviewed as part of the management of change processes.

4.2   Interface Management
4.2.1   Safety risks faced by service providers are affected by interfaces. Interfaces can be either internal (e.g. between departments) or external (e.g. other service providers or contracted services,). By identifying and managing these interfaces the service provider will have more control over any safety risks related to the interfaces. These interfaces should be defined within the system description.

4.2.2   Some of the internal interfaces may be with business areas not directly associated with safety, such as marketing, finance, legal and human resources. These areas can impact safety through their decisions which impact on internal resources and investment, as well as through agreements and contracts with external organizations, and may not necessarily address safety.

4.2.3   Initially service providers should concentrate on interfaces in relation to its business activities. The identification of these interfaces should be detailed in the system description that sets out the scope of the SMS and should include internal and external interfaces.

4.2.4   Once the SMS interfaces have been identified, the service provider should consider their relative criticality. This enables the service provider to prioritize the management of the more critical interfaces, and their potential safety risks. Things to consider are:
(a) what is being provided;
(b) why it is needed;
(c) whether the organizations involved has an SMS or another management system in place; and
(d) whether the interface involves the sharing of safety data / information.

4.2.5   Assessing safety impact of interfaces
(a) The service provider should then identify any hazards related to the interfaces and carry out a safety risk assessment using its existing hazard identification and safety risk assessment processes.
(b) Based on the safety risks identified, the service provider may consider working with the other organization to determine and define an appropriate safety risk control strategy.
(c) By involving the other organization, they may be able to contribute to identifying hazards, assessing the safety risk as well as determining the appropriate safety risk control. This collaborative effort is needed because the perception of safety risks may not be the same for each organization. The risk control could be carried out by either the service provider or the external organization.

4.2.6   Managing and monitoring interfaces
(a) The service provider is responsible for managing and monitoring the interfaces to ensure the safe provision of their services and products. This will ensure the interfaces are managed effectively and remain current and relevant. Formal agreements are an effective way to accomplish this as the interfaces and associated responsibilities can be clearly defined. Any changes in the interfaces and associated impacts should be communicated to the relevant organizations.
(b) It is important to recognize the need for coordination between the organizations involved in the interface. Effective coordination should include:
(i)   clarification of each organization's roles and responsibilities;

        (ii)   agreement of decisions on the actions to be taken (e.g. safety risk control actions and timescales);

        (iii) identification of what safety information needs to be shared and communicated;

        (iv) how and when coordination should take place (task force, regular meetings, ad hoc or dedicated meetings); and

        (v)   agreeing on solutions that benefit both organizations but that do not impair the effectiveness of the SMS.

(c) All safety issues or safety risks related to the interfaces should be documented and made accessible to each organization for sharing and review. This will allow the sharing of lessons learned and the pooling of safety data that will be valuable for both organizations. Operational safety benefits may be achieved through an enhancement of safety reached by each organization as the result of shared ownership of safety risks and responsibility.

4.3　SMS Scalability

4.3.1　The organization's SMS, including the policies, processes and procedures, should reflect the size and complexity of the organization and its activities. It should consider:

(a) the organizational structure and availability of resources;

(b) size and complexity of the organization (including multiple sites and bases); and

(c) complexity of the activities and the interfaces with external organizations.

4.3.2　The service provider should carry out an analysis of its activities to determine the right level of resources to manage the SMS. This should include the determination of the organizational structure needed to manage the SMS. This would include considerations of who will be responsible for managing and maintaining the SMS, what safety committees are needed, if any, and the need for specific safety specialists.

4.4　Integration of Management Systems

4.4.1　Depending upon the organizational, operational and regulatory contexts, a service provider may implement an integrated SMS. Integration has the potential to provide synergies by managing safety risks across multiple areas of aviation activities. For example, a service provider may implement a single SMS for its design organization, production organization, and business aviation flight department. Alternatively, there may be situations where an individual SMS for each type of aviation activity is appropriate.

4.4.2　The organization may define the best means to integrate or segregate its SMS as suits its business or organizational model, subject to satisfying the Authority that its SMS duties in all service provider roles are being properly discharged. The service provider's SMS may also be integrated with security, occupational health and environmental management systems.

4.5 SMS and QMS Integration

4.5.1 Some service providers have both an SMS and QMS. These sometimes are integrated into a single management system. The QMS is generally defined as the organizational structure and associated accountabilities, resources, processes and procedures necessary to establish and promote a system of continuous quality assurance and improvement while delivering a product or service.

4.5.2 Both systems are complementary; the SMS focuses on managing safety risks and safety performance while the QMS focuses on compliance with prescriptive regulations and requirements to meet customer expectations and contractual obligations. The objectives of an SMS are to identify hazards, assess the associated safety risk and implement effective safety risk controls. In contrast, the QMS focuses on the consistent delivery of products and services that meet relevant specifications. Nonetheless, both the SMS and the QMS:
(a) should be planned and managed;
(b) involve all organizational functions related to the delivery of aviation products and services;
(c) identify ineffective processes and procedures;
(d) strive for continuous improvement; and
(e) have the same goal of providing safe and reliable products and services to customers.

4.5.3 The SMS focuses on:
(a) identification of safety-related hazards facing the organization;
(b) assessment of the associated safety risk;
(c) implementation of effective safety risk controls to mitigate safety risks;
(d) measuring safety performance; and
(e) maintaining an appropriate resource allocation to meet safety performance requirements.

4.5.4 The QMS focuses on:
(a) compliance with regulations and requirements;
(b) consistency in the delivery of products and services;
(c) meeting the specified performance standards; and
(d) delivery of products and services that are "fit for purpose" and free of defects or errors.

4.5.5 Monitoring compliance with regulations is necessary to ensure that safety risk controls, applied in the form of regulations, are effectively implemented and monitored by the service provider. The causes and contributing factors of any non-compliance should also be analysed and addressed.

4.5.6 Given the complementary aspects of SMS and QMS, it is possible to integrate both systems without compromising each function. This can be summarized as follows:

(a) an SMS is supported by QMS processes such as auditing, inspection, investigation, root cause analysis, process design, and preventive actions;

(b) a QMS may identify safety issues or weaknesses in safety risk controls;

(c) a QMS may foresee safety issues that exist despite the organization's compliance with standards and specifications;

(d) quality principles, policies and practices should be aligned with the objectives of safety management; and

(e) QMS activities should consider identified hazards and safety risk controls for the planning and performance of internal audits.

5.0 SMS GAP ANALYSIS

5.1 The second step to developing an SMS implementation plan is the Gap Analysis. A gap analysis compares the service provider's existing safety management processes and procedures with requirements contained in the SMS framework. It is likely that the service provider already has some of the SMS functions in place. The development of an SMS should build upon existing organizational policies and processes. The gap analysis identifies the gaps that should be addressed through an SMS implementation plan that defines the actions needed to implement a fully functioning and effective SMS.

5.2 Once the gap analysis has been completed and fully documented, the resources and processes that have been identified as missing or inadequate will form the basis of the SMS implementation plan.

5.3 *Appendix 1* to this circular provides a list of gap analysis questions to facilitate service providers in systematically assessing their existing processes. From an objective response to each gap analysis question, it will be apparent what enhancements or actions are required.

6.0 SMS IMPLEMENTATION PLAN

6.1 An SMS implementation plan is developed in consultation with the accountable executive and managers responsible for the delivery of products and services related to, or in support of, the safe operation of aircraft. Once completed, the accountable executive endorses the plan. The SMS implementation plan includes timelines and milestones consistent with the requirements identified in the gap analysis process, the size of the service provider and the complexity of its products or services. The plan should address coordination with external organizations or contractors where applicable.

6.2 The SMS implementation plan may be documented in different forms, varying from a simple spread sheet to specialized project management software. The plan should be monitored regularly and updated as necessary. It should also clarify when a specific element can be considered successfully implemented. A format example of an SMS implementation plan/schedule is in *Appendix II* to this circular.

6.3 Full implementation of all components and elements of the SMS framework may take up to five years, depending on an organization's maturity and complexity. SMS

implementation may therefore be planned in a phased approach. A discussion and example of a phased approach is discussed in Section 7.0 below.

7.0   PHASED IMPLEMENTATION APPROACH

7.1   The objective of this section is to introduce an example of a phased approach to implantation of SMS. The examples given here details four SMS implementation phases. The implementation of an SMS is a systematic process. Nevertheless, this process may be quite a challenging task depending on factors, such as the availability resources required for implementation, as well as the service provider's pre-existing knowledge of SMS processes and procedures.

7.2   The reasons for a phased approach to SMS implementation include:

7.2.1   the provision of a manageable series of steps to follow in implementing an SMS, including allocation of resources;

7.2.2   the need to allow implementation of SMS framework elements in various sequences, depending upon the results of each service provider's gap analysis;

7.2.3   the initial availability of data and analytic processes to support reactive, proactive and predictive safety management practices; and

7.2.4   the need for a methodical process to ensure effective and sustainable SMS implementation.

7.3   The phased approach recognizes that implementation of a fully mature SMS is a multi-year process. A phased implementation approach permits the SMS to become more robust as each implementation phase is completed. Fundamental safety management processes are completed before moving to successive phases involving processes of greater complexity.

7.4   Four implementation phases are proposed for an SMS. Each phase is associated with various elements (or sub-elements) as per the ICAO SMS framework. It is important to note that this guidance is not absolute, and service providers may choose to make adjustments as appropriate. A sample summary of the four phases of SMS implementation and their corresponding elements is shown in *Appendix II.*

7.5   **Phase 1**

7.5.1   The objective of Phase 1 of SMS implementation is to provide a blueprint of how the SMS requirements will be met and integrated into the organization's control systems, as well as an accountability framework for the implementation of the SMS.

7.5.2   During Phase 1, basic planning and assignment of responsibilities are established. Central to Phase 1 is the gap analysis. From the gap analysis, an organization can determine the status of its existing safety management processes and can begin planning for the development of further safety management processes. The significant output of Phase 1 is the SMS implementation plan.

7.5.3   At the completion of Phase 1, the following activities should be finalized in such a manner that meets the expectations of the Authority, as set forth in Civil Aviation regulations;

7.5.3.1   Management commitment and responsibility — Element 1.1 (i)

7.5.3.1.1 Identify the accountable executive and the safety accountabilities of managers. This activity is based on Elements 1.1 and 1.2 of the SMS framework.

7.5.3.1.2 Establish an SMS implementation team. The team should be comprised of representatives from the relevant departments. The team's role is to drive the SMS implementation from the planning stage to its final implementation. Other functions of the implementation team will include but not be limited to:
(a) developing the SMS implementation plan;
(b) ensuring the adequate SMS training and technical expertise of the team in order to effectively implement the SMS elements and related processes; and
(c) monitoring of and reporting on the progress of the SMS implementation, providing regular updates and coordinating with the SMS accountable manager.

(i) Define the scope of the organization's activities (departments/divisions) to which the SMS will be applicable. The scope of the organization's SMS applicability will subsequently need to be described in the SMS document as appropriate. This activity is based on Element 1.5 of the SMS framework.

(ii) Conduct a gap analysis of the organization's current systems and processes in relation to the SMS framework requirements and SMS regulatory requirements. Guidance gap analysis for a service provider is provided in Appendix I to this circular.

7.5.3.2   SMS implementation plan   Element 1.5 (i)

7.5.3.2.1 Develop an SMS implementation plan on how the organization will implement the SMS on the basis of the identified system and process gaps resulting from the gap analysis. An example of a basic SMS implementation plan is provided in Appendix II to this Circular.

7.5.3.3   Appointment of key safety personnel   Element 1.3

7.5.3.3.1 Identify the key SMS person (safety/quality function) within the organization who will be responsible for administering the SMS on behalf of the accountable executive.

7.5.3.3.2 Establish the safety services office.

7.5.3.4   Training and education Element 4.1 (i)
7.5.3.4.1 Conduct a training needs analysis.
7.5.3.4.2 Organize and set up schedules for appropriate training of all staff according to their individual responsibilities and involvement in the SMS.
7.5.3.4.3 Develop safety training considering: Initial (general safety) job-specific training; and Recurrent training.
7.5.3.4.4 Identify the costs associated with training.
7.5.3.4.5 Develop a validation process that measures the effectiveness of training.
7.5.3.4.6 Establish a safety training records system.

7.5.3.5   Safety communication   Element 4.2 (i)
7.5.3.5.1 Initiate a mechanism or medium for safety communication.
7.5.3.5.2 Establish a means to convey safety information through any of: Safety newsletters, notices and bulletins, websites, e-mail. Etc.

7.6   **Phase 2**
7.6.1   The objective of Phase 2 is to implement essential safety management processes, while at the same time correcting potential deficiencies in existing safety management processes.   Most organizations will have some basic safety management activities in place at different levels of implementation. This phase aims at consolidating existing activities and developing those which do not yet exist.

7.6.1.1   Management commitment and responsibility   Element 1.1 (ii)
7.6.1.1.1 Develop a safety policy.
7.6.1.1.2 Have the accountable executive sign the safety policy.
7.6.1.1.3 Communicate the safety policy throughout the organization.
7.6.1.1.4 Establish a review schedule for the safety policy to ensure it remains relevant and appropriate to the organization.
7.6.1.1.5 Establish safety objectives for the SMS by developing safety performance standards in terms of:
(a)   safety performance indicators;
(b)   safety performance targets and alert levels; and
(c)   action plans.

7.6.1.1.6 Establish the SMS requirements for subcontractors:
(a)   establish a procedure to write SMS requirements into the contracting process; and
(b)   establish the SMS requirements in the bidding documentation.

7.6.1.2 Safety accountabilities   Element 1.2

7.6.1.2.1 Define safety accountabilities and communicate them throughout the organization.

7.6.1.2.2 Establish the safety action group (SAG).

7.6.1.2.3 Establish the safety/SMS coordination committee.

7.6.1.2.4 Define clear functions for the SAG and the safety/SMS coordination committee.

7.6.1.2.5 Establish lines of communication between the safety services office, the accountable executive, the SAG and the safety/SMS coordination committee.

7.6.1.2.6 Appoint the accountable executive as the chairperson of the safety/SMS coordination committee.

7.6.1.2.7 Develop a schedule of meetings for the safety services office to meet with the safety/SMS coordination committee and SAG as needed.

7.6.1.3 Coordination of emergency response planning   Element 1.4

7.6.1.3.1 Review the outline of the ERP related to the delegation of authority and assignment of emergency responsibilities.

7.6.1.3.2 Establish coordination procedures for action by key personnel during the emergency and the return to normal operations.

7.6.1.3.3 Identify external entities that will interact with the organization during emergency situations.

7.6.1.3.4 Assess the respective ERPs of the external entities.

7.6.1.3.5 Establish coordination between the different ERPs.

7.6.1.3.6 Incorporate information about the coordination between the different ERPs in the organization's SMS documentation.

Note. — Refer to CAA-AC-SMS006A for further guidance on ERP.

7.6.1.4 SMS documentation   Element 1.5 (ii)

7.6.1.4.1 Create an SMS documentation system to describe, store, retrieve and archive all SMS-related information and records by:

(a) developing an SMS document that is either a stand-alone manual or a distinct section within an existing controlled organization manual (refer to CAA-AC-SMS002A for guidance on developing an SMS manual);

(b) establishing an SMS filing system to collect and maintain current records relating to the organization's ongoing SMS processes;

(c) maintaining records to provide a historical reference as well as the current status of all SMS processes such as: a hazard register; an index of completed safety

assessments; SMS/safety training records; current SPIs and associated safety objectives; internal SMS audit reports; SMS/safety committee meeting minutes and the SMS implementation plan;

(d) maintaining records that will serve as evidence of the SMS operation and activities during internal or external assessment or audit of the SMS.

7.7 Phase 3

7.7.1 The objective of Phase 3 is to establish safety risk management processes. Towards the end of Phase 3, the organization will be ready to collect safety data and perform safety analyses based on information obtained through the various reporting systems.

7.7.1.1 Hazard identification   Element 2.1 (i)

7.7.1.1.1 Establish a voluntary reporting procedure.

7.7.1.1.2 Establish a programme or schedule for systematic review of all applicable aviation safety-related processes and equipment that are eligible for the HIRM process.

7.7.1.1.3 Establish a process for prioritization and assignment of identified hazards for risk mitigation.

7.7.1.2 Safety risk assessment and mitigation   Element 2.2

7.7.1.2.1 Establish a safety risk management procedure, including its approval and periodic review process.

7.7.1.2.2 Develop and adopt safety risk matrices relevant to the organization's operational or production processes.

7.7.1.2.3 Include adopted safety risk matrices and associated instructions in the organization's SMS or risk management training material.

7.7.1.3 Safety performance monitoring and measurement   Element 3.1 (i)

7.7.1.3.1 Establish an internal occurrence reporting and investigation procedure. This may include mandatory or major defect reports (MDR) where applicable.

7.7.1.3.2 Establish safety data collection, processing and analysis of high-consequence outcomes.

7.7.1.3.3 Establish high consequence safety indicators (initial ALoSP) and their associated target and alert settings. Examples of high-consequence safety indicators are accident rates, serious incident rates and monitoring of high risk non-compliance outcomes.

7.7.1.3.4 Reach an agreement with the State oversight authority on safety performance indicators and safety performance targets.

7.7.1.4 The management of change   Element 3.2

7.7.1.4.1 Establish a formal process for the management of change that considers:
  (a) the vulnerability of systems and activities;
  (b) the stability of systems and operational environments;
  (c) past performance;
  (d) regulatory, industry and technological changes.

7.7.1.4.2 Ensure that management of change procedures address the impact on existing safety performance and risk mitigation records before implementing new changes.

7.7.1.4.3 Establish procedures to ensure that safety assessment of new aviation safety-related operations, processes and equipment are conducted (or accounted for) as applicable, before they are commissioned.

7.7.1.5 Continuous improvement of the SMS — Element 3.3 (i)

7.7.1.5.1 Develop forms for internal evaluations.

7.7.1.5.2 Define an internal audit process.

7.7.1.5.3 Define an external audit process.

7.7.1.5.4 Define a schedule for evaluation of facilities, equipment, documentation and procedures to be completed through audits and surveys.

7.7.1.5.5 Develop documentation relevant to operational safety assurance.

7.8 Phase 4

7.8.1 Phase 4 is the final phase of SMS implementation. This phase involves the mature implementation of safety risk management and safety assurance. In this phase operational safety assurance is assessed through the implementation of periodic monitoring, feedback and continuous corrective action to maintain the effectiveness of safety risk controls.

7.8.1.1 Management commitment and responsibility   Element 1.1 (iii)

7.8.1.1.1 Enhance the existing disciplinary procedure/policy with due consideration of unintentional errors/ mistakes from deliberate/gross violations.

7.8.1.2 Hazard identification   Element 2.1 (ii)

7.8.1.2.1 Integrate the hazards identified from occurrence investigation reports with the voluntary reporting system.

7.8.1.2.2 Integrate hazard identification and risk management procedures with the subcontractor or customer SMS where applicable.

7.8.1.2.3 If necessary, develop a process for prioritizing collected hazards for risk mitigation based on areas of greater need or concern.

7.8.1.3   Safety performance monitoring and measurement   Element 3.1 (ii)

7.8.1.3.1 Enhance the safety data collection and processing system to include lower-consequence events.

7.8.1.3.2 Establish lower-consequence safety/quality indicators with target/alert level monitoring as appropriate (mature ALoSP).

7.8.1.3.3 Reach an agreement with the State oversight authority on lower-consequence safety performance indicators and safety performance target/alert levels.

7.8.1.4   Continuous improvement of the SMS   Element 3.3 (ii)

7.8.1.4.1 Establish SMS audits or integrate them into existing internal and external audit programmes.

7.8.1.4.2 Establish other operational SMS review/survey programmes where appropriate.

7.8.1.5   Training and education Element 4.1 (ii)

7.8.1.5.1 Complete an SMS training programme for all relevant personnel.

7.8.1.6   Safety communication   Element 4.2 (ii)

7.8.1.6.1 Establish mechanisms to promote safety information sharing and exchange internally and externally.

7.8.1.7   SMS elements progressively implemented throughout Phases 1 to 4

7.8.1.7.1 In the phased approach implementation, the following three key elements are progressively implemented throughout each phase:

7.8.1.8   SMS documentation   Element 1.5

7.8.1.8.1 As the SMS progressively matures the relevant SMS manual and safety documentation must be revised and updated accordingly. This activity will be inherent to all phases of SMS implementation and must be maintained after implementation as well.

7.8.1.9   Training and education Element 4.1 and Safety communication Element 4.2

7.8.1.9.1 As with SMS documentation, training, education and safety communication are important ongoing activities throughout all phases of SMS implementation. As the SMS evolves, new processes, procedures or regulations may come into effect or existing procedures may change to cater for the SMS requirements.

7.8.1.9.2 To ensure these changes are effectively understood and implemented by all personnel involved in safety-related duties it is vital that training and communication remain as ongoing activities throughout and after the complete implementation of the SMS.

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CIVIL AVIATION AUTHORITY

INITIAL GAP ANALYSIS CHECKLIST.

The initial gap analysis checklist below 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.

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.

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
Component 1 SAFETY POLICY AND OBJECTIVES			
Element 1.1 Management commitment and responsibility			
1.1.1	Is there a safety policy in place?	☐ Yes ☐ No ☐ Partial	
1.1.2	Does the safety policy reflect senior management's commitment regarding safety management?	☐ Yes ☐ No ☐ Partial	
1.1.3	Is the safety policy appropriate to the size, nature and complexity of the organization?	☐ Yes ☐ No ☑ Partial	
1.1.4	Is the safety policy relevant to aviation safety?	☐ Yes ☐ No ☑ Partial	
1.1.5	Is the safety policy signed by the accountable executive?	☐ Yes ☐ No ☑ Partial	
1.1.6	Is the safety policy communicated, with visible endorsement, throughout the [Organization]?	☐ Yes ☐ No	

		☐ Partial	
1.1.7	Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the [Organization]?	☐ Yes ☐ No ☐ Partial	

Element 1.2   Safety accountabilities

1,2,1	Has [Organization] identified an accountable executive who, irrespective of other functions, shal have ultimate responsibility and accountability, on behalf of the [Organization], for the implementation and maintenance of the SMS?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
1.2.3	Does the Accountable Executive have final authority over al aviation activities of his organization?	☐ Yes ☐ No ☐ Partial	
1.2.4	Has [Organization] identified and documented the safety accountabilities of management as well as operational personnel, with respect to the SMS?	☐ Yes ☐ No ☐ Partial	
1.2.5	Is there a safety committee or review board for the purpose of reviewing SMS and safety performance?	☐ Yes ☐ No ☐ Partial	
1.2.6	Is the safety committee chaired by the accountable executive or by an appropriately assigned deputy, duly substantiated in the SMS manual?	☐ Yes ☐ No ☐ Partial	
1.2.7	Does the safety committee include relevant operational or departmental heads as applicable?	☐ Yes	

		☐ No ☐ Partial	
1.2.8	Are there safety action groups that work in conjunction with the safety committee (especially for large/complex organizations)?	☐ Yes ☐ No ☐ Partial	

Element 1.3   Appointment of key safety personnel

1.3.1	Has [Organization] appointed a qualified person to manage and oversee the day-to-day operation of the SMS?	☐ Yes ☐ No ☐ Partial	
1.3.2	Does the qualified person have direct access or reporting to the accountable executive concerning the implementation and operation of the SMS?	☐ Yes ☐ No ☐ Partial	
1.3.3	Does the manager responsible for administering the SMS hold other responsibilities that may conflict or impair his role as SMS manager.]	☐ Yes ☐ No ☐ Partial	
1.3.4	Is the SMS manager's position a senior management position not lower than or subservient to other operational or production positions	☐ Yes ☐ No ☐ Partial	

Element 1.4   Coordination of emergency response planning

1.4.1	Does [Organization] have an emergency response/contingency plan appropriate to the size, nature and complexity of the organization?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No	

		☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
1.4.4	Is there a plan and record for drills or exercises with respect to the ERP?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
1.4.6	Does [Organization] have a process to distribute and communicate the ERP to all relevant personnel, including relevant external organizations? [	☐ Yes ☐ No ☐ Partial	
	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness?	☐ Yes ☐ No ☐ Partial	
Element 1.5 SMS documentation			
1.5.1	Is there a top-level SMS summary or exposition document which is approved by the accountable manager and accepted by the CAA?	☐ Yes ☐ No ☐ Partial	
1.5.2	Does the SMS documentation address the organization's SMS and its associated components and elements?	☐ Yes ☐ No ☐ Partial	
1.5.3	Is [Organization] SMS framework in alignment with the regulatory SMS framework?	☐ Yes ☐ No	

		☐ Partial	
1.5.4	Does [Organization] maintain a record of relevant supporting documentation pertinent to the implementation and operation of the SMS?	☐ Yes ☐ No ☐ Partial	
1.5.5	Does [Organization] have an SMS implementation plan to establish its SMS implementation process, including specific tasks and their relevant implementation milestones?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
1.5.7	Is the SMS implementation plan endorsed by the accountable executive?	☐ Yes ☐ No ☐ Partial	

Component 2   SAFETY RISK MANAGEMENT

Element 2.1   Hazard identification

2.1.1	Is there a process for voluntary hazards/threats reporting by all employees?	☐ Yes ☐ No ☐ Partial	
2.1.2	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?	☐ Yes ☐ No ☐ Partial	
2.1.3	Does [Organization] SDCPS include procedures for incident/accident reporting by operational or production personnel?	☐ Yes ☐ No ☐ Partial	
2.1.4	Is incident/accident reporting simple, accessible to all personnel involved in safety-related duties and commensurate with the size of the service provider?	☐ Yes ☐ No	

		☐ Partial	
2.1.5	Does [Organization] have procedures for investigation of all reported incident/accidents?.	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
2.1.7	Are there procedures to review hazards/threats from relevant industry reports for follow-up actions or risk evaluation where applicable?	☐ Yes ☐ No ☐ Partial	
Element 2.2 Safety risk assessment and mitigation			
2.2.1	Is there a documented hazard identification and risk mitigation (HIRM) procedure involving the use of objective risk analysis tools?	☐ Yes ☐ No ☐ Partial	
2.2.2	Is the risk assessment reports approved by departmental managers or at a higher level where appropriate?	☐ Yes ☐ No ☐ Partial	
2.2.3	Is there a procedure for periodic review of existing risk mitigation records?	☐ Yes ☐ No ☐ Partial	
2.2.4	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified?	☐ Yes ☐ No ☐ Partial	
2.2.5	Is there a procedure to prioritize identified hazards for risk mitigation actions?	☐ Yes ☐ No	

		☐ Partial	
2.2.6	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?	☐ Yes ☐ No ☐ Partial	

Component 3   SAFETY ASSURANCE

Element 3.1   Safety performance monitoring and measurement

3.1.1	Are there identified safety performance indicators for measuring and monitoring the safety performance of the organization's aviation activities?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
3.1.3	Do the safety performance indicators include alert/target settings to define unacceptable performance regions and planned improvement goals?	☐ Yes ☐ No ☐ Partial	
3.1.4	Is the setting of alert levels or out-of-control criteria based on objective safety metrics principles?	☐ Yes ☐ No ☐ Partial	
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)?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes	

		☐ No ☐ Partial	
3.1.8	Are the safety performance indicators periodical y reviewed?	☐ Yes ☐ No ☐ Partial	
Element 3.2 The management of change			
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?	☐ Yes ☐ No ☐ Partial	
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? [	☐ Yes ☐ No ☐ Partial	
3.2.3	Is there a procedure for review of new aviation safety-related operations and processes for hazards/risks before they are commissioned?	☐ Yes ☐ No ☐ Partial	
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?	☐ Yes ☐ No ☐ Partial	
Element 3.3 Continuous improvement of the SMS			
3.3.1	Is there a procedure for periodic internal audit/ assessment of the SMS?	☐ Yes ☐ No ☐ Partial	
3.3.2	Is there a current internal SMS audit/assessment plan?	☐ Yes ☐ No ☐ Partial	
3.3.3	Does the SMS audit plan include the sampling of completed/existing safety risk assessments?	☐ Yes	

		☐ No	
		☐ Partial	
3.3.4	Does the SMS audit plan include the sampling of safety performance indicators for data currency and their target/alert settings performance?	☐ Yes ☐ No ☐ Partial	
3.3.5	Does the SMS audit plan cover the SMS interface with subcontractors or customers where applicable? [5.4.1; 5.5.5]	☐ Yes ☐ No ☐ Partial	
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.	☐ Yes ☐ No ☐ Partial	

Component 4   SAFETY PROMOTION

Element 4.1   Training and education

4.1.1	Is there a programme to provide SMS training/ familiarization to personnel involved in the implementation or operation of the SMS?	☐ Yes ☐ No ☐ Partial	
4.1.2	Has the accountable executive undergone appropriate SMS familiarization, briefing or training?	☐ Yes ☐ No ☐ Partial	
4.1.3	Are personnel involved in conducting risk mitigation provided with appropriate risk management training or familiarization?	☐ Yes ☐ No ☐ Partial	
4.1.4	Is there evidence of organization-wide SMS education or awareness efforts?	☐ Yes ☐ No ☐ Partial	

Element 4.2   Safety communication

4.2.1	Does [Organization] participate in sharing safety information with relevant external industry product and service providers or organizations, including the relevant aviation regulatory organizations?	☐ Yes ☐ No ☐ Partial	
4.2.2	Is there evidence of a safety (SMS) publication, circular or channel for communicating safety (SMS) matters to employees?	☐ Yes ☐ No ☐ Partial	
4.2.3	Are [Organization] SMS manual and related guidance material accessible or disseminated to all relevant personnel?	☐ Yes ☐ No ☐ Partial	

SMS IMPLEMENTATION PLAN

Four phases of SMS implementation			
Phase 1	*Phase 2*	*Phase 3*	*Phase 4*
1. SMS Element 1.1 (i): a) identify the SMS accountable executive; b) establish an SMS implementation team; c) define the scope of the SMS; d) perform an SMS gap analysis. 2. SMS Element 1.5 (i): a) develop an SMS implementation plan. 3. SMS Element 1.3: a) establish a key person/office responsible for the administration and maintenance of the SMS. 4. SMS Element 4.1 (i): a) establish an SMS training programme for personnel, with priority for the SMS implementation team. 5. SMS Element 4.2 (i): a) initiate SMS/safety communication channels.	1. SMS Element 1.1 (ii): a) establish the safety policy and objectives, 2. SMS Element 1.2: a) define safety management responsibilities and accountabilities across relevant departments of the organization; b) establish an SMS/safety coordination mechanism/ committee; c) establish departmental/ divisional SAGs where applicable. 3. SMS Element 1.4: a) establish an emergency response plan. 4. SMS Element 1.5 (ii): a) initiate progressive development of an SMS document/manual and other supporting documentation.	1. SMS Element 2.1 (i): a) establish a voluntary hazard reporting procedure. 2. SMS Element 2.2: a) establish safety risk management procedures. 3. SMS Element 3.1 (i): a) establish occurrence reporting and investigation procedures; b) establish a safety data collection and processing system for high-consequence outcomes; c) develop high-consequence SPIs and associated targets and alert settings. 4. SMS Element 3.2: a) establish a management of change procedure that includes safety risk assessment. 5. SMS Element 3.3 (i): a) establish an internal quality audit programme; b) establish an external quality audit programme.	1. SMS Element 1.1 (iii): a) enhance the existing disciplinary procedure/ policy with due consideration of unintentional errors or mistakes from deliberate or gross violations. 2. SMS Element 2.1 (ii): a) integrate hazards identified from occurrence investigation reports with the voluntary hazard reporting system; b) integrate hazard identification and risk management procedures with the subcontractor's or customer's SMS where applicable. 3. SMS Element 3.1 (ii): a) enhance the safety data collection and processing system to include lower-consequence events; b) develop lower-consequence SPIs and associated targets/alert settings. 4. SMS Element 3.3 (ii): a) establish SMS audit programmes or integrate them into existing internal and external audit programmes; b) establish other operational SMS review/survey programmes where appropriate. 5. SMS Element 4.1 (ii): a) ensure that the SMS training programme for all relevant personnel has been completed. 6. SMS Element 4.2 (ii): a) promote safety information sharing and exchange internally and externally.

SMS Element 1.5: SMS documentation (Phases 1 to 4) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
SMS Elements 4.1 and 4.2: SMS training, education and communication (Phases 1 and thereafter) >>>
Note 1. —The actual implementation period is dependent on the scope of actions required for each element allocated and the size/complexity of the organization. *Note 2. — The SMS element numbers indicated correspond to the SMS element numbers. Suffixes such as a), b) and c) indicate that the* element has been subdivided to facilitate the phased implementation approach.