Technical Circular
CT.AAC.03

SUBJECT: SAFETY MANAGEMENT SYSTEM IMPLEMENTATION FOR SERVICE PROVIDERS

DATE: 05/06/2015

1. INTRODUCTION

1.1   Objective

1.1.1 This Technical Circular (CT) provides information to assist service providers in developing, implementing and maintaining a safety management system (SMS). It describes the SMS philosophy and processes and provides methods for showing compliance with the applicable SMS requirements.

1.1.2 This CT is provided for information and guidance purposes and is not intended as a prescriptive formula for the development of an SMS. On its own, it does not change, create, amend or permit deviations from regulatory requirements, nor does it establish minimum standards.

1.2   Applicability

1.2.1 This CT applies to all service providers (air operators, maintenance organizations, aerodrome operators, air navigation service providers, aviation training centers and other organizations) who are required to establish and maintain a safety management system in accordance with applicable Cabo Verde Civil Aviation Regulations (CV-CARs).

1.3   Reference documents

1.3.1 This CT relates specifically to the following reference material:

   (1) - CV CAR Part 6, 6.B.165
   (2) - CV CAR Part 9, 9.B.250
   (3) - CV CAR Part 14, 14.E
   (4) - CV CAR Part 17, 17.B.300
   (5) - ICAO Doc 9859 Safety Management Manual

1.4   Change notice

1.4.1 This is the first amendment/revision of this CT and replaces the CT-10-003 dated 27 April 2010.

1.5   Definitions and abbreviations

1.5.1 The following definitions and abbreviations are used in this document:

(1) **Accountable executive**: A single, identifiable person having responsibility for the effective and efficient performance of the service provider's SMS and accountable on behalf of certificate holder for meeting the requirements of the regulations;

(2) **"Service provider" or "product and service provider":** In the context of safety management, the term refers to any organization providing aviation products and/or services, encompassing approved training organizations that are exposed to safety risks during the provision of their services, aircraft operators, approved maintenance organizations, organizations responsible for type design and/or manufacture of aircraft, air traffic service providers and certified aerodromes;

(3) **AAC**: Civil Aviation Authority of Cabo Verde;

(4) CV CAR: Cabo Verde Civil Aviation Regulations;

(5) **SMS**: safety management system;

(6) SOP – Standard Operating Procedures.

2. REGULATORY REQUIREMENTS FOR SMS IMPLEMENTATION

2.1 Safety management is a principal element of a sound aviation management program, and a prime factor in the achievement of the goals of reduction of accidents and incidents and an increasing level of public confidence in the air transportation system. The aim is to improve safety through proactive management rather than reactive compliance with regulatory requirements.

2.2 AAC has developed a series of rule changes to introduce the regulatory requirements for SMS in civil aviation organizations.

2.3 Rules affecting maintenance organisations and air operators were first issued with the new editions of CV-CAR 9 and CV-CAR 6, in February and March 2009, respectively. These rules require maintenance organisations and air operators to have implemented a safety management system capable of performing the following functions:

(1) Identifying actual and potential safety hazards;
(2) Ensuring the implementation of remedial action necessary to maintain an acceptable level of safety;
(3) Providing for continuous monitoring and regular assessment of the safety level achieved; and
(4) Aiming to make continuous improvement of the overall level of safety.

2.4 Rules affecting aerodrome certificate holders were first issued with the original edition of CV CAR Part 14, in March 2005. These rules were subsequently amended in July 2009 with the second edition of CV-CAR 14. Recognizing the need for an effective methodology for SMS implementation, new rules prescribe a phased approach for SMS implementation, based on the submission of an implementation plan on, or before, 30 October for aerodromes certificated under the 2005 edition of CV-CAR 14, and together with the application for aerodrome certification for aerodromes to be certificated in accordance with the applicable schedule prescribed in CV-CAR 14.B.105 d). This guidance document provides information for the implementation of the SMS regulations.

2.5 Rules affecting air traffic service providers were first issued with the original edition of CV CAR 17 in September 2009 and also prescribe a phased approach for SMS implementation based on the submission of an implementation plan on, or before, 31 December 2010 or together with the application for an Air Traffic Services certificate, whichever occurs first.

2.6 Although not specifically required under CV CAR 6 and 9, the phased approach in the implementation of SMS is recommended in ICAO Doc. 9859 Safety Management Manual as an appropriate means for ensuring effective SMS implementation, by providing a manageable series of steps for organisations to follow. Four implementation phases have been identified; each phase involves the introduction of specific SMS components and elements. Some provisions have been incorporated in the regulations to permit the phased implementation approach.

2.7 Safety management involves organizational as well as cultural change. All Cape Verde civil aviation organizations are encouraged to use the process identified in this circular in the implementation of SMS in their organisation.

3. SMS: AN OVERVIEW

3.1 Describing SMS

3.1.1 The rapid pace of technological change and the growth in global aviation activity and complexity, with distinct operational contexts bringing new challenges, are key reasons to move to a risk-based approach. In addition to this, traditional methods of managing organisational safety may no longer meet rising stakeholder expectations. Different ways of understanding and managing safety-related risk are necessary to improve existing aviation safety levels. One such way is for operators to develop and implement their SMS to suit the size and complexity of their operation.

3.1.2 The elimination of accidents and serious incidents is unachievable. Failures will occur, in spite of the most accomplished prevention efforts. The hazards that contribute to accidents can never be completely eliminated but they can be reduced to acceptable levels. This is best achieved through a structured approach to managing safety-related risk.

3.1.3 An SMS is a systematic, explicit and proactive businesslike approach to managing safety to ensure the level of risk is acceptable, as low as reasonably practicable and that there is continuing pressure to drive the level of risk down over time. In common with all management systems, the SMS set out by this CT provides for goal setting, planning, and measuring performance. It concerns itself with how an organisation behaves so that all its personnel focus on safety and continual improvement in its aviation operations. An SMS defines how the organisation intends to manage aviation safety (includes aviation operations related risks in the operational workplace) as an integral part of the organisational management activities.

3.2 An SMS is designed to:

(1) Manage risks within the organisation, with a particular focus on risks which impact safety;

(2) Provide for ongoing monitoring and assessment of safety performance;

(3) Make continual improvements to the level of safety in operations;

(4) Develop and improve the safety culture within the organisation.

3.2.2 An SMS should be woven into the fabric of an organisation, so that it becomes part of the culture; the way people do their jobs. The concept of developing a 'positive safety culture' is an important overall goal in any organisation.

3.2.3 An SMS should not be seen as an added layer of compliance, but as a system that is beneficial to the commercial success of the business. It empowers individuals to act safely, and provides the organisational framework to do so.

3.3   Guiding Principles of an SMS

3.3.1   It is helpful to consider the principles by which an organisation's SMS is guided:

(1) Senior management is accountable and responsible for safety management;

(2) Clear and unambiguous lines of authority and responsibility must be set to ensure safety is documented, communicated and maintained;

(3) Personnel must have the knowledge, experience, skills and competence to discharge their responsibilities (though appropriate training and education);

(4) Priorities must be balanced and resources effectively allocated to address safety and operational concerns;

(5) Identification of safety hazards and evaluation of risks are conducted before work is performed;

(6) Conditions and requirements are agreed upon and clearly established to enhance the effective implementation of an SMS.

3.3.2   There are significant benefits to the introduction of an SMS; the focus for implementing an SMS should be on the benefits that come from identifying the hazards and managing the risks associated with aviation, and allowing goals and objectives to be achieved, rather than simply being motivated by regulatory requirements. In fact, the establishment of an SMS is a unique opportunity for aviation organisations to build, through their exposition, a system that reflects their organisation needs and provides for continual business and safety improvement.

3.3.3   The need for an SMS to meet individual organisational needs means that flexibility is required. As a result, this CT contains the required elements for an effective SMS but it is not prescriptive as to how these elements are adopted by the organisation. The following questions can be applied to all stages of the development and implementation of an SMS:

(1) Have we got it?

(2) Is it in place (implemented)?

(3) Is it working?

(4) Is it delivering?

3.3.4 The development and implementation of an SMS is part of driving improved operational integrity. Once the SMS is in place, a programme of continual improvement is needed to ensure on-going commitment to safety.

4. SAFETY MANAGEMENT SYSTEMS FRAMEWORK

4.1.1 AAC has adopted the ICAO SMS framework that is outlined in Table A.. It should be noted that the implementation of the framework should be commensurate with the size of the organization and the complexity of the products or services provided. The framework includes four components and twelve elements, representing the minimum requirements for SMS implementation.

Table A - This table is included for information purposes and as a reference for Phases 1 through 4.

Table A- SMS Framework		
Component	**Element**	**Phase**
1. Safety policy and objectives	1.1 Management commitment and responsibility	1,4
	1.2 Safety accountabilities	1
	1.3 Appointment of key safety personnel	1
	1.4 Coordination of emergency response planning	2, 4*
	1.5 SMS documentation	1, 2, 3, 4
2. Safety risk management	2.1 Hazard Identification	2, 3
	2.2 Safety risk assessment and mitigation	2, 3
3. Safety assurance	3.1 Safety performance monitoring and measurement	4
	3.2 The management of change	4
	3.3 Continuous improvement of the SMS	4
4. Safety promotion	4.1 Training and education	1, 2, 3, 4
	4.2 Safety communication	1, 2, 3, 4

5. PHASED APPROACH TO SMS IMPLEMENTATION

5.1 Why adopt a phased approach to SMS implementation

5.1.1 An organization should set as its objective the realistic implementation of an effective SMS, not the tokens of it. It would be quite appealing for an organization unduly burdened with requirements, and without the resources to fully implement an SMS in its entirety in an insufficient period of time, to produce all the paperwork that would conform to the demands and requirements of a civil aviation oversight authority. In other words, a situation referred to as "ticking the appropriate boxes" might develop, as a result of unreasonably demanding implementation requirements. Should such be the case, the resulting SMS, although complete and compliant on paper, would be nothing more than an empty shell. By providing a series of small, incremental and, most importantly, measurable steps, cosmetic compliance and "ticking the appropriate boxes" are discouraged.

5.1.2 In summary, the reasons for a phased approach to SMS implementation include:

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

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

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

(4) the need for a methodical process to ensure effective and sustainable SMS implementation.

5.1.3   Four implementation phases are proposed for an SMS. Each phase is associated with various elements (or sub-elements) as per the ICAO SMS framework. The implementation of each phase is based on the introduction of specific elements of each component of the SMS framework during the phase in question.

5.1.4   A summary of the four phases of SMS implementation and their corresponding elements is shown in Table B

Table B - Four phases of SMS implementation

Phase 1 (12 months*)	Phase 2 (12 months)	Phase 3 (18 months)	Phase 4 (18 months)
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

SMS Element 1.5: SMS documentation (Phases 1 to 4)
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SMS Elements 4.1 and 4.2: SMS training, education and communication (Phases 1 and thereafter)
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Note 1.— The implementation period indicated is an approximation. 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 ICAO SMS element numbers. Suffixes such as a), b) and c) indicate that the element has been subdivided to facilitate the phased implementation approach.

5.2   SMS implementation phases

5.2.1   The AAC is taking a phased-in approach to implementation. The compliance due dates for the acceptance of the four phases can be extend over 3 years, as required in Table C

Table C - Phased approach acceptances dates

Compliance Due Dates	+ 90 Days	+ 1 Year	+ 2 Years	+ 3 Years
	Phase 1 acceptance	Phase 2 acceptance	Phase 3 acceptance	Phase 4 acceptance
	2014	**2015**	**2016**	**2017**

5.2.2   Phase 1

5.2.2.1 The objective of Phase I of SMS implementation is to provide a blueprint on how the SMS requirements will be met and integrated into the organization's work activities, as well as an accountability framework for the implementation of the SMS.

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

5.2.2.3 During this phase, certificate holders are also required to complete a copy of the SMS compliance document (Appendix A) and forward it to AAC. Completion of a compliance document is an essential element of the SMS implementation process because it ensures that all affected organizations are aware of their regulatory responsibility.

5.2.2.4 The compliance document identifies the accountable executive and, once completed, will confirm that the individual accepts the responsibilities of their position. It also identifies the person within the organization who is responsible for implementing the SMS, and contains a statement committing the organization to implementing that system. In some organizations, the accountable executive and the person responsible for implementation of the SMS may be the same person.

5.2.2.5 The project implementation plan is subject to approval by AAC. To be effective, the implementation plan must include milestones for critical items, such as dates for development and submission of policies and procedures, training of staff, and review by AAC. These milestone dates are important, as AAC inspectors use them to plan their implementation responsibilities and commitments. As it is acknowledged that implementation plans require some flexibility, AAC may agree to changes, provided they do not permit extension beyond the time limitations of any phase. Last-minute changes made to the plan due to workload or other priorities may not be accommodated by AAC.

5.2.2.6 The compliance form, gap analysis and implementation plan shall be completed and submitted as a package within the time limitations specified in the applicable regulations. AAC will review the submission and provide a response within 90 days. AAC's acceptance of the compliance document will indicate that a review of the gap analysis has been completed and the implementation plan has been accepted

5.2.2.7 At the completion of Phase 1, the following activities should be finalized in such a manner that meets the expectations of the AAC, as set forth in relevant requirements and guidance material:

(1) Management commitment and responsibility — Element 1.1 (i)

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

(b) 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:

(i) developing the SMS implementation plan;

(ii) ensuring the adequate SMS training and technical expertise of the team in order to effectively implement the SMS elements and related processes; and

(iii) monitoring of and reporting on the progress of the SMS implementation, providing regular updates and coordinating with the SMS accountable executive.

(c) 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 ICAO SMS framework.

(d) Conduct a gap analysis of the organization's current systems and processes in relation to the ICAO SMS framework requirements (or the relevant SMS regulatory requirements). A checklist for completing an SMS gap analysis for a service provider is provided in Appendix B to this CT.

(2) SMS implementation plan — Element 1.5 (i)

(a) 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 C to this CT.

(3) Appointment of key safety personnel — Element 1.3

(a) 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.

(b) Establish the safety services office.

(4) Training and education — Element 4.1 (i)

(a) Conduct a training needs analysis.

(b) Organize and set up schedules for appropriate training of all staff according to their individual responsibilities and involvement in the SMS.

(c) Develop safety training considering:

(i) initial (general safety) job-specific training; and

(ii) recurrent training.

(d) Identify the costs associated with training.

(e) Develop a validation process that measures the effectiveness of training.

(f) Establish a safety training records system.

(5) Safety communication — Element 4.2 (i)

(a) Initiate a mechanism or medium for safety communication.

(b) Establish a means to convey safety information through any of:

(i) safety newsletters, notices and bulletins;

(ii) websites;

(iii) email.

5.2.3   Phase 2

5.2.3.1 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.

5.2.3.2 At the completion of Phase 2, the following activities should be finalized in such a manner that meets the expectations of the AAC, as set forth in relevant requirements and guidance material:

(1) Management commitment and responsibility — Element 1.1 (ii)

(a) Develop a safety policy (Refer to appendix F for guidance)

(b) Have the accountable executive sign the safety policy.

(c) Communicate the safety policy throughout the organization.

(d) Establish a review schedule for the safety policy to ensure it remains relevant and appropriate to the organization.

(e) Establish safety objectives for the SMS by developing safety performance standards in terms of:

(i) safety performance indicators;

(ii) safety performance targets and alert levels; and

(iii) action plans.

(f) Establish the SMS requirements for subcontractors:

(i) establish a procedure to write SMS requirements into the contracting process; and

(ii) establish the SMS requirements in the bidding documentation.

(2) Safety accountabilities — Element 1.2

(a) Define safety accountabilities and communicate them throughout the organization.

(b) Establish the safety action group (SAG).

(c) Establish the safety/SMS coordination committee.

(d) Define clear functions for the SAG and the safety/SMS coordination committee.

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

(f) Appoint the accountable executive as the chairperson of the safety/SMS coordination committee.

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

Note Refer to appendix I for guidance

(3) Coordination of emergency response planning — Element 1.4

(a) Review the outline of the ERP related to the delegation of authority and assignment of emergency responsibilities.

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

(c) Identify external entities that will interact with the organization during emergency situations.

(d) Assess the respective ERPs of the external entities.

(e) Establish coordination between the different ERPs.

(f) Incorporate information about the coordination between the different ERPs in the organization's SMS documentation.

Note.— Refer to Appendix G for further guidance on ERP.

(4) SMS documentation — Element 1.5 (ii)

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

(i) Developing an SMS document that is either a stand-alone manual or a distinct section within an existing controlled organization manual (refer to Appendix H for guidance on development an SMS manual);

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

(iii) 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;

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

5.2.4 Phase 3

5.2.4.1 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.

5.2.4.2 At the completion of Phase 3, the following activities should be finalized in such a manner that meets the expectations of the AAC, as set forth in relevant requirements and guidance material:

(1) Hazard identification — Element 2.1 (i)

(a) Establish a voluntary reporting procedure. Refer to Appendix J for guidance.

(b) Establish a programme/schedule for systematic review of all applicable aviation safety-related processes/equipment that are eligible for the hazard Identification and Risk Management (HIRM) process.

(c) Establish a process for prioritization and assignment of identified hazards for risk mitigation.

(2) Safety risk assessment and mitigation — Element 2.2

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

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

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

(3) Safety performance monitoring and measurement — Element 3.1 (i)

(a) Establish an internal occurrence reporting and investigation procedure. This may include mandatory or major defect reports (MDR) where applicable.
(b) Establish safety data collection, processing and analysis of high-consequence outcomes.
(c) 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. Refer to Appendix K for guidance on safety performance indicators.

(d) Reach an agreement with the State oversight authority on safety performance indicators and safety performance targets.

(4) The management of change — Element 3.2

(a) Establish a formal process for the management of change that considers:

(i) The vulnerability of systems and activities;

(ii) The stability of systems and operational environments;

(iii) Past performance;

(iv) Regulatory, industry and technological changes.

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

(c) 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.

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

(a) Develop forms for internal evaluations.

(b) Define an internal audit process.

(c) Define an external audit process.

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

(e) Develop documentation relevant to operational safety assurance.

5.2.5   Phase 4

5.2.5.1 Phase 4 is the final phase of the SMS. 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.

5.2.5.2 At the completion of Phase 4, the following activities should be finalized in such a manner that meets the expectations of the AAC, as set forth in relevant requirements and guidance material:

(1) Management commitment and responsibility — Element 1.1 (iii)

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

(2) Hazard identification — Element 2.1 (ii)

(a) Integrate the hazards identified from occurrence investigation reports with the voluntary reporting system.

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

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

(3) Safety performance monitoring and measurement — Element 3.1 (ii)

(a) Enhance the safety data collection and processing system to include lower-consequence events.

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

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

(4) Continuous improvement of the SMS — Element 3.3 (ii)

(a) Establish SMS audits or integrate them into existing internal and external audit programmes.

(b) Establish other operational SMS review/survey programmes where appropriate.

(5) Training and education — Element 4.1 (ii)

(a) Complete an SMS training programme for all relevant personnel.

(6) Safety communication — Element 4.2 (ii)

(a) Establish mechanisms to promote safety information sharing and exchange internally and externally.

5.2.6   SMS elements progressively implemented throughout Phases 1 to 4

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

(1) SMS documentation — Element 1.5

(a) 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.

(2) Training and education — Element 4.1 and Safety communication — Element 4.2

(a) 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. 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.

6. GAP ANALYSIS AND IMPLEMENTATION PLAN

6.1   Phase 1 of SMS implementation requires affected organizations to conduct a gap analysis of their system(s) to determine which components and elements of an SMS are currently in place, and which components or elements must be added or modified to meet the regulatory requirements. The review involves comparing the SMS requirements against the certificate holder's existing systems.

6.2   This CT was developed to assist organizations conduct their gap analysis. It lists all the SMS components and elements, and includes criteria linked to the appropriate regulation or standard.

6.3   A comprehensive gap analysis form is included in Appendix B of this CT. The form combines applicable references to the regulations and standards. Organizations can use this format as a template to conduct their gap analysis, or they can create their own, provided they refer to all the appropriate criteria for each component and element.

6.4   Each gap analysis question is designed for a "yes" or "no" response. A "yes" answer indicates the organization already meets the criteria for that particular SMS component or element. A "no" answer indicates that a gap exists between the stated criteria and the organization's policies, processes or procedures. If the response is "yes," the next column of the gap analysis form is used to indicate precisely where (in company documentation) the requirement is addressed. If the response is "no," the same column is used to indicate how or where the policy, process or procedure will be further developed to bring the organization into compliance with the requirement.

6.5   Once the gap analysis is complete and fully documented, the items identified as missing or deficient will form the basis of the implementation plan. Organizations may format their implementation plan to suit their individual needs; however, a spreadsheet format or MS Project type layout is recommended for ease of viewing and tracking. Each item will be reviewed to determine how the organization will create or modify policies, processes or procedures to incorporate the required SMS components and elements. Components and elements can be grouped into larger projects and assigned to project manager(s) who will oversee the development and implementation of that project. Each component, element or project should be assigned milestones, including a termination date, so that to ensure that completion date is clearly established. Appendix C provides an example of an implementation plan, with suggested headings to assist organizations in the development of their plan.

6.6   Once completed, the compliance document, gap analysis and implementation plan must be submitted to the AAC no later than the time specified in the applicable regulations or guindance. These documents will be reviewed in accordance with the requirements of the applicable SMS regulations and standards.

6.7   Circumstances that necessitate change(s) to the implementation plan must be communicated as soon as possible to the AAC for acceptance, and to ensure timely submission of required material. Periodic progress reporting is a key component of this process

7. ACCOUNTABLE EXECUTIVE

7.1 Coincident with the introduction of SMS regulations, organizations are also required to appoint an accountable executive. The accountable executive is a single, identifiable person within each organization who will discharge the certificate holder's responsibilities, and in particular, lead the necessary cultural change. It is imperative that the correct person be identified as the accountable executive, and that the individual understands and accepts the roles and responsibilities associated with that position. This is not intended to be a position title without accountability.

7.2 Depending on the size and complexity of the organization, the Accountable Executive may be:

(1) The chief executive officer (CEO);

(2) The chairperson of the board of directors;

(3) A partner; or

(4) The proprietor.

7.3 Appendices D and E provide a flow chart and series of questions, respectively, to assist with the selection process. The flow chart identifies several organizational structures that will lead to a corresponding accountable executive. Once this person is determined, the questions following the flow chart will confirm the selected person is the correct choice. All questions must receive a "yes" answer for the candidate to be acceptable. Should any of the questions result in a "no" answer, the selection process must start again with a new candidate. The organizational structures included in Appendix E are intended to cover the majority of situations that will be encountered. Should there be an organizational structure that does not result in the clear selection of an accountable executive, an appropriate candidate will be selected in consultation with AAC. The nomination of the accountable executive will be validated during the next inspection, or SMS validation or assessment.

Note: Information on the accountable executive is included here to offer organizations a comprehensive package for implementing their SMS and selecting their accountable executive.

8. MULTIPLE CERTIFICATE HOLDERS

8.1 Certificate holders with multiple certificates (e.g air operators, maintenance organizations) may choose to implement a single SMS. This format is optional and will allow the SMS to be designed to accommodate the regulatory requirements of all certificates held by a single organization. This will ensure that the SMS will be a fully integrated system, and not separate systems operating independently of each other.

8.2 This is not to imply that the regulatory requirements within each certificate will be combined. Each certificate must continue to comply with its regulatory requirements; however, all certificates can be subject to a single SMS.

João dos Reis Monteiro
President of the Board

APPENDIX A— SMS COMPLIANCE DOCUMENT

![AAC logo] AGÊNCIA DE AVIAÇÃO CIVIL	**SMS COMPLIANCE DOCUMENT FORM**	Reference:	FS.AAC.07
		Revision:	Revision 1
		Date:	05-06-2015

Part 1

I, _____,
(name, position title and signature)

declare myself to be the accountable executive for_____
(name of the organization on certificate(s))

for the following certificates:

☐ Approved maintenance organization   ☐ Air operator   ☐ Aerodrome

☐ Air traffic services   ☐ Approved training organization   ☐ Other

Part 2

Implementing the safety management system will be the responsibility of

_____
(provide name and position title)

Part 3

As accountable executive, I am committing

_____
(company name)

to implement a safety management system as identified in the attached implementation plan.

Signed: _____
(Accountable executive)   Date: __/__/____

AAC USE

In accordance with the conditions of the regulations, the information contained in this document, the gap analysis and the project plan have been reviewed. The signature by Agência de Aviação Civil (AAC) indicates the acceptance of SMS Phase I.

Signed: _____
(For the AAC)   Date:__/__/____

APPENDIX B— GAP ANALYSIS

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? [5.3.7 to 5.3.15; 5.5.3]	☐ Yes ☐ No ☐ Partial	
1.1-2	Does the safety policy reflect senior management's commitment regarding safety management? [5.3.7 to 5.3.15]	☐ Yes ☐ No ☐ Partial	
1.1-3	Is the safety policy appropriate to the size, nature and complexity of the organization? [5.3.7 to 5.3.15]	☐ Yes ☐ No ☐ Partial	
1.1-4	Is the safety policy relevant to aviation safety? [5.3.7 to 5.3.15]	☐ Yes ☐ No ☐ Partial	
1.1-5	Is the safety policy signed by the accountable executive? [5.3.7 to 5.3.15; 5.5.3]	☐ Yes ☐ No ☐ Partial	
1.1-6	Is the safety policy communicated, with visible endorsement, throughout the [Organization]? [5.5.3]	☐ Yes ☐ No ☐ Partial	
1.1-7	Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the [Organization]? [5.5.3]	☐ Yes ☐ No ☐ Partial	
Element 1.2 — Safety accountabilities			
1.2-1	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]	☐ 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? [5.3.16 to 5.3.26]	☐ Yes ☐ No ☐ Partial	
1.2-3	Does the Accountable Executive have final authority over all aviation activities of his organization? [5.3.16 to 5.3.26]	☐ 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? [5.3.16 to 5.3.26]	☐ Yes ☐ No ☐ Partial	
1.2-5	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]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
1.2-6	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]	☐ Yes ☐ No ☐ Partial	
1.2-7	Does the safety committee include relevant operational or departmental heads as applicable? [5.3.27 to 5.3.33; Appendix 4]	☐ Yes ☐ No ☐ Partial	
1.2-8	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]	☐ 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? [5.3.27 to 5.3.33; 5.5.2; Appendix 2]	☐ 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? [5.3.27 to 5.3.33; 5.5.2; Appendix 2, 6.1]	☐ 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. [Appendix 2, 6.4]	☐ 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 [Appendix 2, 6.4]	☐ 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? [Appendix 3]	☐ 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? [Appendix 3, 4 f)]	☐ 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? [Appendix 3, 4 e)]	☐ Yes ☐ No ☐ Partial	
1.4-4	Is there a plan and record for drills or exercises with respect to the ERP? [Appendix 3, 5 c)]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
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? [Appendix 3, 4 d)]	☐ 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? [Appendix 3, 5 d)]	☐ Yes ☐ No ☐ Partial	
1.4-7	Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness? [Appendix 3, 5 f)]	☐ 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? [5.3.36 to 5.3.38]	☐ Yes ☐ No ☐ Partial	
1.5-2	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]	☐ Yes ☐ No ☐ Partial	
1.5-3	Is [Organization] SMS framework in alignment with the regulatory SMS framework? [5.3.36 to 5.3.38; 5.4.1; Appendix 4]	☐ Yes ☐ No ☐ Partial	
1.5-4	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]	☐ 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? [5.4.4]	☐ 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? [5.4.4]	☐ Yes ☐ No ☐ Partial	
1.5-7	Is the SMS implementation plan endorsed by the accountable executive? [5.4.4; 5.5.2]	☐ 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? [5.3.42 to 5.3.52; 5.5.4]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
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? [5.3.42 to 5.3.52]	☐ Yes ☐ No ☐ Partial	
2.1-3	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]	☐ 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? [5.3.42 to 5.3.52; 5.5.4]	☐ Yes ☐ No ☐ Partial	
2.1-5	Does [Organization] have procedures for investigation of all reported incident/accidents?. [5.3.42 to 5.3.52; 5.5.4]	☐ 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? [2.13.9; 5.3.50 f); 5.5.5]	☐ 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? [5.3.5.1]	☐ 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? [2.13; 2.14; 5.3.53 to 5.3.61]	☐ Yes ☐ No ☐ Partial	
2.2-2	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]	☐ Yes ☐ No ☐ Partial	
2.2-3	Is there a procedure for periodic review of existing risk mitigation records? [5.5.4]	☐ Yes ☐ No ☐ Partial	
2.2-4	Is there a procedure to account for mitigation actions whenever unacceptable risk levels are identified? [5.5.4]	☐ Yes ☐ No ☐ Partial	
2.2-5	Is there a procedure to prioritize identified hazards for risk mitigation actions? [5.5.4]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
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? [5.5.4]	☐ 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? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	☐ 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? [5.3.66 to 5.3.73; 5.4.5; Appendix 6]	☐ Yes ☐ No ☐ Partial	
3.1-3	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]	☐ Yes ☐ No ☐ Partial	
3.1-4	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]	☐ 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)? [5.3.66 to 5.3.73; 5.4.5; 5.5.4; 5.5.5; Appendix 6]	☐ 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? [5.3.66 to 5.3.73; 5.4.5.2; 5.5.4; 5.5.5]	☐ 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? [5.4.5; Appendix 6, Table 5-A6-5 b)]	☐ Yes ☐ No ☐ Partial	
3.1-8	Are the safety performance indicators periodically reviewed? [5.4.5; Appendix 6]	☐ 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? [5.3.74 to 5.3.77; 5.5.4]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
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? [5.3.74 to 5.3.77; 5.5.4]	☐ 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? [5.5.4]	☐ 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? [5.5.4]	☐ 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? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	☐ Yes ☐ No ☐ Partial	
3.3-2	Is there a current internal SMS audit/assessment plan? [5.3.78 to 5.3.82; 5.5.4; 5.5.5]	☐ Yes ☐ No ☐ Partial	
3.3-3	Does the SMS audit plan include the sampling of completed/existing safety risk assessments? [5.5.5]	☐ 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? [5.4.5; 5.5.5]	☐ 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. [5.3.80; 5.5.5]	☐ 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? [5.3.86 to 5.3.91; 5.5.5]	☐ Yes ☐ No ☐ Partial	
4.1-2	Has the accountable executive undergone appropriate SMS familiarization, briefing or training? [5.3.86 to 5.3.91; 5.5.5]	☐ Yes ☐ No ☐ Partial	

No.	Aspect to be analysed or question to be answered	Answer	Status of implementation
4.1-3	Are personnel involved in conducting risk mitigation provided with appropriate risk management training or familiarization? [5.3.86 to 5.3.91; 5.5.5]	☐ Yes ☐ No ☐ Partial	
4.1-4	Is there evidence of organization-wide SMS education or awareness efforts? [5.3.86 to 5.3.91; 5.5.5]	☐ 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? [5.3.92; 5.3.93; 5.5.5]	☐ Yes ☐ No ☐ Partial	
4.2-2	Is there evidence of a safety (SMS) publication, circular or channel for communicating safety (SMS) matters to employees? [5.3.92; 5.3.93; 5.5.5]	☐ Yes ☐ No ☐ Partial	
4.2-3	Are [Organization] SMS manual and related guidance material accessible or disseminated to all relevant personnel? [5.3.92; 5.3.93; 5.5.5]	☐ Yes ☐ No ☐ Partial	

APPENDIX C - SAMPLE IMPLEMENTATION PLAN

GAQ Ref	Gap Analysis Question	Answer: Yes/ No/ Partial	Description of the Gap	Action/ Task Required to fill Gap	Assigned Task Group/ Person	Planed time frame or Date of activity	Action/task Status (open/ WIP/ closed)	SMS Document Reference
Add applicable reference.	*Is there a safety policy in place?[5.3.7 to 5.3.15; 5.5.3]*	*Partial*	*The organisation policy is not appropriate to the size and complexity of the organization.*	- *develop appropriate safety policy text – amend applicable company documents* - *communicate policy to staff*	*As assigned.*	*Select a due date*	*Select the status of implementation*	
Add applicable reference.	*Does the safety policy reflect senior management commitments regarding safety management?[5.3.7 to 5.3.15]*	*Partial*	*The safety policy is not appropriate to the size and complexity of the organization.*	- *develop appropriate safety policy text – amend applicable company documents* - *communicate policy to staff*	*As assigned.*			
Add applicable reference.	*Is the Safety Policy is appropriate to the size, nature and complexity of the organization. [5.3.7 to 5.3.15]*	*Partial*	*The safety policy is not appropriate to the size and complexity of the organization.*	- *develop appropriate safety policy text – amend applicable company documents* - *communicate policy to staff*	*As assigned.*			
Add applicable reference.	*Is the Safety Policy is relevant to aviation safety. [5.3.7 to 5.3.15]*	*Partial*	*The safety policy is not appropriate to the size and complexity of the organization.*	- *develop appropriate safety policy text – amend applicable company documents* - *communicate policy to staff*	*As assigned.*			
Add applicable reference.	*Is the safety policy signed by the Accountable Executive?[5.3.7 to 5.3.15; 5.5.3]*	*No*		- *accountable executive to endorse safety policy in applicable company documents*	*As assigned.*			
Add applicable reference.	*Is the safety policy communicated, with visible endorsement, throughout the [organization]?[5.5.3]*	*No*		- *establish methods for accountable executive to promote the safety policy* - *amend applicable documents*	*As assigned.*			
Add applicable reference.	*Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the [organization]?[5.5.3]*	*No*		- *develop procedures for periodic review* - *amend applicable documents*	*As assigned.*			

APPENDIX D - ACCOUNTABLE EXECUTIVE SELECTION FLOW CHART
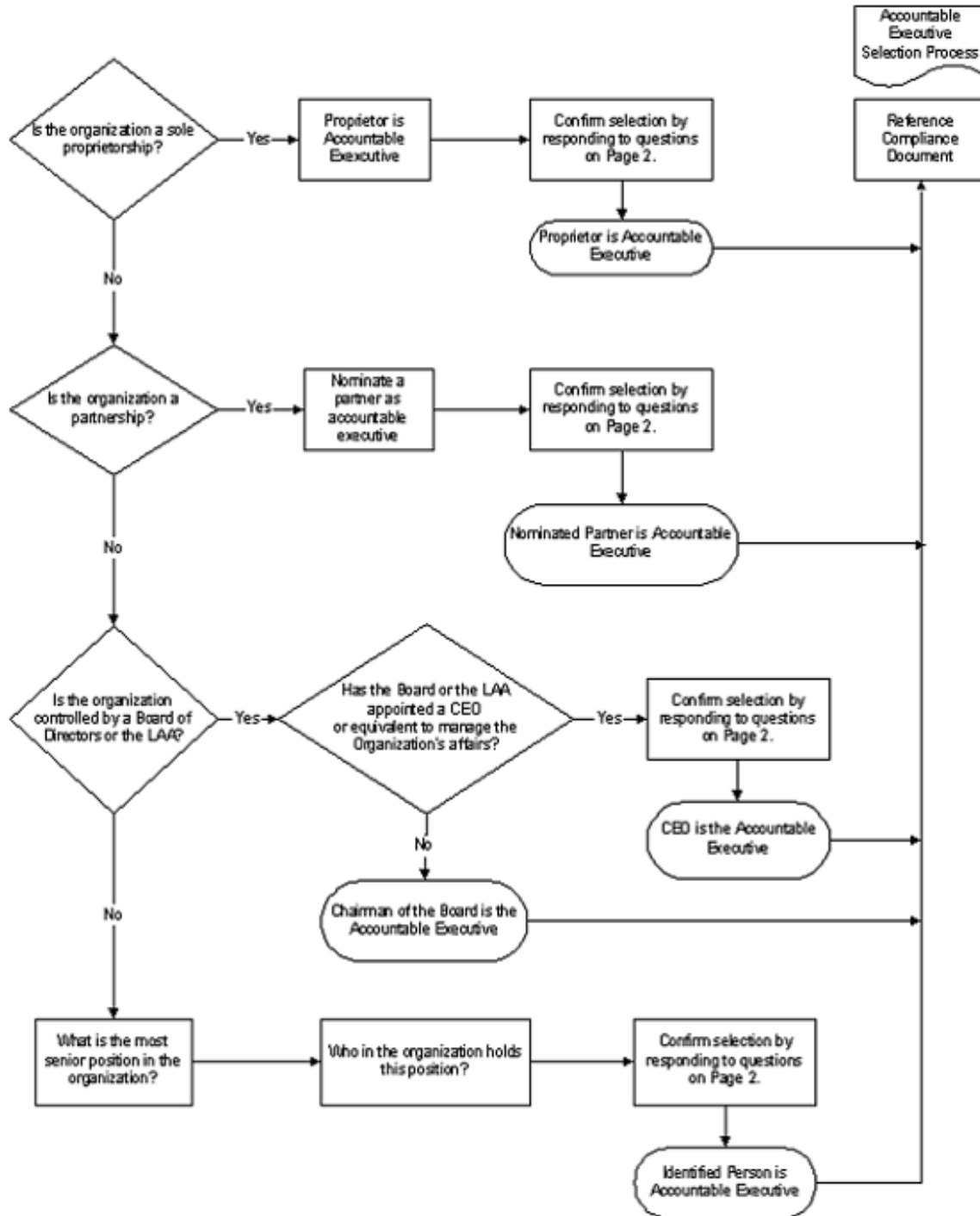
APPENDIX E - ACCOUNTABLE EXECUTIVE SELECTION QUESTION LIST

```
                    ┌─────────────────────────┐
                    │  Identify Person by Name │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │   Does this person have  │
                    │   full authority for all │
                    │ human resource issues?   │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │   Does this person have  │
                    │     authority for major  │
                    │     financial issues?    │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │   Does this person have  │
                    │  direct responsibility for│
                    │     the conduct of the   │
                    │ certificate holder's affairs?│
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │ If the organization holds│
                    │ multiple certificates does│
                    │      this person have    │
                    │     responsibility for all│
                    │     certificates held?   │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │   Does this person have  │
                    │   final authority over all│
                    │   operations conducted   │
                    │   under the certificates?│
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │   Does this person have  │
                    │   final responsibility   │
                    │   for all safety issues? │
                    └─────────────────────────┘
            No                                        Yes
             │                                          │
             ▼                                          ▼
  ┌─────────────────────────┐           ┌─────────────────────────┐
  │ If any answer is NO then │           │  If the answers are all  │
  │   the selection process  │           │ YES then that person is  │
  │  must start again using  │           │     the Accountable      │
  │   a different nominee    │           │        Executive         │
  └─────────────────────────┘           └─────────────────────────┘
```

APPENDIX F - SAMPLE SAFETY POLICY STATEMENT

Safety is one of our core business functions. We are committed to developing, implementing, maintaining and constantly improving strategies and processes to ensure that all our aviation activities take place under a balanced allocation of organizational resources, aimed at achieving the highest level of safety performance and meeting regulatory requirements, while delivering our services.
All levels of management and all employees are accountable for the delivery of this highest level of safety performance, starting with the [Chief executive officer (CEO)/managing director/or as appropriate to the organization].

Our commitment is to:

• Support the management of safety through the provision of all appropriate resources, that will result in an organizational culture that fosters safe practices, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as the attention to the results of the other management systems of the organization;

• Ensure that the management of safety is a primary responsibility of all managers and employees;

• Clearly define for all staff, managers and employees alike, their accountabilities and responsibilities for the delivery of the organization's safety performance and the performance of our safety management system;

• Establish and operate hazard identification and risk management processes, including a hazard reporting system, in order to eliminate or mitigate the safety risks of the consequences of hazards resulting from our operations or activities to achieve continuous improvement in our safety performance;

• Ensure that no action will be taken against any employee who discloses a safety concern through the hazard reporting system, unless such disclosure indicates, beyond any reasonable doubt, gross negligence or a deliberate or willful disregard of regulations or procedures;

• Comply with and, wherever possible, exceed, legislative and regulatory requirements and standards;

• Ensure that sufficient skilled and trained human resources are available to implement safety strategies and processes;

• Ensure that all staff are provided with adequate and appropriate aviation safety information and training, are competent in safety matters, and are allocated only tasks commensurate with their skills;

• Establish and measure our safety performance against realistic safety performance indicators and safety performance targets;

• Continually improve our safety performance through continuous monitoring and measurement, regular review and adjustment of safety objectives and targets, and diligent achievement of these; and

• Ensure externally supplied systems and services to support our operations are delivered meeting our safety performance standards.

(Signed) _____

CEO/Managing Director/or as appropriate

APPENDIX G - EMERGENCY RESPONSE PLANNING

1. Perhaps because aviation accidents are rare events, few organizations are prepared when one occurs. Many organizations do not have effective plans in place to manage events during or following an emergency or crisis. How an organization fares in the aftermath of an accident or other emergency can depend on how well it handles the first few hours and days following a major safety event. An emergency response plan (ERP) outlines in writing what should be done after an accident or aviation crisis and who is responsible for each action. Among different product and service providers, such emergency planning may be known by different terms such as contingency plan, crisis management plan and continuing airworthiness support plan. In this CT, the generic term emergency response plan (ERP) is used to address the relevant contingency plans expected of aviation service providers whose products/services may have an impact on aviation safety.

2. While there is a tendency to think of emergency response planning with respect to aircraft or aerodrome operations, usually as a result of an aircraft accident, the expectation can equally be applied to other aviation service providers. In the case of ATS providers this may include a major power outage or loss of radar, communications or other major facilities. For a maintenance organization it may involve a serious breach of airworthiness requirements resulting in the grounding of a fleet (AOG). For a design and manufacturing organization, a serious design deficiency may result in a global AOG that requires emergency re-design, modification, production and retrofitting actions (emergency airworthiness directives) to address such a crisis. Where there is a possibility of an organization's aviation operations or activities being compromised by other crises or emergencies originating from external sources, such as a public health emergency/pandemic, these scenarios should also be addressed in its aviation ERP as appropriate. Hence, an ERP is essentially an integral component of an organization's safety risk management procedure to address all possible safety - or quality-related emergencies, crises or events that its product or services could contribute to or be associated with. The ERP should address all possible/likely scenarios and have appropriate mitigating actions or processes put in place so that the organization, its customers, the public and/or the industry at large may have a better level of safety assurance as well as service continuity.

3. Successful response to an emergency begins with effective planning. An ERP provides the basis for a systematic approach to managing the organization's affairs in the aftermath of a significant unplanned event — in the worst case, a major accident.

4. The purpose of an emergency response plan is to ensure:
   a) delegation of emergency authority;
   b) assignment of emergency responsibilities;
   c) documentation of emergency procedures and processes;
   d) coordination of emergency efforts internally and with external parties;
   e) safe continuation of essential operations while the crisis is being managed;
   f) proactive identification of all possible emergency events/scenarios and their corresponding mitigation actions, etc.

5. To be effective, an ERP should:
   a) be appropriate to the size, nature and complexity of the organization;
   b) be readily accessible to all relevant personnel and other organizations where applicable;
   c) include checklists and procedures relevant to specific emergency situations;
   d) have quick-reference contact details of relevant personnel;

   e) be regularly tested through exercises;
   f) be periodically reviewed and updated when details change, etc.

EPR contents

6. An ERP would normally be documented in the format of a manual that should set out the responsibilities, roles and actions of the various agencies and personnel involved in dealing with specific emergencies. An ERP should take account of such considerations as:

a) Governing policies. The ERP should provide direction for responding to emergencies, such as governing laws and regulations for investigations, agreements with local authorities, company policies and priorities.

b) Organization. The ERP should outline management's intentions with respect to the responding organizations by:
   1) designating who will lead and who will be assigned to the response teams;
   2) defining the roles and responsibilities of personnel assigned to the response teams;
   3) clarifying the reporting lines of authority;
   4) setting up an emergency management centre (EMC);
   5) establishing procedures for receiving a large number of requests for information, especially during the first few days after a major accident;
   6) designating the corporate spokesperson for dealing with the media;
   7) defining what resources will be available, including financial authorities for immediate activities;
   8) designating the company representative to any formal investigations undertaken by State officials;
   9) defining a call-out plan for key personnel.

An organizational chart could be used to show organizational functions and communication relationships.

c) Notifications. The plan should specify who in the organization should be notified of an emergency, who will make external notifications and by what means. The notification needs of the following should be considered:

   1) management;
   2) State authorities (search and rescue, the regulatory authority, the accident investigation board, etc.);
   3) local emergency response services (aerodrome authorities, fire fighters, police, ambulance, medical agencies, etc.);
   4) relatives of victims (a sensitive issue that, in many States, is handled by the police);
   5) company personnel;
   6) media; and
   7) legal, accounting, insurers, etc.

d) Initial response. Depending on the circumstances, an initial response team may be dispatched to the accident or crisis site to augment local resources and oversee the organization's interests. Factors to be considered for such a team include:

   1) Who should lead the initial response team?
   2) Who should be included on the initial response team?
   3) Who should speak for the organization at the accident site?
   4) What would be required by way of special equipment, clothing, documentation, transportation, accommodation, etc.?

e) Additional assistance. Employees with appropriate training and experience can provide useful

support during the preparation, exercising and updating of an organization's ERP. Their expertise may be useful in planning and executing such tasks as:
1) acting as passengers or customers in exercises;
2) handling survivors or external parties;
3) dealing with next of kin, authorities, etc.

f) Emergency management centre (EMC). An EMC (normally on standby mode) may be established at the organization's headquarters once the activation criteria have been met. In addition, a command post (CP) may be established at or near the crisis site. The ERP should address how the following requirements are to be met:

1) staffing (perhaps for 24 hours a day, 7 days per week, during the initial response period);
2) communications equipment (telephones, facsimile, Internet, etc.);
3) documentation requirements, maintenance of emergency activity logs;
4) impounding related company records;
5) office furnishings and supplies; and
6) reference documents (such as emergency response checklists and procedures, company manuals, aerodrome emergency plans and telephone lists).

The services of a crisis centre may be contracted from an airline or other specialist organization to look after the service provider's interests in a crisis away from home base. Company personnel would normally supplement such a contracted centre as soon as possible.

g) Records. In addition to the organization's need to maintain logs of events and activities, the organization will also be required to provide information to any State investigation team. The ERP should address the following types of information required by investigators:
1) all relevant records about the product or service concerned;
2) lists of points of contact and any personnel associated with the occurrence;
3) notes of any interviews (and statements) with anyone associated with the event;
4) any photographic or other evidence.

h) Accident site. For a major accident, representatives from many jurisdictions have legitimate reasons for accessing the site: for example, police; fire fighters; medics; aerodrome authorities; coroners (medical examining officers) to deal with fatalities; State accident investigators; relief agencies such as the Red Cross and even the media. Although coordination of the activities of these stakeholders is the responsibility of the State's police and/or investigating authority, the service provider should clarify the following aspects of activities at the accident site:

1) nominating a senior company representative at the accident site if:
   • at home base;
   • away from home base;
   • offshore or in a foreign State;
2) management of surviving victims;
3) the needs of the relatives of victims;
4) security of the wreckage;
5) handling of human remains and personal property of the deceased;
6) preservation of evidence;
7) provision of assistance (as required) to the investigation authorities;
8) removal and disposal of the wreckage; etc.

i) News media. How the company responds to the media may affect how well the company recovers from the event. Clear direction is required regarding, for example:

   1) what information is protected by statute (FDR data, CVR and ATC recordings, witness statements, etc.);
   2) who may speak on behalf of the parent organization at head office and at the accident site (public relations manager, chief executive officer or other senior executive, manager, owner);
   3) prepared statements for immediate response to media queries;
   4) what information may be released (what should be avoided);
   5) the timing and content of the company's initial statement;
   6) provisions for regular updates to the media.

j) Formal investigations. Guidance for company personnel dealing with State accident investigators and police should be provided.

k) Family assistance. The ERP should also include guidance on the organization's approach to assisting crisis victims or customer organizations. This guidance may include such things as:

   1) State requirements for the provision of assistance services;
   2) travel and accommodation arrangements to visit the crisis site;
   3) programme coordinator and point(s) of contact for victims/customers;
   4) provision of up-to-date information;
   5) temporary assistance to victims or customers.

   Note.— ICAO Circular 285, Guidance on Assistance to Aircraft Accident Victims and their Families*, provides further guidance on this subject.*

l) Post-occurrence review. Direction should be provided to ensure that, following the emergency, key personnel carry out a full debrief and record all significant lessons learned which may result in amendments to the ERP and associated procedures.

Checklists

7. Everyone involved in the initial response to a major aviation event will be suffering from some degree of disorientation. Therefore, the emergency response process lends itself to the use of checklists. These checklists can form an integral part of the company's operations manual or emergency response manual. To be effective, checklists must be regularly:
   a) reviewed and updated (for example, currency of call-out lists and contact details); and
   b) tested through realistic exercises.

Training and exercises

8. An ERP is a paper indication of intent. Hopefully, much of an ERP will never be tested under actual conditions. Training is required to ensure that these intentions are backed by operational capabilities. Since training has a short —shelf life‖, regular drills and exercises are advisable. Some portions of the ERP, such as the call-out and communications plan, can be tested by —desktop‖ exercises. Other aspects, such as —on-site‖ activities involving other agencies, need to be exercised at regular intervals. Such exercises have the advantage of demonstrating deficiencies in the plan, which can be rectified before an actual emergency. For certain service providers such as airports, the periodic testing of the adequacy of the plan and the conduct of a full-scale emergency

APPENDIX H – DEVELOPMENT OF AN SMS MANUAL

1. GENERAL

1.1 This appendix serves to guide organizations in their compilation of a top-level SMS manual (or document) to define their SMS framework and its associated elements. The manual can be a stand-alone SMS manual or be integrated as a consolidated SMS section/chapter within an appropriate approved manual of the organization (e.g. the organization's exposition manual or company manual). The configuration follows the layout defined in CV-CARS.

1.2 Using the suggested format and content items in this appendix and adapting them as appropriate is one way in which an organization can develop its own top-level SMS manual. The actual content items will depend on the specific SMS framework and elements of the organization. The description under each element will be commensurate with the scope and complexity of the organization's SMS processes.

1.3 The manual will serve to communicate the organization's SMS framework internally as well as with relevant external organizations. The manual is subject acceptance by the AAC as evidence of the acceptance of the SMS.

Note — A distinction is to be made between an SMS manual and its operational supporting records and documents. The latter refers to historical and current records and documents generated during implementation and operation of the various SMS processes. These are documentary evidence of the ongoing SMS activities of the organization.

2. FORMAT OF THE SMS MANUAL

2.1 The SMS manual may be formatted in the following manner:
   1) section heading;
   2) objective;
   3) criteria;
   4) cross-reference documents.

2.2 Below each numbered "section heading" is a description of the "objective" for that section, followed by its "criteria" and "cross-reference documents". The "objective" is what the organization intends to achieve by doing what is described in that section. The "criteria' defines the scope of what should be considered when writing that section. The "cross-reference documents" links the information to other relevant manuals or SOPs of the organization which contain details of the element or process as applicable.

3. CONTENTS OF THE MANUAL

3.1 The contents of the manual may include the following sections:
   1) Document control;
   2) SMS regulatory requirements;
   3) Scope and integration of the safety management system;
   4) Safety policy;
   5) Safety objectives;
   6) Safety accountabilities and key personnel;
   7) Safety reporting and remedial actions;
   8) Hazard identification and risk assessment;
   9) Safety performance monitoring and measurement;
   10) Safety-related investigations and remedial actions;
   11) Safety training and communication;

12) Continuous improvement and SMS audit;
13) SMS records management;
14) Management of change; and
15) Emergency/contingency response plan.

3.2 Below is an example of the type of information that could be included in each section using the format prescribed in 2.2.

1. Document control

Objective
Describe how the manual(s) will be kept up to date and how the organization will ensure that all personnel involved in safety-related duties have the most current version.

Criteria
a) Hard copy or controlled electronic media and distribution list.
b) The correlation between the SMS manual and other existing manuals such as the maintenance control manual (MCM) or the operations manual.
c) The process for periodic review of the manual and its related forms/documents to ensure their continuing suitability, adequacy and effectiveness.
d) The manual's administration, approval and regulatory acceptance process.
Cross-reference documents
Quality manual, engineering manual, etc.

2. SMS regulatory requirements

Objective
Address current SMS regulations and guidance material for necessary reference and awareness by all concerned.

Criteria
a) Spell out the current SMS regulations/standards. Include the compliance timeframe and advisory material references as applicable.
b) Where appropriate, elaborate on or explain the significance and implications of the regulations to the organization.
c) Establish a correlation with other safety-related requirements or standards where appropriate.

Cross-reference documents
SMS regulation/requirement references, SMS guidance document references, etc.

3. Scope and integration of the safety management system

Objective
Describe the scope and extent of the organization's aviation-related operations and facilities within which the SMS will apply. The scope of the processes, equipment and operations deemed eligible for the organization's hazard identification and risk management (HIRM) programme should also be addressed.

Criteria
a) Spell out the nature of the organization's aviation business and its position or role within the industry as a whole.
b) Identify the major areas, departments, workshops and facilities of the organization within which the SMS will apply.

     c) Identify the major processes, operations and equipment which are deemed eligible for the organization's HIRM programme, especially those which are pertinent to aviation safety. If the scope of the HIRM-eligible processes, operations and equipment is too detailed or extensive, it may be controlled under a supplementary document as appropriate.

     d) Where the SMS is expected to be operated or administered across a group of interlinked organizations or contractors, define and document such integration and associated accountabilities as applicable.

     e) Where there are other related control/management systems within the organization, such as QMS, OSHE and SeMS, identify their relevant integration (where applicable) within the aviation SMS.

Cross-reference documents

Quality manual, engineering manual, etc.

4. Safety policy

Objective

Describe the organization's intentions, management principles and commitment to improving aviation safety in terms of the product or service provider. A safety policy should be a short description similar to a mission statement.

Criteria

a) The safety policy should be appropriate to the size and complexity of the organization.

b) The safety policy states the organization's intentions, management principles and commitment to continuous improvement in aviation safety.

c) The safety policy is approved and signed by the accountable executive.

d) The safety policy is promoted by the accountable executive and all other managers.

e) The safety policy is reviewed periodically.

f) Personnel at all levels are involved in the establishment and maintenance of the safety management system.

g) The safety policy is communicated to all employees with the intent that they are made aware of their individual safety obligations.

Cross-reference documents

OSHE safety policy, etc.

5. Safety objectives

Objective

Describe the safety objectives of the organization. The safety objectives should be a short statement that describes in broad terms what the organization hopes to achieve.

Criteria

a) The safety objectives have been established.

b) The safety objectives are expressed as a top-level statement describing the organization's commitment to achieving safety.

c) There is a formal process to develop a coherent set of safety objectives.

d) The safety objectives are publicized and distributed.

e) Resources have been allocated for achieving the objectives.

f) The safety objectives are linked to safety indicators to facilitate monitoring and measurement where appropriate.

Cross-reference documents

Safety performance indicators document, etc.

6. Roles and responsibilities

Objective
> Describe the safety authorities, responsibilities and accountabilities for personnel involved in the SMS.

Criteria
> a) The accountable executive is responsible for ensuring that the safety management system is properly implemented and is performing to requirements in all areas of the organization.
> b) An appropriate safety manager (office), safety committee or safety action groups have been appointed as appropriate.
> c) Safety authorities, responsibilities and accountabilities of personnel at all levels of the organization are defined and documented.
> d) All personnel understand their authorities, responsibilities and accountabilities with regard to all safety management processes, decisions and actions.
> e) An SMS organizational accountabilities diagram is available.

Cross-reference documents
> Company exposition manual, SOP manual, administration manual, etc.

7. Safety reporting

Objective
> A reporting system should include both reactive (accident/incident reports, etc.) and proactive/ predictive (hazard reports). Describe the respective reporting systems. Factors to consider include: report format, confidentiality, addressees, investigation/evaluation procedures, corrective/ preventive actions and report dissemination.

Criteria
> a) The organization has a procedure that provides for the capture of internal occurrences including accidents, incidents and other occurrences relevant to SMS.
> b) A distinction is to be made between mandatory reports (accidents, serious incidents, major defects, etc.), which are required to be notified to the AAC, and other routine occurrence reports, which remain within the organization.
> c) There is also a voluntary and confidential hazard/occurrence reporting system, incorporating appropriate identity/data protection as applicable.
> d) The respective reporting processes are simple, accessible and commensurate with the size of the organization.
> e) High-consequence reports and associated recommendations are addressed to and reviewed by the appropriate level of management.
> f) Reports are collected in an appropriate database to facilitate the necessary analysis.

Cross-reference documents
> - - - - - - - - - - - - - -

8. Hazard identification and risk assessment

Objective
> Describe the hazard identification system and how such data are collated. Describe the process for the categorization of hazards/risks and their subsequent prioritization for a documented safety assessment. Describe how the safety assessment process is conducted and how preventive action plans are implemented.

Criteria

a) Identified hazards are evaluated, prioritized and processed for risk assessment as appropriate.

b) There is a structured process for risk assessment involving the evaluation of severity, likelihood, tolerability and preventive controls.

c) Hazard identification and risk assessment procedures focus on aviation safety as their fundamental context.

d) The risk assessment process utilizes worksheets, forms or software appropriate to the complexity of the organization and operations involved.

e) Completed safety assessments are approved by the appropriate level of management.

f) There is a process for evaluating the effectiveness of the corrective, preventive and recovery measures that have been developed.

g) There is a process for periodic review of completed safety assessments and documenting their outcomes.

Cross-reference documents
- - - - - - - - - - - - - ~

9. Safety performance monitoring and measurement

Objective

Describe the safety performance monitoring and measurement component of the SMS. This includes the organization's SMS safety performance indicators (SPIs).

Criteria

a) The formal process to develop and maintain a set of safety performance indicators and their associated performance targets.

b) Correlation established between the SPIs and the organization's safety objectives where applicable and the process of regulatory acceptance of the SPIs where required.

c) The process of monitoring the performance of these SPIs including remedial action procedure whenever unacceptable or abnormal trends are triggered.

d) Any other supplementary SMS or safety performance monitoring and measurement criteria or process.

Cross-reference documents
- - - - - - - - - - - - -

10. Safety-related investigations and remedial actions

Objective

Describe how accidents/incidents/occurrences are investigated and processed within the organization, including their correlation with the organization's SMS hazard identification and risk management system.

Criteria

a) Procedures to ensure that reported accidents and incidents are investigated internally.

b) Dissemination of completed investigation reports internally as well as to the AAC as applicable.

c) A process for ensuring that corrective actions taken or recommended are carried out and for evaluating their outcomes/effectiveness.

d) Procedure on disciplinary inquiry and actions associated with investigation report outcomes.

e) Clearly defined conditions under which punitive disciplinary action would be considered (e.g. illegal activity, recklessness, gross negligence or wilful misconduct).

f) A process to ensure that investigations include identification of active failures as well as contributing factors and hazards.

g) Investigation procedure and format provides for findings on contributing factors or hazards to be processed for follow-up action by the organization's hazard identification and risk management system where appropriate.

Cross-reference documents
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11. Safety training and communication

Objective
Describe the type of SMS and other safety-related training that staff receive and the process for assuring the effectiveness of the training. Describe how such training procedures are documented. Describe the safety communication processes/channels within the organization.

Criteria
a) The training syllabus, eligibility and requirements are documented.
b) There is a validation process that measures the effectiveness of training.
c) The training includes initial, recurrent and update training, where applicable.
d) The organization's SMS training is part of the organization's overall training programme.
e) SMS awareness is incorporated into the employment or indoctrination programme.
f) The safety communication processes/channels within the organization.

Cross-reference documents
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12. Continuous improvement and SMS audit

Objective
Describe the process for the continuous review and improvement of the SMS.
Criteria
a) The process for regular internal audit/review of the organization's SMS to ensure its continuing suitability, adequacy and effectiveness.
b) Describe any other programmes contributing to continuous improvement of the organization's SMS and safety performance, e.g. MEDA, safety surveys, ISO systems.

Cross-reference documents
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13. SMS records management

Objective
Describe the method of storing all SMS-related records and documents.

Criteria
a) The organization has an SMS records or archiving system that ensures the retention of all records generated in conjunction with the implementation and operation of the SMS.
b) Records to be kept include hazard reports, risk assessment reports, safety action group/safety meeting notes, safety performance indicator charts, SMS audit reports and SMS training records.

    c) Records should be traceable for all elements of the SMS and be accessible for routine administration of the SMS as well as internal and external audits purposes.

Cross-reference documents
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14. Management of change

Objective
Describe the organization's process for managing changes that may have an impact on safety risks and how such processes are integrated with the SMS.

Criteria
a) Procedures to ensure that substantial organizational or operational changes take into consideration any impact which they may have on existing safety risks.
b) Procedures to ensure that appropriate safety assessment is performed prior to introduction of new equipment or processes which have safety risk implications.
c) Procedures for review of existing safety assessments whenever there are changes to the associated process or equipment.

Cross-reference documents
Company SOP relating to management of change, etc.

15. Emergency/contingency response plan

Objective
Describe the organization's intentions regarding, and commitment to dealing with, emergency situations and their corresponding recovery controls. Outline the roles and responsibilities of key personnel. The emergency response plan can be a separate document or it can be part of the SMS manual.

Criteria (as applicable to the organization)
a) The organization has an emergency plan that outlines the roles and responsibilities in the event of a major incident, crisis or accident.
b) There is a notification process that includes an emergency call list and an internal mobilization process.
c) The organization has arrangements with other agencies for aid and the provision of emergency services as applicable.
d) The organization has procedures for emergency mode operations where applicable.
e) There is a procedure for overseeing the welfare of all affected individuals and for notifying next of kin.
f) The organization has established procedures for handling the media and insurance-related issues.
g) There are defined accident investigation responsibilities within the organization.
h) The requirement for preservation of evidence, securing the affected area, and mandatory/ governmental reporting is clearly stated.
i) There is emergency preparedness and response training for affected personnel.
j) A disabled aircraft or equipment evacuation plan has been developed by the organization in consultation with aircraft/equipment owners, aerodrome operators or other agencies as applicable.
k) A procedure exists for recording activities during an emergency response.

Cross-reference documents
ERP manual, etc.

APPENDIX I – SAFETY MANAGEMENT ORGANISATION

1. GENERAL

This appendix serves to guide organizations in the establishment of a safety management organisation including the safety office, the selection of a safety manager, the safety review and safety action group.

2. SAFETY MANAGER FUNCTIONS AND RESPONSIBILITIES

2.1 The appointment of a qualified safety manager is key to the effective implementation and functioning of a safety services office. The safety manager may be identified by different titles in different organizations, but for the purposes of this CT the generic term safety manager is used.

2.2 The safety manager should be the individual responsible for the development and maintenance of an effective SMS. The safety manager also advises the accountable executive and line managers on safety management matters and is responsible for coordinating and communicating safety issues within the organization, as well as with external stakeholders.

2.3 The safety manager's functions include:
   a) managing the SMS implementation plan on behalf of the accountable executive;
   b) performing/facilitating hazard identification and safety risk analysis;
   c) monitoring corrective actions and evaluating their results;
   d) providing periodic reports on the organization's safety performance;
   e) maintaining records and safety documentation;
   f) planning and facilitating staff safety training;
   g) providing independent advice on safety matters;
   h) monitoring safety concerns in the aviation industry and their perceived impact on the organization's operations aimed at service delivery;
   i) coordinating and communicating (on behalf of the accountable executive) with the State's oversight authority and other State agencies as necessary on issues relating to safety; and
   j) coordinating and communicating (on behalf of the accountable executive) with international organizations on issues relating to safety.

2.3 The safety manager's responsibilities include:
   a) managing the operation of the safety management system;
   b) collecting and analysing safety information in a timely manner;
   c) administering any safety-related surveys;
   d) monitoring and evaluating the results of corrective actions;
   e) ensuring that risk assessments are conducted when applicable;
   f) monitoring the industry for safety concerns that could affect the organization;
   g) being involved with actual or practice emergency responses;
   h) being involved in the development and updating of the emergency response plan and procedures; and
   i) ensuring safety-related information, including organizational goals and objectives, are made available to all personnel through established communication processes.

2.4 The selection criteria for a safety manager should include, but not be limited to, the following:
   a) safety/quality management experience;
   b) operational experience;
   c) technical background to understand the systems that support operations;
   d) people skills;
   e) analytical and problem-solving skills;
   f) project management skills; and

g) oral and written communications skills.

Note — For small organizations, it may be viable to combine safety and quality management functions within the same office.

2.5 The safety manager is generally supported by additional staff. This will depend upon the size of the organization and the nature and complexity of the organization. The safety manager liaises directly with line managers or their delegates, such as where operational units are supported by dedicated safety officers.

2.6 The safety manager is the person responsible for the collection and analysis of safety data and the distribution of related safety information to line managers. The distribution of safety information by the safety services office is the first step in the safety risk management process. This information must be used by line managers to mitigate safety risks, which inevitably requires the allocation of resources. The necessary resources may be readily available to the line managers for this purpose.

3. SAFETY REVIEW COMMITTEE AND SAFETY ACTION GROUP

3.1 A formal process is required to assess the effectiveness and efficiency of any mitigation strategies used to achieve the agreed safety performance targets of the organization. One potential process includes the creation of a safety review committee (SRC). The SRC provides the platform to achieve the objectives of resource allocation and to assess the effectiveness and efficiency of risk mitigation strategies.

3.2 The SRC is a very high-level committee, chaired by the accountable executive and composed of senior managers, including line managers responsible for functional areas as well as those from relevant administrative departments. The safety manager participates in the SRC in an advisory capacity only. The SRC may meet infrequently, unless exceptional circumstances dictate otherwise.

3.3 The main functions of the SRC include:
　　a) monitoring the effectiveness of the SMS;
　　b) monitoring that any necessary corrective action is taken in a timely manner;
　　c) monitoring safety performance against the organization's safety policy and objectives;
　　d) monitoring the effectiveness of the organization's safety management processes which support the declared corporate priority of safety management as another core business process;
　　e) monitoring the effectiveness of the safety supervision of subcontracted operations; and
　　f) ensuring that appropriate resources are allocated to achieve safety performance beyond that required by regulatory compliance.

3.4 The SRC is strategic and deals with high-level issues related to policies, resource allocation and organizational performance monitoring. Once a strategic direction has been developed by the SRC, implementation of safety strategies must be coordinated throughout the organization. This can be accomplished by creating a safety action group (SAG).

3.5 SAGs should be composed of line managers and front-line personnel and are normally chaired by a designated line manager. SAGs are tactical entities that deal with specific implementation issues per the direction of the SRC. The SAG:
　　a) oversees operational safety performance within the functional areas of the organization and ensures that appropriate safety risk management activities are carried out with staff involvement as necessary to build up safety awareness;
　　b) coordinates the resolution of mitigation strategies for the identified consequences of hazards and ensures that satisfactory arrangements exist for safety data capture and employee feedback;

    c) assesses the safety impact related to the introduction of operational changes or new technologies;

    d) coordinates the implementation of corrective action plans and ensures that corrective action is taken in a timely manner;

    e) reviews the effectiveness of previous safety recommendations; and

    f) oversees safety promotion activities as necessary to increase employee awareness of safety issues and to ensure that they are provided appropriate opportunities to participate in safety management activities.

APPENDIX J - VOLUNTARY AND CONFIDENTIAL REPORTING SYSTEMS

Note.— The guidance below is based on the example of an integrated air operator and maintenance organization. For other service provider organization types, this guidance material may be customized as necessary.

1. An organization's voluntary and confidential reporting system should, as minimum, define:

a) the objective of the reporting system;

> **Example**:
> The key objective of *[Organization name]* voluntary and confidential reporting system is to enhance the safety of our company's aviation activities through the collection of reports on actual or potential safety deficiencies that would otherwise not be reported through other channels. Such reports may involve occurrences, hazards or threats relevant to the safety of our aviation activities. This system does not eliminate the need for formal reporting of accidents and incidents according to our company SOPs, as well as the submission of mandatory occurrence reports to the relevant regulatory authorities.
> The *[Name of system]* is a voluntary, non-punitive, confidential occurrence and hazard reporting system administered by the *[Name of department/office]*. It provides a channel for the voluntary reporting of aviation occurrences or hazards relevant to our organization's aviation activities, while protecting the reporter's identity.

b) the scope of the aviation sectors/areas covered by the system;

> **Example:**
> The *[Name of system]* covers areas such as:
> a) flight operations;
> b) hangar aircraft maintenance;
> c) workshop component maintenance;
> d) technical fleet management;
> e) inventory technical management;
> f) engineering planning;
> g) technical services;
> h) technical records;
> i) line maintenance;
> j) etc.

c) who can make a voluntary report;

> **Example:**
> If you belong to any of these operational areas or departments, you can contribute to aviation safety enhancement through the [Name of system] by reporting on occurrences, hazards or threats relevant to our organization's aviation activities:
> a) flight and cabin crew members;
> b) air traffic controllers;
> c) licensed aircraft engineers, technicians or mechanics;
> d) employees of maintenance, design and manufacturing organizations;
> e) airport ground handling operators;
> f) aerodrome employees;
> g) general aviation personnel;
> h) etc.

d) when to make such a report;

> **Example:**
> You should make a report when:
> a) you wish for others to learn and benefit from the incident or hazard but are concerned about protecting your identity;
> b) there is no other appropriate reporting procedure or channel; and
> c) you have tried other reporting procedures or channels without the issue having been addressed.

e) how the reports are processed;

> **Example:**
> The *[Name of system]* pays particular attention to the need to protect the reporter's identity when processing all reports. Every report will be read and validated by the manager. The manager may contact the reporter to make sure he understands the nature and circumstances of the occurrence/hazard reported and/or to obtain the necessary additional information and clarification.
> When the manager is satisfied that the information obtained is complete and coherent, he will de-identify the information and enter the data into the *[Name of system]* database. Should there be a need to seek input from any third party, only the de-identified data will be used.
> The *[Name of system]* form, with the date of return annotated, will eventually be returned to the reporter. The manager will endeavour to complete the processing within ten (10) working days if additional information is not needed. In cases where the manager needs to discuss with the reporter or consult a third party, more time may be needed.
> If the manager is away from his office for a prolonged period, the alternate manager will process the report. Reporters can rest assured that every *[Name of system]* report will be read and followed through by either the manager or the alternate manager.
> *Safety information sharing within the company and the aviation community*
> Relevant de-identified reports and extracts may be shared within the company as well as with external aviation stakeholders as deemed appropriate. This will enable all concerned personnel and departments within the company as well as appropriate external aviation stakeholders to review their own operations and support the improvement of aviation safety as a whole.
> If the content of a *[Name of system]* report suggests a situation or condition that poses an immediate or urgent threat to aviation safety, the report will be handled with priority and referred, after de-identification, to the relevant organizations or authorities as soon as possible to enable them to take the necessary safety actions.

f) contacting the *[Name of system]* manager;

> Example:
> You are welcome to call the *[Name of system]* manager to enquire about the *[Name of system]* or to request a preliminary discussion with the *[Name of system]* manager before making a report. The manager and alternate manager can be contacted during office hours from Monday to Friday at the following telephone numbers:
>
> [*Name of system*] administrator Mr. ABC Tel.:
> Alternate administrator Mr. XYZ Tel.:

APPENDIX K - SAFETY PERFORMANCE INDICATORS (Reserved)