



CIVIL AVIATION AUTHORITY OF SRI LANKA
AVIATION SAFETY NOTICE

ASN No 092	Ref No: GEN/2007/01	File Ref: AS/11/01
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Recipients	<ol style="list-style-type: none">1. Air Traffic Service Providers in Sri Lanka2. Aerodrome Operators in Sri Lanka3. Aircraft operators in Sri Lanka4. Aircraft maintenance organizations in Sri Lanka.
01. Subject	: Safety Management Requirements to be satisfied by the ATS Service Providers, Aerodrome Operators, Aircraft operators and Aircraft maintenance organizations in Sri Lanka.
02. Nature	: Compulsory
03. Issue no	: 01
04. Status	: New
05. Effective date	: With immediate effect
06. Validity	: Until further notice
07. Contact persons	: For more details / clarifications/ about this ASN please contact Deputy Director, Aerodromes & Navigation Services (Tel. 2436324, e-mail-atulacaa@slt.net.lk), Deputy Director, Operations (Tel. 2399534) or Deputy Director Airworthiness (Tel. 2391305, e-mail-aidacaa@slt.net.lk) as appropriate. Address, Civil Aviation Authority of Sri Lanka, No 64, Galle Road Colombo 3.
08. Availability	: A copy of this document is available at the Technical library of Civil Aviation Authority for reference.
09. Applicability	: <ol style="list-style-type: none">1. Air Traffic Service providers in Sri Lanka2. Aerodrome Operators in Sri Lanka3. Aircraft operators in Sri Lanka4. Aircraft maintenance organizations in Sri Lanka
10. Comments	: Comments (if any) on the contents of this ASN may be forwarded to the Contact Persons. However the Aviation Safety Notice will come into effect on the date shown therein notwithstanding any objection or comment made by any person or party unless and until an amendment to the Aviation Safety Notice is issued afresh by the Director General of Civil Aviation
11. Notice	: Air Traffic Service Providers, Aerodrome Operators, Aircraft operators and Aircraft maintenance organizations shall implement a Safety Management System in accordance with the requirements given in this ASN.

- 12.Action Required : For strict compliance by Air Traffic Service Providers, Aerodrome Operators, Aircraft operators and Aircraft maintenance organizations in Sri Lanka .
13. Related ASNs : Nil
- 14.Action Required : For strict compliance by Air Traffic Service Providers, Aerodrome Operators, Aircraft operators and Aircraft maintenance organizations in Sri Lanka .
- 15.Check list : List of current ASN nos. are as follows

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**Regulatory
Requirements on
Safety Management
Systems (SMS)**

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Regulatory Requirements on Safety Management Systems (SMS)

1. SCOPE AND APPLICABILITY

1.1 SCOPE

- 1.1.1 The service providers operating in accordance with ICAO Annex 11 - *Air Traffic Services* , Annex 14 - *Aerodromes, Volume I - Aerodrome Design and Operations*, ICAO Annex 6 - *Operation of Aircraft, Part I - International Commercial Air Transport - Aeroplanes, and Part III - International Operations - Helicopters* shall implement a Safety Management System in accordance with the requirements given in this ASN.
- 1.1.2 Within the Context of this ASN the term “service provider” is used to designate any organization of air traffic service providers, aerodrome operators, aircraft operators and maintenance organizations, as applicable.
- 1.1.3 The requirements in this ASN address aviation safety related processes and activities rather than occupational safety, environmental protection, or customer service quality.
- 1.1.4 The service provider is responsible for the safety of services or products contracted to or purchased from other organizations.
- 1.1.5 The requirements in this ASN establish the minimum acceptable requirements. However the service providers can establish more stringent requirements as they wish.

2. Applicability

2.1 Applicability and Acceptance

- 2.1.1 Effective 30th June 2008, a service provider shall have a safety management system (SMS) in place, that is acceptable to the Director General of Civil Aviation, that, as a minimum:
- 2.1.1.1 identifies safety hazards;
 - 2.1.1.2 ensures that remedial action necessary to maintain an acceptable level of safety is implemented;
 - 2.1.1.3 provides for continuous monitoring and regular assessment of the safety level achieved; and
 - 2.1.1.4 aims to make continuous improvement to the overall level of safety.
- 2.2 In order to be acceptable to the Director General of Civil Aviation, a service provider SMS shall meet the requirements given below;
- 2.2.1 An applicant shall apply to the Director General of Civil Aviation for the acceptance of the Safety Management System.
 - 2.2.2 The application shall be forwarded with a printed copy of the Safety Management Manual.
 - 2.2.3 Before granting the acceptance the Director General of Civil Aviation must be satisfied by the Service Provider that the SMS has been established in accordance with the requirements given in this ASN.

2.2.4 Acceptance of the SMS is given for a period of one year.

2.2.5 The application for the renewal of the acceptance shall be forwarded to the Director General of Civil Aviation with the new changes introduced to the SMS during the year, before expires the validity period of the acceptance.

2.2.6 The Director General of Civil Aviation may suspend or cancel the acceptance of a SMS if there are reasonable grounds to believe that the SMS is not operating in accordance with the requirements given in this ASN.

3. References

3.1 The requirements given in this ASN are in accordance with ICAO requirements.

ICAO Annex 11 - *Air Traffic Services*,

ICAO Annex 14 - *Aerodromes, Volume I - Aerodrome Design and Operations*

ICAO Annex 6 - *Operation of Aircraft, Part I - International Commercial Air Transport - Aeroplanes, and Part III - International Operations – Helicopters*

ICAO Safety Management Manual (Doc 9859)

4. Definitions

Term or Abbreviation	Meaning
<ul style="list-style-type: none"> • Accident 	<p>An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:</p> <p>a) a person is fatally or seriously injured as a result of:</p> <ul style="list-style-type: none"> - being in the aircraft; or - direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or - direct exposure to jet blast; except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or <p>b) the aircraft sustains damage or structural failure which:</p> <ul style="list-style-type: none"> - adversely affects the structural strength, performance or flight characteristics of the aircraft; and - would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers,

	<p>wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or</p> <p>c) the aircraft is missing or is completely inaccessible.</p>
<ul style="list-style-type: none"> Accountable Executive 	Identified person responsible for safety
<ul style="list-style-type: none"> Hazard 	Condition, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.
<ul style="list-style-type: none"> Incident 	An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.
<ul style="list-style-type: none"> Mitigation Predictive 	Measures to eliminate the potential hazard or to reduce the risk probability or severity. A system which performs as it happens in real-time normal operations
<ul style="list-style-type: none"> Proactive 	A system which looks actively for the identification of safety risks through analysis.
<ul style="list-style-type: none"> Probability Reactive 	The likelihood that an unsafe event or condition might occur. A system which responds to an event that already happened.
<ul style="list-style-type: none"> Risk Safety 	The likelihood of injury to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function, measured in terms of probability and severity. A state in which the risk of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management
<ul style="list-style-type: none"> Safety assessment 	The set of quantitative or qualitative criteria to be used in a safety assessment to determine the acceptability of the assessed level of safety.
<ul style="list-style-type: none"> Safety assurance 	Is what the operators/service providers do with regard to safety performance monitoring and measurement
<ul style="list-style-type: none"> Safety audit 	Is what the CAA performs with regard to its safety programme and the operators / service providers perform with regard to the SMS
<ul style="list-style-type: none"> Safety manager 	Responsible individual and focal point for the development and maintenance of an effective safety management system
<ul style="list-style-type: none"> Safety requirement 	Specified criteria of a system that is necessary in order to reduce the risk of an accident or incident to an acceptable level. Also a requirement that helps to achieve a Safety Objective.
<ul style="list-style-type: none"> Safety management system (SMS) Safety programme 	A systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures. An integrated set of regulations and activities aimed at improving safety.

<ul style="list-style-type: none"> • Severity 	The possible consequences of an unsafe event or condition, taking as reference the worst foreseeable situation.
<ul style="list-style-type: none"> • System description 	Organized set of processes and procedures

5. General

5.1 A service provider shall establish, maintain and adhere to a safety management system (SMS) that is appropriate to the size, nature and complexity of the operations authorized to be conducted under its operations certificate and the safety hazards and risks related to the operations.

6. Safety policy and objectives

6.1 General requirements

6.1.1 A service provider shall define the organization's safety policy.

6.1.2 The safety policy shall be signed by the Chief Executive Officer of the organization.

6.1.3 The safety policy shall be in accordance with the requirements given in this ASN and reflect organizational commitments regarding safety.

6.1.4 The safety policy shall be communicated, with visible endorsement, throughout the organization.

6.1.5 The safety policy shall include a clear statement about the provision of the necessary human and financial resources for its implementation.

6.1.6 The safety policy shall, *inter alia*, include the following objectives:

6.1.6.1 Commitment to implement an SMS;

6.1.6.2 Commitment to continual improvement in the level of safety;

6.1.6.3 Commitment to the management of safety risks;

6.1.6.4 Commitment to encourage employees to report safety issues;

6.1.6.5 Establishment of clear standards for acceptable behaviour; and

6.1.6.5 Identification of responsibilities of management and employees with respect to safety performance.

6.1.7 The safety policy shall be reviewed periodically to ensure it remains relevant and appropriate to the organization.

6.1.8 A service provider shall establish safety objectives for the SMS.

6.1.9 The safety objectives should be linked to the safety performance indicators, safety performance targets and safety requirements of the service provider SMS.

6.2 Organizational structure and responsibilities

- 6.2.1 A service provider shall identify an Accountable Executive to be responsible and accountable on behalf of the service provider for meeting the requirements of this ASN, and shall notify the DGCA the name of the person.
- 6.2.2 The Accountable Executive shall be a single, identifiable person who, irrespective of other functions, shall have the ultimate responsibility for the implementation and maintenance of the SMS.
- 6.2.3 The Accountable Executive shall have:
- 6.2.3.1 full control of the human resources required for the operations authorized to be conducted under the operations certificate;
 - 6.2.3.2 full control of the financial resources required for the operations authorized to be conducted under the operations certificate;
 - 6.2.3.3 final authority over operations authorized to be conducted under the operations certificate;
 - 6.2.3.4 direct responsibility for the conduct of the organization's affairs; and
 - 6.2.3.5 final responsibility for all safety issues.
- 6.2.4 A service provider shall establish the safety structure necessary for the implementation and maintenance of the organization's SMS. (Refer Annex A)
- 6.2.5 A service provider shall identify the safety responsibilities of all members of senior management, irrespective of other responsibilities
- 6.2.6 Safety-related positions, responsibilities and authorities shall be defined, documented and communicated throughout the organization.
- 6.2.7 A service provider shall identify a Safety Manager to be the member of management who shall be the responsible individual and focal point for the implementation and maintenance of an effective SMS.
- 6.2.8 The Safety Manager shall:
- 6.2.8.1 ensure that processes needed for the SMS are established, implemented and maintained;
 - 6.2.8.2 report to the Accountable Executive on the performance of the SMS and on any need for improvement; and
 - 6.2.8.3 ensure safety promotion throughout the organization.

6.3 SMS implementation plan

- 6.3.1 A service provider shall develop and maintain an SMS implementation plan.
- 6.3.2 The SMS implementation plan shall be the definition of the approach the organization will adopt for managing safety in a manner that will meet the organization's safety needs.
- 6.3.3 The SMS implementation plan shall include the following:
- 6.3.3.1 safety policy and objectives;
 - 6.3.3.2 safety roles and responsibilities;
 - 6.3.3.3 system description;
 - 6.3.3.4 gap analysis;
 - 6.3.3.5 SMS components;
 - 6.3.3.6 safety performance measurement;
 - 6.3.3.7 safety reporting policy;
 - 6.3.3.8 safety communication;
 - 6.3.3.9 means of employee involvement; and
 - 6.3.3.10 management review of safety performance

Note: Refer SMS Manual ICAO Doc. 9859

- 6.3.4 The SMS implementation plan shall be endorsed by senior management of the organization.
- 6.3.5 A service provider shall, as part of the development of the SMS implementation plan, complete a system description.
- 6.3.6 The system description shall include the following:
- 6.3.6.1 the system interactions with other systems in the air transportation system;
 - 6.3.6.2 the system functions;
 - 6.3.6.3 required Human Factors considerations of the system operation;
 - 6.3.6.4 hardware components of the system;
 - 6.3.6.5 software components of the system;
 - 6.3.6.6 related procedures that define guidance for the operation and use of the system;
 - 6.3.3.7 operational environment; and
 - 6.3.3.8 contracted and purchased products and services.
- 6.3.7 A service provider shall, as part of the development of the SMS implementation plan, complete a gap analysis (Refer Annex B), in order to:
- 6.3.7.1 identify the safety arrangements existing within the organization; and
 - 6.3.7.2 determine additional safety arrangements required to implement and maintain the organization's SMS.

6.4 Coordination of the emergency response plan

6.4.1 A service provider shall develop and maintain, or coordinate, as appropriate, an emergency response plan (ERP) that shall ensure:

- 6.4.1.1 orderly and efficient transition from normal to emergency operations;
- 6.4.1.2 designation of emergency authority;
- 6.4.1.3 assignment of emergency responsibilities;
- 6.4.1.4 coordination of efforts to cope with the emergency; and
- 6.4.1.5 safe continuation of operations, or return to normal operations as soon as possible.

6.5 Documentation

6.5.1 A service provider shall develop and maintain SMS documentation, in paper or electronic form, to describe the following:

- 6.5.1.1 safety policy;
- 6.5.1.2 safety objectives;
- 6.5.1.3 SMS requirements, procedures and processes;
- 6.5.1.4 responsibilities and authorities for procedures and processes; and
- 6.5.1.5 SMS outputs.

6.5.3 A service provider shall, as part of the SMS documentation, develop and maintain a safety management manual (SMM), to communicate the organization's approach to safety throughout the organization.

6.5.4 The SMM shall document all aspects of the SMS, and its contents shall include the following:

- 6.5.4.1 scope of the safety management system;
- 6.5.4.2 safety policy and objectives;
- 6.5.4.3 safety accountabilities;
- 6.5.4.4 key safety personnel;
- 6.5.4.5 documentation control procedures;
- 6.5.4.6 emergency response planning;
- 6.5.4.7 hazard identification and risk management schemes;
- 6.5.4.8 safety performance monitoring;
- 6.5.4.9 management of change;
- 6.5.4.10 safety auditing; and
- 6.5.4.11 safety promotion.

7. Safety Risk Management

7.1 General

7.1.1 A service provider shall develop and maintain safety data collection and processing systems (SDCPS) that provide for the identification of hazards and the analysis, assessment and control of risks.

7.1.2 A service provider's SDCPS shall include reactive, proactive and predictive methods of safety data collection.

7.2 Hazard Identification

7.2.1 A service provider shall develop and maintain formal means of collecting, recording, acting on and generating feedback about hazards in operations, which combine reactive, proactive and predictive methods of safety data collection.

7.2.2 The hazard identification process shall include the following steps:

7.2.2.1 reporting of hazards, events or safety concerns;

7.2.2.2 collection and storing the safety data;

7.2.2.3 analysis of the safety data; and

7.2.2.4 distribution of the safety information distilled from the safety data.

7.3 Risk Management

7.3.1 A service provider shall develop and maintain a formal risk management process that ensures the analysis, assessment and control of risks to an acceptable level.

7.3.2 The risks in each hazard identified through the hazard identification processes described in section 7.2 of this ASN shall be analysed in terms of probability and severity of occurrence, and assessed for their tolerability.

7.3.3 The organization shall define the levels of management with authority to make safety risk tolerability decisions.

7.3.4 The organization shall define safety controls for each risk assessed as intolerable.

8. Safety Assurance

8.1 General

8.1.1 A service provider shall develop and maintain safety assurance processes to ensure that the safety risks controls developed as a consequence of the hazard identification and risk management activities under paragraph 7 achieve their intended objectives.

8.1.2 Safety assurance processes shall apply to an SMS whether the activities and/or operations are accomplished internally or outsourced.

8.2 Safety Performance Monitoring and Measurement

8.2.1 A service provider shall, as part of the SMS safety assurance activities, develop and maintain the necessary means to verify safety performance of the organization in comparison with the approved safety policies and objectives, and to validate the effectiveness of implemented safety risk controls.

8.2.2 Safety performance monitoring and measurement means shall include the following:

- 8.2.2.1 safety reporting;
- 8.2.2.2 safety audits;
- 8.2.2.3 safety surveys;

- 8.2.2.4 safety reviews;
- 8.2.2.5 safety studies; and
- 8.2.2.6 internal safety investigations

8.2.3 The safety reporting procedure shall set out the conditions under which immunity from disciplinary action would be considered.

8.3 Management of Change

8.3.1 A service provider shall, as part of the SMS safety assurance activities, develop and maintain a formal process for the management of change.

8.3.2 The formal process for the management of change shall:

- 8.3.2.1 identify changes within the organization which may affect established processes and services;
- 8.3.2 describe the arrangements to ensure safety performance before implementing changes; and
- 8.3.3 eliminate or modify safety risk controls that are no longer needed due to changes in the operational environment.

8.4 Continuous Improvement of the Safety System

8.4.1 A service provider shall, as part of the SMS safety assurance activities, develop and maintain formal processes to identify the causes of under-performance of the SMS, determine the implications in its operation, and eliminate such causes, in order to ensure the continual improvement of the SMS.

8.4.2 Continuous improvement of the service provider SMS shall include:

- 8.4.2.1 proactive and reactive evaluations of facilities, equipment, documentation and procedures, to verify the effectiveness of strategies for control of safety risks; and
- 8.4.2.2 proactive evaluation of the individuals' performance, to verify the fulfillment of safety responsibilities.

9. Safety Promotion

9.1 General

9.1.1 Service providers shall develop and maintain formal safety training and safety communication activities to create an environment where the safety objectives of the organization can be achieved.

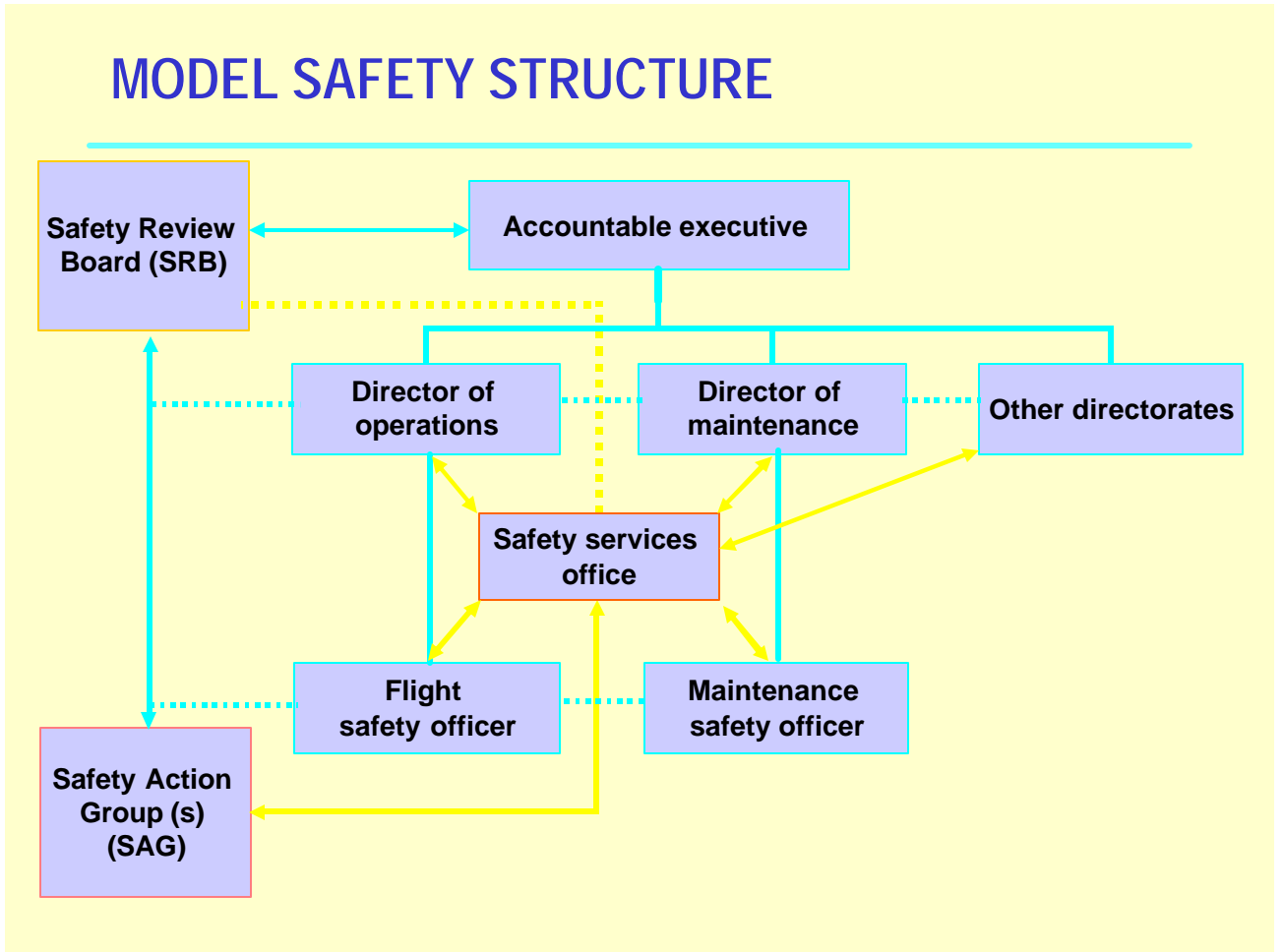
9.2 Safety Training

9.2.1 A service provider shall, as part of its safety promotion activities, develop and maintain a safety training programme that ensures that personnel are trained and competent to perform the SMS duties.

- 9.2.2 The scope of the safety training shall be appropriate to the individual's involvement in the SMS.
- 9.2.3 The Accountable Executive shall receive safety awareness training regarding:
- 9.2.3.1 SMS roles and responsibilities;
 - 9.2.3.2 safety policy;
 - 9.2.3.3 SMS objectives; and
 - 9.2.3.4 safety assurance.
- 9.3 **Safety Communication**
- 9.3.1 A service provider shall, as part of its safety promotion activities, develop and maintain formal means for safety communication, to:
- 9.3.1.1 ensure that all staff is fully aware of the SMS;
 - 9.3.1.2 convey safety critical information;
 - 9.3.1.3 explain why particular safety actions are taken; and
 - 9.3.1.4 explain why safety procedures are introduced or changed.
- 9.3.2 Formal means of safety communication shall include:
- 9.3.2.1 safety policies and procedures;
 - 9.3.2.2 news letters; and
 - 9.3.2.3 bulletins.
10. **Quality Policy**
- 10.1 A service provider shall ensure that the organization quality policy is consistent with, and supports the fulfilment of the activities of the SMS.
11. **Implementation of the SMS**
- 11.1 This ASN proposes, but does not mandate, a phased implementation of a service provider SMS, which encompasses four phases as described in paragraph 11.2 through paragraph 11.5 hereunder.
- 11.2 **Phase 1** should provide a blueprint on how the SMS requirements will be met and integrated to the organization's work activities, and an accountability framework for the implementation of the SMS:
- 11.2.1 Identify the accountable executive and the safety accountabilities of managers;
 - 11.2.2 Identify the person (or planning group) within the organization responsible for implementing the SMS;
 - 11.2.3 Describe the system (ATC services provider, certified aerodrome operator, Air operator and approved maintenance organization);
 - 11.2.4 Conduct a gap analysis of the organization's existing resources compared with the national and international requirements for establishing an SMS;
 - 11.2.5 Develop an SMS implementation plan that explains how the organization will implement the SMS on the basis of national requirements and international SARPs, the system description and the results of the gap analysis;
 - 11.2.6 Develop documentation relevant to safety policy and objectives; and
 - 11.2.7 Develop and establish means for safety communication.

- 11.3 **Phase 2** should put into practice those elements of the SMS implementation plan that refer to the safety risk management reactive processes:
- 11.3.1 investigation and analysis;
 - 11.3.2 hazard identification and risk management;
 - 11.3.3 training relevant to:
 - 11.3.3.1 SMS implementation plan components; and
 - 11.3.3.2 safety risk management (reactive processes).
 - 11.3.4 documentation relevant to:
 - 11.3.4.1 SMS implementation plan components; and
 - 11.3.4.2 safety risk management (reactive processes).
- 11.4 **Phase 3** should put into practice those elements of the SMS implementation plan that refer to the safety risk management proactive processes:
- 11.4.1 investigation and analysis;
 - 11.4.2 hazard identification and risk management;
 - 11.4.3 training relevant to:
 - 11.4.3.1 SMS implementation plan components; and
 - 11.4.3.2 safety risk management (proactive processes).
 - 11.4.4 documentation relevant to:
 - 11.4.4.1 SMS implementation plan components; and
 - 11.4.4.2 safety risk management (proactive processes).
- 11.5 **Phase 4** should put into practice operational safety assurance:
- 11.5.1 development of acceptable level (s) of safety;
 - 11.5.2 development of safety indicators and targets;
 - 11.5.3 SMS continuous improvement;
 - 11.5.4 training relevant to operational safety assurance; and
 - 11.5.5 documentation relevant to operational safety assurance.

ANNEX A



ANNEX B**GAP ANALYSIS MODEL FORM****1. BACKGROUND**

This gap analysis model form is intended to assist a service provider with the implementation of an Safety Management System (SMS) in accordance with the requirements given in the ASN092. A gap analysis is conducted against generally accepted SMS concepts and component/elements. In this case, the gap analysis is conducted against the ICAO frame work for the implementation and maintenance of an SMS. The model form provides, in checklist format, information to assist the evaluation of the components of a safety system presently in place, and the identification of those components/elements of an SMS that need to be developed.

2. ICAO SAFETY MANAGEMENT SYSTEMS FRAMEWORK

The ICAO SMS framework for the implementation and maintenance of an SMS consists of four components and fourteen elements, outlined below.

1. Safety policy and objectives
 - 1.1 – Management commitment and responsibility
 - 1.2 – Safety accountabilities of managers
 - 1.3 – Appointment of key safety personnel
 - 1.4 – SMS implementation plan
 - 1.5 – Coordination of the emergency response plan
 - 1.6 – Documentation
2. Safety risk management
 - 2.1 – Hazard identification processes
 - 2.2 – Risk assessment and mitigation processes
3. Safety assurance
 - 3.1 – Safety performance monitoring and measurement
 - 3.2 – The management of change
 - 3.3 – Continuous improvement of the safety system
4. Safety promotion
 - 4.1 – Training and education
 - 4.2 – Safety communication

The implementation of an SMS requires a service provider to conduct an analysis of its system to determine which components/elements of a safety management system are currently in place and which components/elements must be added or modified to meet the SMS implementation requirements. The analysis involves comparing the SMS components/elements included in the SMS implementation requirements against those existing in the service provider system.

The model gap analysis presented in this section can be used for a service provider as a template to conduct a gap analysis. Each analysis question is designed for a “yes” or “no” response. A “yes” answer indicates that the organization already complies with the requirement for that particular SMS component/element. A “no” answer indicates that a gap exists between the stated criteria and the organization's policies, procedures or processes. If the response is “yes”, the next column of the analysis form can be used to indicate where (in company documentation) the requirement is addressed. If the response is “no”, the same column can be used to indicate how and/or where the policy, procedure or process will be further developed to bring the organization into compliance with the requirement.

Once the gap analysis is complete and documented, the requirements identified as missing or deficient will form one basis of the SMS implementation plan. Each requirement will be assessed to determine how the organization will create or modify policies, procedures or processes to incorporate the required SMS components/elements. Components/elements can be grouped into larger projects and assigned to project manager(s) who will oversee the development and implementation of that project. Each project should be assigned milestones including a termination date to ensure that completion does not fall outside acceptable time limits.

Gap Analysis Model Form

SMS Framework	Response (Yes/No)	If yes, state where the requirement is addressed. If no, record how compliance with the requirement will be achieved
Safety Policy and Objectives		
Is a safety management system (SMS) with defined components/elements established, maintained and adhered to?		
Is the SMS appropriate to the size, nature and complexity of the organization?		
Is there a safety policy in place?		
Is the safety policy approved by the accountable executive?		
Is the safety policy promoted by the accountable executive?		
Is the safety policy reviewed periodically?		
Does the safety policy clearly indicate which types of operational behaviours are acceptable or unacceptable?		
Is there a safety reporting policy that clearly includes the conditions under which reporter immunity from disciplinary action would be considered?		
Have safety objectives been established?		
Is there a formal process to develop safety objectives?		
Are safety objectives publicized and distributed?		
Is there a formal process to develop and maintain a set of safety performance indicators and safety performance markers?		
Has an accountable executive been identified?		
Does the accountable executive have responsibility for ensuring that the SMS is properly implemented and performing to requirements in all relevant areas of the organization?		
Does the accountable executive have control of the financial and human resources required to ensure the proper performance of the SMS?		
Have the safety accountabilities of all members of senior management been identified, documented and communicated throughout the organization?		
Has a qualified person been appointed to be the focal point for the daily operation of the SMS?		

Does the person appointed as focal point for the daily operation of the SMS fulfil the required job functions and responsibilities?		
Are the safety responsibilities and accountabilities of personnel at all levels of the organization defined and documented?		
Is there consolidated documentation that describes the SMS and the interrelationships between all its components?		
Has a documented procedure been established and maintained for identifying applicable regulatory requirements?		
Are regulations, standards and exemptions periodically reviewed to ensure that the most current information is available?		
Does the organization have an emergency response/contingency procedure appropriate to the size, nature and complexity of the organization?		
Have the emergency response/contingency procedures been documented, implemented and assigned to a responsible manager?		
Are the emergency response/contingency procedures been periodically reviewed?		
Does the organization have a process to distribute the emergency response/contingency procedures and to communicate the content to all personnel?		
Does the organization conduct drills and exercises with all key personnel at specified intervals, as applicable?		
Does this information reside or is it incorporated into approved documentation, such as the Operations Manual, Maintenance Control Manual, or Airport Operations Manual, as applicable, and where these approved documents are not required by regulation, the organization includes the information in a separate, controlled document?		
Does the organization have a records system that ensures the generation and retention of all records necessary to document and support operational requirements, and is in accordance with applicable regulatory requirements and industry best practices?		

Does the system provide the control processes necessary to ensure appropriate identification, legibility, storage, protection, archiving, retrieval, retention time, and disposition of records?		
1 Safety Risk Management		
Does the organization have a reactive method that provides for the capture of internal safety information including hazard identification, occurrences and other data relevant to safety risk management?		
Is the reactive reporting process simple, accessible and commensurate with the size of the organization?		
Are reactive reports reviewed at the appropriate level of management?		
Does the organization have a proactive method that provides for the capture of internal information including hazard identification, occurrences and other data relevant to safety risk management?		
Is the proactive reporting process simple, accessible and commensurate with the size of the organization?		
Are proactive reports reviewed at the appropriate level of management?		
Does the organization have a predictive method that provides for the capture of internal information including hazard identification, occurrences and other data relevant to safety risk management?		
Is predictive safety information reviewed at the appropriate level of management?		
Is there a feed back process to notify contributors that their reports have been received and to share the results of the analysis?		
Are corrective and preventive actions generated in response to safety data analysis?		
Is there a structured process for the analysis of risk associated with identified hazards, expressed in terms of severity, and probability of occurrence? Are there criteria for assessing risk in terms of tolerability (i.e., the acceptable level of risk the organization is willing to accept)?		
Does the organization have risk management control strategies that include corrective/preventive mitigation action of risks to an acceptable level?		
2 Safety Assurance		
Is there a process in place to monitor and analyze safety trends?		

Do measures exist that ensure all reported occurrences and deficiencies are investigated?		
Is there a process to ensure that occurrences and deficiencies reported are analyzed to identify all associated hazards?		
Are corrective and preventative actions generated in response to event investigation and risk analysis?		
Does the organization have a process for evaluating the effectiveness of the corrective/preventive measures that have been developed?		
Are corrective/preventive actions, including timelines, documented?		
Is there a process to evaluate the effectiveness of corrective actions?		
Does the organization have a system to monitor the internal reporting process and the associated corrective actions?		
Are regular and periodic reviews conducted regarding the organization safety performance, internal audit results, hazard and occurrence investigations, hazard and occurrence analysis results, internal/external feedback analysis results, status of corrective actions, follow-up actions from management reviews, changes that could affect safety, recommendations for improvement and sharing of best practices across the organization?		
Has the organization implemented self-evaluation processes, such as regularly scheduled safety audits, safety surveys, safety reviews, and safety studies?		
Is there an operationally independent audit function with the authority required to carry out an effective internal evaluation program?		
Does the audit system cover all functions, activities and organizations within the company?		
Are there defined audit scope, criteria, frequency and methods?		
Are there selection/training process to ensure the objectivity and competence of auditors as well as the impartiality of the audit process?		
Is there a procedure for reporting audit results and maintaining records?		
Is there a procedure outlining requirements for timely corrective and preventive action in response to audit results?		

Is there a procedure to record verification of action(s) taken and the reporting of verification results?		
Is a process in place for analyzing changes to operations or key personnel for risks?		
Does the organization perform periodic management reviews of safety critical functions and relevant safety issues that arise from the internal evaluation program?		
Are there procedures in place for the conduct of internal safety investigations?		
3 Safety Promotion		
Is there a documented process to identify training requirements so that personnel are competent to perform their duties?		
Is there a process that measures the effectiveness of training?		
Is the organization's safety training incorporated into indoctrination training upon employment?		
Is there emergency response and response training for affected personnel?		
Does the safety training ensure that all personnel understand their responsibilities and accountabilities in regards to all safety management processes, decisions and actions?		
Are there communication processes in place within the organization that permit the safety management system to function effectively?		
Are communication processes (written, meetings, electronic, etc.) commensurate with the size and scope of the organization?		
Is information established and maintained in a suitable medium that provides direction in related documents?		
Is there a process for the dissemination of safety information throughout the organization and a means of monitoring the effectiveness of this process?		