



GOVERNMENT OF INDIA
OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION

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SSP Circular No. 02 of 2018

Subject: Guidance Material for preparation of Safety Management System Manual

Rule 29D of the Aircraft Rules, 1937 requires the service providers to implement a Safety Management System (SMS), which is acceptable to the State.

CAR Section 1 Series C Part I prescribes the detailed requirements for establishing Safety Management System (SMS) and its phased-wise implementation.

Appendix A to CAR Section 1 Series C Part I prescribes the guidance on contents of the SMS Manual.

Annexure to this circular provides the detailed guidance for preparation of Safety Management System Manual by the service providers.

All service providers are advised to use this Annexure for preparation of Safety Management System Manual of their organization.

Sd/-
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Distribution: All service providers

Guidance for preparation of Safety Management System Manual

Chapter 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.

Chapter 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.

Chapter 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.

Chapter 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.

Chapter 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) Where the safety objectives are linked to safety indicators to facilitate monitoring and measurement where appropriate.

Cross-reference documents

Safety performance indicators document, etc.

Chapter 6: Role, Safety accountability and responsibility of Personnel Involved in SMS

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.

Chapter 7: Safety reporting and remedial actions

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 AAIB/DGCA, and other routine occurrence reports, which remain within the organization. There is also a voluntary and confidential hazard/occurrence reporting system, incorporating appropriate identity/data protection as applicable.
- c) The respective reporting processes are simple, accessible and commensurate with the size of the organization.
- d) High-consequence reports and associated recommendations are addressed to and reviewed by the appropriate level of management.
- e) Reports are collected in an appropriate database to facilitate the necessary analysis.

Cross-reference documents
-----**Chapter 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

Chapter 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

Chapter 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 CAA 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

Chapter 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

Chapter 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

Chapter 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

Chapter 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.

Chapter 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:

- 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.