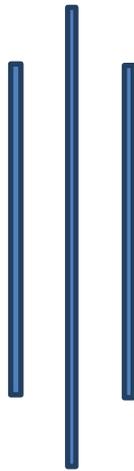# Procedure Manual for Safety Management Functions

Second Edition

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Procedure Manual for Safety Management Functions

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FOREWORD

ICAO Annex 19 stipulates that each State shall establish a State Safety Programme for the management of safety under its purview in order to achieve an acceptable level of safety performance. The Civil Aviation Authority of Nepal has the regulatory responsibilities for aviation safety in Nepal. It is therefore incumbent upon Civil Aviation Authority of Nepal to undertake the implementation of SSP related activities in Nepal.

This manual has been prepared for the purpose of providing guidance to regulatory domains of CAAN and service providing organizations in Nepal, as applicable, in discharging their safety management related roles and responsibilities in accordance to SSP and SMS respectively. All the regulatory domains may further introduce their roles and responsibilities under SSP in their respective Procedures Manual for providing detailed guidance to their officers at the grass root level.

Er. Pradeep Adhikari

Director General

RECORD OF AMENDMENTS

This manual shall be updated as and when necessary. It shall be the responsibility of the Safety Management Division to ensure that it is continuously updated and the entries are recorded.

Amendment	Date	Description of amendment
1st edition	April 2019	
1	April 2021	
2 (2nd edition)	September 2022	
3	June 2023	
4	August 2023	
5	October 2023	
6	January 2024	
7	November 2024	
8	February 2026	Abbreviation, Definition, Chapter 2.2, Chapter 4.9, 4.10, Appendix 4, Appendix 6, Appendix 8, Appendix 9, Appendix 10.

ABBREVIATIONS

ACI	Airport Council International
ADREP	Accident Data Reporting
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
ALARP	As Low as Reasonably Practicable
ALoSP	Acceptable Level of Safety Performance
ANSSSD	Air Navigation Service Safety Standards Department
APRAST	Asia – Pacific Regional Aviation Safety Team
ASSD	Aerodrome Safety Standards Department
ASSRD	Aviation Safety and Security Regulation Directorate
CAR	Civil Aviation Requirement
CAR-19	Civil Aviation Requirement for Safety Management
CANSO	Civil Air Navigation Services Organization
DG	Director General
ECCAIRS	European Coordination Centre for Accident and Incident Reporting Systems
ERP	Emergency Response Plan
FSSD	Flight Safety Standards Department
HLSCC	High Level Safety Coordination Committee
HRD	Human Resource Department
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
MoCTCA	Ministry of Culture, Tourism and Civil Aviation
MOR	Mandatory Occurrence Reports
MORS	Mandatory Occurrence Reporting System
NASP	Nepal Aviation Safety Plan
NAST	National Aviation Safety Team
NAST-ANS	National Aviation Safety Team-Air Navigation Service
NOTAM	Notice to Airmen
OJT	On the Job Trainee/Training

RASG/APAC	Regional Aviation Safety Group/ Asia Pacific
SAR	Search and Rescue
SARAST	South Asia Regional Aviation Safety Team
SARPs	Standards and Recommended Practices
SM	Safety Management
SMD	Safety Management Division
SMS	Safety Management System
SPI	Safety Performance Indicator
SPT	Safety Performance Target
SSP	State Safety Programme
VIRS	Voluntary Information Reporting System

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Chapter 1: GENERAL

Definitions

Acceptable level of safety performance (ALoSP): The level of safety performance agreed by State authorities to be achieved for the civil aviation system in a State, as defined in its State safety programme, expressed in terms of safety performance targets and safety performance indicators.

Accountable executive: A single, identifiable person having responsibility for the effective and efficient performance of the service provider's SMS.

Change management: A formal process to manage changes within an organization in a systematic manner, so that changes which may impact identified hazards and risk mitigation strategies are accounted for, before the implementation of such changes.

Hazard: A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Safety: The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety data: A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety.

Note— Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

a) accident or incident investigations;

b) safety reporting;

c) continuing airworthiness reporting;

d) operational performance monitoring;

e) inspections, audits, surveys; or

f) safety studies and reviews.

Safety information: Safety data processed, organized or analysed in a given context so as to make it useful for safety management purposes.

Safety management system (SMS): A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

Safety objective: A brief, high-level statement of safety achievement or desired outcome to be accomplished by the State Safety Programme or service provider's safety management system.

Note— Safety objectives are developed from the organization's top safety risks and should be taken into consideration during subsequent development of safety performance indicators and targets.

Safety oversight: A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

Safety performance: A State's or service provider´s safety achievement as defined by its safety performance targets and safety performance indicators.

***Safety performance indicator*.** A metric used to measure and monitor a State or a service provider's safety performance, including the progress towards achieving a safety objective

***Safety performance target*.** The State or service provider's planned or intended target for a safety performance indicator over a given period.

Safety risk: The predicted probability and severity of the consequences or outcomes of a hazard.

State safety programme (SSP). An integrated set of laws, regulations, policies, objectives, processes, procedures and activities aimed at managing safety, at the State level.

Purpose of the Manual

The purpose of this manual is to support the implementation and continual improvement of the SSP in Nepal. The manual provides general information and guidelines for the implementation of SSP and supporting service providers in develop and implement their SMSs. The purpose of this manual area as follows:

(a) To provide guidance to Safety Management Inspectors and other regulatory staffs in administering the SSP, acceptance of Service providers' Safety performance and SMSs' inspection and audit activities.

(b) To promote standardization and uniformity in application of programme, procedures and practices.

(c) To encourage and promote the establishment of reasonable programmes for enhancing and improving safety to benefit the aviation community.

Applicability

The provisions contained in this manual are applicable to the Safety Management functions (SSP and SMS) directly support of safety operation of aircraft.
For completeness, the roles and responsibilities documented in this manual should be reflected in procedure manuals of the respective regulatory departments.

The manual should be read in conjunction with the SSP Nepal, CAR 19 and CAAN SMS Implementation Guidance Material.

Authority for publication and amendment of the manual

This manual is developed, published and distributed in pursuant to Civil Aviation Regulations, 2002.

The Authority is responsible for the issuance and control of amendments to this manual. All copies of the manual are numbered and issued in accordance with the distribution list. Individual holders are responsible for insertion of all amendments. Minor changes (e.g. telephone number, typographical errors) can be accommodated by hand amendment with prior notification to the Authority. All such changes will be incorporated accordingly.

All users of this manual are encouraged to submit recommendations for proposed revisions, additions or omissions to the Authority for consideration and inclusion in the amendments as appropriate.

This manual shall be reviewed annually and revised as necessary.

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Chapter 2

STATE SAFETY PROGRAMME

2.1 Overview

The SSP is an integrated set of regulations and activities aimed at improving Safety. It includes specified safety activities that must be performed by the State, and regulations and directives promulgated by the State to support fulfillment of its responsibilities concerning safe and efficient delivery of aviation activities of the State. Therefore, it is a management system for the management of safety by the State. The objectives of the SSP, in accordance with the SSP, Nepal are to:

- Ensure that a State has the minimum required regulatory framework in place.
- Ensure harmonization amongst the State's regulatory and administrative organizations in their respective safety risk management roles.
- Facilitate monitoring and measurement of the aggregate safety performance of the State's aviation industry.
- Coordinate and continuously improve the State's safety management functions.
- Support effective implementation and interaction with service providers' SMS.

The current version of SSP Nepal is published in http://www.caanepal.gov.np

The CAAN is responsible for the progressive implementation and continual development of the SSP. It has set a framework for effective implementation of SSP in Nepal. The framework includes various teams with defined roles and responsibilities. They are as follows:

2.2 Safety Management Division

Safety Management Division, under the Aviation Safety and Security Regulations Directorate, is the focal point of SSP implementation. It is mainly responsible for:

1. Coordinating, facilitating, monitoring and reviewing the effective implementation of State Safety Programme (SSP) and National Aviation Safety Plan (NASP) in Nepal with all stakeholders including MoCTCA (AIG related) and Nepal Army as required.
2. Developing and maintaining the central safety database system, analyzing data and information for defining State SPIs, SPTs and monitoring the safety performance at the State level.
3. Acting on the Voluntary Information Reports (VIRs) received through various sources ensuring the prevailing safety data protection and confidentiality rules and maintaining the database.

4. Coordinating meetings of High - Level Safety Coordination Committee (HLSCC), SSP Implementation Team (SSPIT); conducting regular State Safety Action Group (SSAG) Meetings and working as the secretariat of the HLSCC and SSPIT Committees.

5. Developing and updating documents related to ICAO Annex -19 (Safety Management) SARPs.

6. Overseeing the implementation and operational performance of the service provider's SMS.

7. Conducting various Safety Management-related trainings, promotional and awareness activities.

8. Participating in Reginal Aviation Safety Group (RASG), Asia - Pacific Regional Aviation Safety Team (APRAST), South - Asia Regional Aviation Safety Team (SA- RAST) and other safety management related meetings, workshops and seminars and coordinating with concerned entities to execute the decisions made in those meetings, workshops and seminars.

9. Monitoring and documenting the implementation of recommendations issued by Accident Investigation committees of Government of Nepal

10. Formation of investigation committees in coordination with other regulatory departments to conduct safety investigations as per Civil Aviation Regulation, 2002, Rule 83 (b) as required. Moreover, monitoring and documenting the implementation of recommendations issued by such investigation committees.

11. Coordinating and participating in National Aviation Safety Teams (NASTs) meetings as required,

12. Publishing Aviation Safety Report (ASR) and publishing and broadcasting other safety promotional materials as required.

13. Conducting Training Need Analysis (TNA), developing training plan and programme for divisional staff. Moreover, maintaining the training records of CAAN safety inspectors.

14. Accepting service providers' Safety Management System (SMS) related documents and assessing the competencies of their key safety personnel (ie, Safety Manager and Accountable Manager/Executives).

15. Involving in the process of authorization, certification and approval of service providers.

16. Carrying out other functions as deemed necessary for the effective implementation of SSP in Nepal.

Note: the organization Structure of Aviation Safety and Security Regulatory Directorate is included in Appendix – 1.

2. 3 High Level Safety Coordination Committee

A collaborative inter-agency High Level Safety Coordination Committee (HLSCC) is used to ensure SSP functions are effective by monitoring its implementation and guiding its development. It is composed of the high level officials of the entities that are responsible for implementing SSP in Nepal. It is basically established for providing strategic guidance for SSP implementation in Nepal. Therefore, its main function is to ensure efficient SSP implementation including evaluation of ALoSP achievement.

The composition and functions of High-Level Safety Coordination Committee are as follows:

A collaborative inter-agency High Level Safety Coordination Committee (HLSCC) is used to ensure SSP functions are effective by monitoring its implementation and guiding its development. The Committee brings together the following representatives and agencies as decided by the 345th meeting of the Civil Aviation Authority of Nepal Board of Directors:

1. Director General, Civil Aviation Authority of Nepal -   Coordinator
2. Joint Secretary, MoCTCA (looking after AIG) -   Member
3. Deputy Director General, Aviation Safety and Security Regulation Directorate, CAAN – Member
   (Safety Management Division of CAAN to work as the Secretariat of the Committee)

Representative (s) from Nepal Army and other relevant entities shall be called in 'as and when required' basis.

HLSCC shall meet as and when required but not less than once in every six months.

The main purpose of the establishment of the HLSCC is:

- To ensure efficient SSP implementation through good communication together with avoidance of duplication of efforts and conflicting policies
- To facilitate continuous coordination in high level of all agencies and stakeholders
- To evaluate and implement the safety recommendations originating from SSP Implementation Team meetings
- To ensure that State is achieving the established ALoSP
- To provide guidance for the effective implementation of SMS
- To carry out discussions in the matters of aviation safety for ensuring effective communication, sharing of information and data exchange.

2.4 SSP Implementation Team

For an effective implementation of SSP, an SSP Implementation Team has been formed. The composition and functions are as follows:

Deputy Director General, ASSRD   Coordinator

Director, FSSD   Member

Director, ANSSSD   Member

Director, ASSD   Member

Deputy Director, SMD   Member

Director, Air Transport Department	Member
Representative from MoCTCA (looking after AIG matter)	Member

(Safety Management Division of CAAN to work as the Secretariat of the Committee)

The Team is responsible for carrying out such actions that are related to the concerned department and division of each of the members in accordance to the phase wise implementation of SSP together with Nepal Aviation Safety Plan. It manages SSP implementation within the CAAN by ensuring that procedures, terms of reference and training are developed in accordance with the SSP and developing a consistent approach to safety management throughout Nepal.

Team can call representative(s) from other entities as invitees when deemed necessary.

SSP Implementation Team meets as and when required but not less than once in every two months.

2.5 State Safety Action Group

The State Safety Action Group (SSAG) is the operational committee that acts on the actions needed for successful implementation of SSP together with NASP with respect to duties and responsibilities of the CAAN and MoCTCA (for Accident Investigation issues). The composition of the group shall be as follows:

Chief, Safety Management Division,	Coordinator
Designated Representative/s, Flight Safety Standards Department	Member
Designated Representative/s, Aerodrome Safety Standards Department	Member
Designated Representative/s, ANS Safety Standards Department	Member
Designated Representative, Safety Management Division	Member Secretary

The SSAG shall meet at least once a month or as and when required.

Responsibilities of the group are as follows:
- Carry out State Safety Data Collection and Processing Activities together with State Safety Data Verification.
- Carry out State Safety Risk management Activities

- Determine and propose to SSP implementation Team for endorsement, the State SPIS and SPTS based on analysis of Safety data available from SDCPS
- Involve in Safety promotion activities
- Study the recommendations of all accident/serious incident report and prepare report on the status of implementation of such recommendations.
- Prepare an annual safety report based on all the activities mentioned above.
- Determine and propose any other issues to SSP implementation Team, as may be considered relevant, to assist the SSP implementation Team in continuously improving the effectiveness of the SSP and NASP.

Team can call representative(s) from MoCTCA (looking after AIG matter) and other entities as invitees when deemed necessary.

2.6 National Aviation Safety Teams (NASTs) Nepal

SSP implementation is a coordinated approach that requires the involvement of all safety related departments within CAAN and Accident and Incident Investigation entity in MoCTCA.

To ensure the effective SSP implementation National Aviation Safety Teams (NASTs) are essential that comprises the representatives of service providers as well. In order to ensure ease of coordination and its effectiveness, NASTs have been formed as NAST-Aeroplane, NAST-Helicopter, NAST-ANS and NAST-Aerodrome. These teams are responsible for the exchange of safety information, review of safety risks, determining the acceptable level of safety, suggest respective oversight department on SMS matter, overall evaluation of SSP and its continuous improvement. These teams will seek and review safety information and identify risk issues that are of strategic importance, ensure appropriate action plans are identified to mitigate these risks. The NASTs will aim to assess the tolerability of aviation risks using both objective and subjective methods.

The composition of each of the NAST is as follows:

A. NAST- Aeroplane
1. Chief of Flight Safety Standards Department, CAAN   Coordinator
2. Chief of Safety Management Division, CAAN   Member
3. Safety Managers of Operators of Aeroplane in Nepal   Members
4. Designated Representative, SMD, CAAN   Member Secretary

B. NAST- Helicopter
1. Chief of Flight Safety Standards Department, CAAN   Coordinator
2. Chief of Safety Management Division, CAAN   Member
3. Safety Managers of Operators of Helicopter in Nepal   Members
4. Designated Representative, SMD, CAAN   Member Secretary

C. NAST- Air Navigation Services (ANS)

1. Chief of ANS Safety Standards Dept. CAAN — Coordinator
2. Chief of ATM Standards Division, CAAN — Member
3. Chief of ANS Licensing Rating Division, CAAN — Member
4. Chief of CNS Standards Division, CAAN — Member
5. Chief of SAR/Technical Research and Safety Data Division, CAAN — Member
6. Representative from Safety Management Div., CAAN — Member
7. Representative from Flight Operation Dept., TIACAO — Member
8. Representative from ATM Dept. CAAN — Member
9. Representative from AIM Dept. CAAN — Member
10. Representative from DAF Dept. CAAN — Member
11. Representative from ATS Safety office TIA — Member
12. Representative from Com. And Nav. Aid Div. TIA — Member
13. Representative from Surveillance Div. TIA — Member
14. Representative designated by ANSSSD Chief — Member Secretary

D. NAST- Aerodrome

1. Chief of Aerodrome Safety Standards Dept., CAAN — Coordinator
2. Chief of Aerodrome Engineering Dept., CAAN — Member
3. Chief of Elector-Mechanical Dept., CAAN — Member
4. Chief of Rescue and Fire Fighting Dept., CAAN — Member
5. Representative from Safety Management Div., CAAN — Member
6. Aerodrome Safety Managers from all certified aerodromes — Members
7. Manager, Aerodrome Safety Standards Dept., CAAN — Member Secretary

Each of the NASTs meets as and when required but not less than once in every three months.

Chapter 3

STATE SAFETY PROGRAMME FOUNDATION

3.1 General

The State safety policy and objectives define how safety is managed throughout the aviation system. This includes the determination of responsibilities and accountabilities of the different State organizations related to the SSP, as well as of the broad safety objectives to be achieved by the SSP. The Safety Management Division, working with other safety oversight departments and service providers, is responsible for the development, routine review and updates to the State safety policy and objectives. Safety objectives are set once the top safety risks are identified from the data analysis for that year. The state safety policy is reviewed annually for the purpose of ensuring its continuing relevance and compliance with ICAO SARPS and national regulatory requirements.

3.2 State safety legislative framework

Safety Management Division is the responsible unit for implementing the SARPs contained in Annex 19 to the Convention on International Civil Aviation (Safety Management). The Division carries out, when necessary, the amendment of Civil Aviation Requirement for Safety Management (CAR 19) in congruence with Annex-19 as per the provisions mentioned in the Procedure Manual for ICAO, International Affairs and Legal Functions.

Besides the primary aviation legislation, the Division functions, in accordance to operating regulations such as the SSP Nepal, second edition, 2020, CAR-19, NASP in operation, Procedure Manual for Safety Management Functions, Safety Occurrence Reporting Procedure, 2016 etc.

3.3 SSP Gap Analysis

The Safety Management Division, in coordination with FSSD, ASSD and ANSSSD, conducts the gap analysis before developing an SSP implementation plan. The gap analysis may also be conducted at times during the implementation of SSP when considered necessary. The gap analysis aims to gain a detailed understanding of the gap between the existing State structures and processes, and those required for an effective SSP implementation in Nepal. The gap analysis points out the areas that need to be addressed and actions that need to be taken to drive the SSP further ahead. The elements or processes identified as requiring action form the basis of the SSP implementation plan.

The gap analysis checklist as in Appendix 2 is a template for conducting gap analysis. Each question is designed for a 'Yes', 'No' and 'Partial' response. A 'Yes' answer indicates that Nepal already has the component or element of the ICAO SSP framework in question incorporated into

its safety system and that it matches or exceeds the requirement. A 'No' answer indicates that a gap exists between the component/element of the ICAO SSP framework and the safety system. A 'Partial' answer indicates that the component or element of the ICAO SSP framework in question is only partially incorporated into its safety system.

Gap Analysis can also be performed as guided in ICAO iSTARS portal.

3.4 SSP Implementation Plan

Performing a gap analysis before embarking on the implementation of SSP allows to identify the gap between the current organizational structures and processes, and those required for effective SSP implementation.
The SSP implementation plan is, as the name implies, a plan for SSP implementation. It provides a clear description of the resources, tasks and processes required, and an indicative timing and sequencing of key tasks and responsibilities. Plan shall be developed considering the ICAO SSPIA (SSP implementation Assessment) Protocol questions.

3.5 SSP documentation

The SSP documentation shall be developed and maintained at Safety Management Division. It shall also maintain the records of latest accidents and incidents, investigation reports and the status of the implementation of the recommendations, SSP data, data analysis including SPIs and SPTs, ALoSP, State level risk management and management of change, State level training records, plans, programmes, SMS audit reports, records and materials related to safety etc.

Chapter 4

STATE SAFETY DATA

4.1 General

Safety risk management is a generic term that encompasses the assessment, mitigation and follow up of the safety risks of the consequences of hazards that threaten the capabilities of an organization, to a level as low as reasonably practicable (ALARP). The objective of safety risk management is to provide the foundation for a balanced allocation of resources between all assessed safety risks and those safety risks for which the control and mitigation is viable. Safety risk management is therefore a key component of the safety management process. The CAR 19 requires all service providers to implement necessary hazard identification processes and risk management controls. The core part of hazard identification and risk management process is the data collection, analysis and exchange. The service providers carry out this function in accordance to the directive "Safety Reporting Procedures Directive, 2022 ."

Similarly, data collection, analysis and exchange also need to be carried out at State Level with the overall SMS-data of Nepal. For this, SMD carries out the actions to reach to State Level top safety risks, SPIs, SPTs and objectives in alignment with each other.

4.2 State Safety data collection, storage, analysis and exchange

Data-based decision making is one of the most important facets of any Safety management system. Safety data shall be collected from reports as well as other sources. Reports may be mandatory or voluntary on the basis of reporting requirements.

The general rule in data collection through reporting systems is that the reported information should not be used against the reporting person for punitive actions unless there is proven gross negligence or willful violation.

4.2.1 State Safety Data Collection

4.2.1.1 Mandatory Occurrence Reporting System

The aviation service provider organizations have a legal responsibility to report to Civil Aviation Authority of Nepal all accidents or serious incidents of which they become aware.

Additionally, operational personnel are required to report certain categories of safety occurrences to their employers and to the Civil Aviation Authority of Nepal under a

national mandatory occurrence reporting scheme and internal (to their organisation) reporting system.

Being one of the contracting States, Nepal has to implement the provisions in 5.1 CAR 19, Safety Management, which require the States to establish mandatory occurrence reporting (MOR) systems to facilitate the collection of information on actual or potential safety deficiencies.

' Safety Reporting Procedures Directive, 2022' related to the reporting, analysis and follow-up of occurrences in civil aviation establishes requirements for mandatory reporting of occurrences which, if not corrected, would endanger the safety of aircraft, its occupants or any other person.

4.2.1.2 Voluntary Information Reporting System (VIRS)

According to ICAO Safety Management Manual (Doc. 9859) mandatory occurrence reporting systems tend to collect more information on technical ("hardware") failures than on human performance aspects. To overcome this problem, voluntary information reporting system has been implemented in order to acquire more information on the human factors related aspects and enhance aviation safety in accordance to 5.1 of CAR 19, Safety Management.

VIRS is a system of a proactive process and related arrangements for collecting information about safety concerns, issues and hazards, which otherwise will not be revealed by a mandatory reporting system. It is established for the purpose of facilitating the collection of information on actual or potential safety deficiencies thus contributing to the identification and implementation of safety improvement measures.

VIRS in Nepal is non-punitive, error-tolerant, affording protection to the sources of information and is meant to encourage further reporting of safety related information.

4.2.1.3 Methods for reporting voluntarily

All employees, including safety sensitive personnel, as well as all stakeholders can report through VIRS which is a non-punitive system of hazard/occurrence reporting. Voluntary reports can be made through any of the following methods:

a) filing complaints or reports in the reporting boxes as made available at various places in civil aviation offices under Aviation Safety and Security Regulation Directorate or writing directly to those offices or the Civil Aviation Authority of Nepal.

b) reporting electronically in the VIRS link as provisioned in CAAN website www.caanepal.gov.np.

c) Emailing to nast@caanepal.gov.np.

d) Via direct telephone calls.

e) Other ways such as calls or messages via viber or similar applications, reporting in person orally or in written etc.

4.2.1.4 Confidentiality and De-identification in VIRS

The voluntary reports are received electronically through web-link, email or other ways at Safety Management Division. Such messages are immediately de-identified, if needed to maintain confidentiality and sent to the concerned regulatory departments through the SSAG members as mentioned in 2.5 of this Manual. Concerned department shall act on the report, notify the action taken to the Safety Management Division and SMD shall notify the action taken to the reporter if possible. If such reports are received by concerned department directly, the department shall de-identify the report, act on it and notify action taken to the reporter if possible.

4.2.1.5 Just culture

The objective of safety reporting is to prevent safety occurrences, such as accidents and incidents, not to attribute blame or liability if they happen. Prosecution or punitive actions such as suspension of licence shall not be sought against a person who files a safety report unless the unsafe act is deliberately committed or gross negligence is demonstrated. For that, assurances such as confidentiality of reporting and sole use of reported data for safety improvement shall be provided. One of such measures already adopted is protecting the identity of reporters as mentioned in 4.4.2

A Just Culture implies that, as far as possible:

- Reports will be confidential;
- Prosecution or punishment will not follow reports of unpremeditated or accidental breaches of regulations;
- Gross negligence or willful misconduct shall be punished.

The Civil Aviation Authority of Nepal has issued 'Aviation Enforcement Policy and Procedures Manual, 2021' as a part of it's just culture policy.

4.3 Other Methods of Hazard Identification

Besides the reporting system, data may also be generated from identifying underlying hazards by adopting methods such as audits, inspections, training evaluations, brainstorming etc. The

quality of the data that is used to enable effective decision making must be considered throughout SSP development and implementation.

The Safety Management Division is responsible for developing and implementing the entire data management process about hazards and safety risks at the State level.

4.4 Data storage and retention

In the context of safety data collection and analysis, the term safety database may include the following type of data or information which can be used to support safety data analysis:

- Accident/Incident investigation data;
- Mandatory Occurrrence reporting data;
- Voluntary reporting data;
- Continuing airworthiness reporting data;
- Operational performance monitoring data;
- Safety risk assessment data;
- Data from audit findings/ reports;
- Data from safety studies/ surveys/ review;
- Data from training evaluation/ review;
- Data from ERP critique and evaluation;
- Safety data from other States, Regional Safety Oversight Organizations or Regional Accident & Incident Investigation Organizations etc.

Safety databases related to the SSP and service provider's SMS are typically housed in regulatory Departments/Divisions of CAAN. The CAAN shall house its State safety data in the database system and analysis the data annually for performance monitoring, measurement and future improvement.

The processed data from ANSSSD, FSSD and ASSD is collected at SMD through the concerned SSAG member, who is also the focal point for coordination on matters related to SSP data as mentioned in 2.5 of this Manual. The SMD, after review, compiles these data with the data related to State Aviation Safety as a whole.

Safety reports and accident, incident investigation reports are retained permanently and other state safety data shall be retained for the period of 5 years.

4.5 State Safety Risk Management

The identified State hazard's Safety Risk Management (SRM) shall be conducted by concerned regulatory departments. If the hazard is of inter-departmental nature, the SRM shall be

conducted by SSAG. For complete SRM process, refer to Safety Risk Management Procedure Manual, CAAN.

4.6 Management of Change

All the significant changes in CAA including equipment, procedures and accountability and responsibility, shall be subject to an MOC. Changes with potential for significant impact to the safety for which CAA shall conduct MOC which include, but are not limited to:

i.   restructuring of organization (including downsizing);
ii.   changes in the SSP processes, including changes in methodology such as Risk based Surveillance (RBS), SRM and safety assurance processes.
iii.   changes in the regulatory environment, such as changes in existing State safety policies, programmes, and regulations;
iv.   changes in the operational environment, such as introduction of new technologies, changes in infrastructure, equipment and services;
v.   rapidly changing industry (expanding, contracting, morphing) and its potential impact on the State oversight and performance monitoring capabilities

MOC shall be conducted by concerned regulatory departments including the stakeholders for the departmental changes. If the changes are of inter-departmental nature, the MOC shall be conducted by SSAG or a designated committee formed by DGCA with the help of identified stakeholders. The complete process of MOC is attached in appendix 7.

4.7 Data Analysis

After collecting and compiling the safety data, SMD shall perform necessary analysis, at least, annually to identify actual or potential safety deficiencies; measure safety performance and to determine and prioritize any actions required to enhance safety at a State level.

Safety analysis is often iterative, requiring multiple cycles. As such, it is not possible to define all the elements of analysis. However, it should, as a minimum, include:

• Monitoring and measuring safety trends;
• Analyzing high impact/consequence events;
• Assessing safety performance (both at the service provider and State level) including correlating proactive indicators and safety outcomes (accidents and serious incidents);
• Comparative and benchmark analyses;
• Historical trend analyses.

The SMD is responsible for state safety data analysis. It shall employ an appropriate number of safety analysts to develop the outputs necessary to effectively measure safety performance across all service providers and for the State as a whole and to prioritize State safety actions.

The SMD shall, in consultation with the SSP Implementation Team and all the Safety Oversight Departments:

- Using the input data and results of the analyses, develop and publish Safety Alerts; (The procedure for setting safety alerts is as mentioned in Appendix 3)
- Using the results of analyses, review and consider changes to legislation, regulation, AICs etc.; review and agree levels of safety performance for the State and service providers and provide input to safety initiatives by other States and/or international organizations.
- Consider requests for specific safety data to support safety campaigns or activities to improve safety;

4.8 Definition of State SPIs, SPTs and Alert levels

Each regulatory department shall define the annual departmental SPIs, SPTs and Alert levels after analyzing the departmental safety data including the data received from service providers that fall under their oversight responsibility. They shall monitor and measure the departmental safety performance on monthly basis. The SPIs, SPTs and Alert levels, thus defined, shall be communicated to SMD and SMD shall define the State SPIs, SPTs, Alert levels. The State level SPIs, SPTs and Alert levels shall be communicated with SSP implementation team by the SMD. The process for definition of SPIs, SPTs and Alert levels has been attached in Appendix 4.

4.9 Data protection

Data is key to the success of any safety system, it is therefore imperative, for both the improvement of safety and for the protection those providing safety data, that it is not misused.

All regulatory departments and Safety Management Division shall ensure that all possible measures are put in place to prevent the misuse of safety data and information as per CAR 19 Chapter 5 and Appendix 3.

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Chapter 5

STATE SAFETY ASSURANCE

5.1 General

The CAAN provides safety assurance through oversight and surveillance activities on service providers and the internal review of its regulatory and administrative processes.

5.2 Safety oversight

The CAAN safety oversight system includes processes for the initial approval and continued surveillance of its service providers to assure compliance with national regulations established in accordance with ICAO SARPs. The initial approval, authorization, certification or designation of a service provider includes acceptance of the organization's SMS implementation plan. The CAAN conducts surveillance through audits and inspections to assure that an adequate level of regulatory compliance is maintained by its service providers and that their respective aviation-related activities are performed safely. The CAAN surveillance obligations also include the acceptance of an SMS implemented by service providers as well as the periodic assessment of SMS performance.

Support to service providers during implementation of CAR for SMS establishes a progressive approach evaluating the level of maturity of implementation. Whilst all existing service providers should have completed the implementation, immature or new service providers will continue to require support in developing and implementing an acceptable SMS.

All Service providers requiring to implement an SMS shall implement the SMS that is acceptable to CAAN (CAR-19, Para. 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8 and 4.1.9). In Nepal, the acceptable level of SMS implementation shall be 60% at minimum. CAAN shall stop the operations of organizations having SMS implementation percentage below the minimum acceptable level.

CAAN may impose sanctions for the organizations achieving SMS implementation percentage above 60% to 75%. The implementation percentage shall be calculated according to the Para. 1.9 of Appendix 5. CAAN shall gradually implement the SMS implementation criteria in all service providers, initially starting from the organizations listed below:

a. an approved training organization, in accordance with Personnel Licensing Requirement, that is exposed to safety risks related to aircraft operations during the provision of its services;

b. a certified operator of aeroplanes or helicopters authorized to conduct commercial air transport, in accordance with Flight Operations Requirement (Aeroplane) part I or Flight Operations Requirement (Helicopters), Section II

c. an approved maintenance organization providing services to operators of aeroplanes or helicopters engaged in commercial air transport.

Normally, CAAN shall carry out surveillance activities annually and follow up as and when required. Also, CAAN shall develop Risk Based Surveillance Programme considering the safety risk factors of service providers and establish the surveillance frequency. The number of the frequency of surveillance shall be varied on the basis of risk factor exposed to the organization.

Safety oversight of different technical areas shall be carried out by respective regulatory departments and detailed oversight procedures of the technical areas shall be included in the regulatory departmental respective documents.

The oversight of SMS of service providers shall be the responsibility of Safety Management Division and concerned regulatory departments. After oversight activities, SMD shall forward all type of oversight reports to the regulatory department oversighting the service providers for the departmental safety management including SDCPS, for determining risks profiles of the organization and for any other actions, if required.

Safety Management Division shall perform organizational level SMS audit of service providers. SMD may also carry out unscheduled inspection as well if the exposed level of risk of organization demands the immediate inspection. While carrying out the routine audit SMD shall review the service providers' SMS and also its effectiveness at managing risk. The audit shall be carried out in accordance to the SMS Audit Procedures as attached in Appendix 5.

5.3 Human Resource Requirement for Oversight

Each regulatory department and Safety Management Division shall calculate the human resource requirement for the departments and division using the standard departmental or divisional methods. The ICAO iSTARS's 'Manpower User Guide' may also be used for the purpose of human resource requirement calculation.

Chapter 6

STATE SAFETY PROMOTION

6.1 General

Safety promotion involves the establishment of internal as well as external processes by the CAAN to provide or facilitate safety training, communication and dissemination of safety information. The effective internal and, where appropriate, external dissemination and coordination of SSP operational strategies, harmonized SMS requirements and oversight activities of the service providers is essential to the success of the SSP.

6.2 Safety training

The CAAN is responsible for developing, delivering and maintaining an internal safety training programme for all personnel involved in SSP related duties.

The overall training programme of the CAAN is prepared every fiscal year by the HRD in accordance to the Regulatory Technical Personnel Training Policy; Program and Plan, 2021. The ASSRD, respective departments and divisions under it shall develop their own training plan and programme and implement it. Such regulatory departmental and divisional training plan and program shall be added in CAAN's annual training programme by HRD. All inspectors' training records are maintained by the respective departments and SMD.

The SMD also arranges Safety management training or workshop as required in collaboration with stakeholders. The SMD aims at arranging training on SSP Implementation on a regular basis. It organizes safety campaigns in collaboration with stakeholders and international organizations as well.

The HRD shall:

• Working with ASSRD, identify and agree the safety training needs for all staff;
• Develop and support the delivery of the safety courses as included in training programme prepared in coordination with ASSRD appropriate to the CAAN requirements:

The detailed SSP training syllabus has been attached in Appendix 19 and SMS training syllabus has been included in SMS Implementation Guidance Material, CAAN.

SSP, SMS and other Safety Management related trainings shall be provided by the qualified instructors/trainers.

A. SSP Instructors/Trainers: The minimum qualifications of Instructors/Trainer for SSP trainings shall be:

     I.   An extensive knowledge and experience of State Safety Programme (SSP) Implementation and completed appropriate SSP Implementation training;

    II.   An extensive knowledge of Safety Management System (SMS) Implementation and completed appropriate SMS Implementation training;

    III.   Knowledge and experience on State Safety Oversight System including audit technique course;

    IV.   Training and experience on Aircraft Accident and Incident Investigation;

    V.   At least, one refresher training on SSP received within the past twenty-four calendar months.

    VI.   Updated on the Safety Management processes and procedures contained in latest National and International documents.

    VII.   Appropriate Train the Trainer (TOT) / Instructor Course received.

    VIII.   Experience in the aviation field for at least ten years;

B. SMS Instructors/Trainers: CAAN shall ensure that service providers provide the SMS trainings to staff by the qualified Instructors/Trainer. The minimum qualifications of SMS Instructor/Trainer shall be as follows:

Instructor/Trainer to be developed within organization/state

    I.   An extensive knowledge and experience of safety management systems (SMS) Implementation and completed appropriate SMS Implementation training;

    II.   At least, one refresher training of SMS received within the past twenty-four calendar months.

    III.   Updated on the Safety Management processes and procedures contained latest National and International documents.

    IV.   Appropriate Train the Trainer (TOT) / Instructor Course received.

    V.   Worked in the aviation field for at least five years, and had broad aviation operational knowledge; and

    VI.   At least, one SMS class conducted in the presence of CAAN Safety Management Inspector with satisfactory remarks.

Note 1: Such SMS Instructor/Trainer shall take prior permission from Safety Management Division, CAAN before conducting SMS training in other organization.

Note 2: SMS Instructor's Competency Assessment Tool to be followed by CAAN Safety Management Inspector to assess the competency of SMS Instructor/trainer has been attached in appendix 18.

CAAN inspectors being primarily involved in the oversight of SMS implementation of service providers, having Train the Trainer (TOT) / Instructor Course, are automatically considered as SMS Instructors/Trainers.

C. Other Safety Management related courses Instructors/Trainers: The instructors/trainers qualified for SSP or SMS trainings having extensive knowledge and experience on the related course (Aircraft Accident Incident Investigation, Safety Investigation, Root Cause Analysis, Human Factors, Aviation Audit Technique and others SSP and SMS related advanced (specialized) courses) shall be qualified for the instructors/trainers of other safety management related trainings.

Instructors/Trainers for SMS developed internally can be authorized by the organizations whereas the Instructors/Trainers for SSP and other Safety Management related courses shall be authorized by DG CAAN.

Instructors/Trainers to be hired from outside of State:
• The Instructor/Trainer shall have received Instructor/Trainer authorization/certification issued or recognized by relevant regulatory body.

6.3 Safety Communication

6.3.1 Internal Communication and Dissemination of Safety Information

CAAN shall develop a mechanism for the consolidation of safety information by the ASSRD. The SSP documentation of Nepal, safety/enforcement policies and procedures and safety data consolidated from all aviation sectors shall be shared among all regulators and service providers. All relevant safety documents shall be made available in CAAN website www.caanepal.gov.np.

6.3.2 External Communication and Dissemination of Safety Information In addition to a structured approach to internal communications, it is essential that external communications are also coordinated to:

• Inform stakeholders about the SSP, introduce SSP concepts and encourage safety culture;

• Support and encourage stakeholder implementation;

• Develop two-way communication processes to communicate and exchange safety related information;

• Support the development of safety assurance, including data collection, management, analysis and sharing;

• Support safety promotion.

The CAAN has facilitated external safety promotion by promoting awareness of safety risks and facilitating the sharing and exchange of safety information with the aviation community.

- The NAST meetings form a platform for exchange of safety data and information between SMS implementers and regulator. The internal as well as external communications are carried out via nast@caanepal.gov.np and (or) smd.caanepal @gmail .com
- The CAAN also actively participates in ICAO regional and global meetings or conferences, and facilitates industries participation in those safety forums.
    The CAAN, when appropriate, aggregates data and share safety information with service providers, the general public and/or other States and organizations. There are three primary outputs which support the exchange of safety data:
- CAAN publications: These include Nepal Aviation Safety Plan, Aviation Safety Report, Newsletters, Safety pamphlets and posters. Additional material may be developed and published as necessary.
- Response to ad-hoc requests: If used responsibly, safety data can be used to reinforce safety improvement campaigns and activities. Requests should be carefully considered and data be de-identified before release to avoid personal or commercial damage.
- CAAN actions: These include the review of legislation, regulation, AICs etc.; reviewing and agreeing levels of safety performance for the State and service providers and providing input to safety initiatives by other States and/or international organizations such as ICAO, IATA, ACI or CANSO.

6.4 Developing a safety culture

In addition to functional training, the successful implementation of SSP will also require changes in behaviour for both CAAN and stakeholders to support the transition from a compliance-based regulation to performance-based oversight.

Communication through behaviour is often more powerful than other forms of communication and is particularly important when there is a need to change the culture of an organisation. This should be considered in the provision of all types of training and support.

It is important to recognise the need for the DGCA to adopt and exhibit new behaviours both internally and especially when dealing with external stakeholders. This will facilitate the adoption of a safety culture.

All safety oversight departments shall:

- Actively promote the development of safety culture across all staff;
- Exhibit and seek to promote a safety culture during all routine communications with service providers and other bodies;
- Where engaged in routine oversight, surveillance or inspection programmes, shall assess the effectiveness of service providers' SMS through the safety culture of its staff.

The SMD, during routine audits or any other occasion, shall:

Assess the development of the safety culture of all service providers and, where feasible, conduct activities at a State level to further develop it. The reports from the CAAN safety oversight departments on the matter shall also be taken into consideration during the assessment.

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Appendix- 1: Organizational   Structure of Regulatory Functions
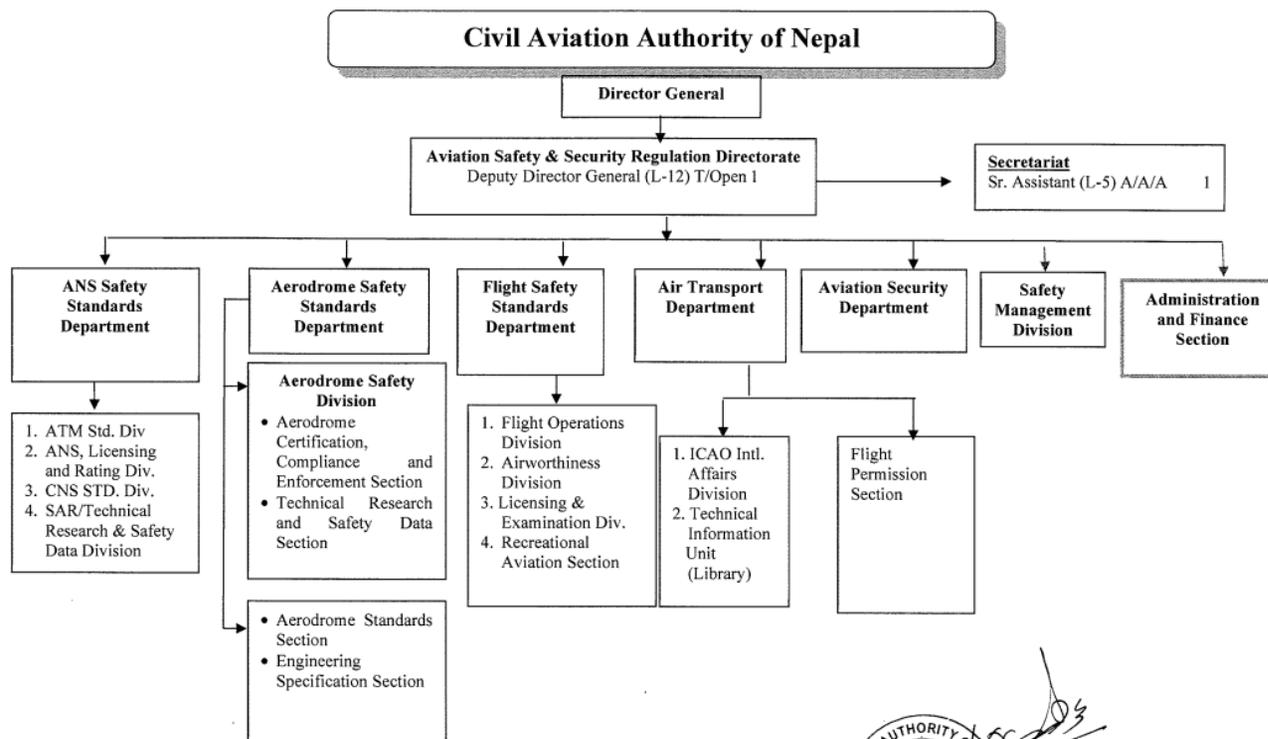
ASSR Directorate

Appendix 2: SSP GAP Analysis Checklist

Number	Question	Component	Status (Yes/No/Partial)
1.1-01	Has [State] established a national aviation legislative framework that addresses the proactive management of safety in the State?	State Safety Policy, Objectives and Resources	
1.2-01	Has [State] identified the organization that is responsible for coordinating the maintenance and implementation of the SSP?	State Safety Policy, Objectives and Resources	
1.2-02	Has [State] established an SSP coordination group responsible for the implementation and maintenance of the SSP?	State Safety Policy, Objectives and Resources	
1.2-03	Has [State] identified, defined and documented the State requirements, obligations, functions and activities regarding the establishment and maintenance of the SSP?	State Safety Policy, Objectives and Resources	
1.2-19	Has [State] assessed the organizational structure to determine if any changes are needed to support the implementation and maintenance of the SSP?	State Safety Policy, Objectives and Resources	
1.2-04	Does State have an SSP implementation plan in place, which includes the timing and sequencing of key tasks and responsibilities?	State Safety Policy, Objectives and Resources	
1.2-05	Is there a documented statement about the provision of the necessary resources for the implementation and maintenance of the SSP?	State Safety Policy, Objectives and Resources	
1.2-06	Are the organizations involved in the implementation and maintenance of the SSP provided with the necessary resources?	State Safety Policy, Objectives and Resources	
1.2-07	Has [State] defined the specific activities and responsibilities related to the management of safety in the State for each aviation authority?	State Safety Policy, Objectives and Resources	
1.2-09	Does the head of organization responsible for the implementation	State Safety Policy,	

	and maintenance of the SSP coordinate the activities of the different State aviation organizations under the SSP?	Objectives and Resources	
1.2-10	Has [State] established a safety policy?	State Safety Policy, Objectives and Resources	
1.2-11	Is [State] safety policy endorsed by the State aviation authorities?	State Safety Policy, Objectives and Resources	
1.2-12	Is [State] safety policy reviewed periodically?	State Safety Policy, Objectives and Resources	
1.2-13	Is [State] safety policy communicated to the employees in all [State] aviation organizations with the intent that they are made aware of their individual safety responsibilities?	State Safety Policy, Objectives and Resources	
1.2-14	Has the [State] initiated the SSP documentation to describe the structure of the SSP and associated programmes, how the various components work together as well as the roles of the different State aviation authorities?	State Safety Policy, Objectives and Resources	
1.2-15	Has the SSP documentation been completed, approved and communicated/ made accessible to all stake holders?	State Safety Policy, Objectives and Resources	
1.2-16	Does [State] have a means of documentation that ensures appropriate storage, archiving, protection and retrieval of all documents relating to SSP activities?	State Safety Policy, Objectives and Resources	
1.2-17	Does the [State] have a periodic internal review mechanism to assure the continuing improvement and effectiveness of its SSP?	State Safety Assurance	
1.2-18	Does the State periodically review specific operating regulations, guidance material and implementation policies to ensure they remain relevant and appropriate?	State Safety Policy, Objectives and Resources	
1.3-01	Has [State] established an independent accident and incident investigation process the sole objective of which is the prevention of accidents and incidents, and not the apportioning of blame or liability?	State Safety Risk Management	
1.3-02	Is the organization/authority for accident investigation functionally	State Safety Risk	

	independent. (See Manual of Aircraft Accident and Incident Investigation Doc 9756, paragraph 2.1)?	Management	
1.4-04	Does the enforcement policy specify the conditions and circumstances under which SPs with an SMS are allowed to deal with, resolve events involving certain safety issues internally, within the context of SMS and to the satisfaction of the State authority?	State Safety Policy, Objectives and Resources	
1.4-05	Does the SSP enforcement policy include provision to prevent the use or disclosure of safety data for purposes other than safety improvement?	State Safety Policy, Objectives and Resources	
1.4-06	Does the SSP enforcement policy include provision to protect the sources of information obtained from voluntary incident reporting systems?	State Safety Policy, Objectives and Resources	
1.5-01	Has the State provided guidance to the industry on the initial review and acceptance of a service provider's SMS?	State Safety Policy, Objectives and Resources	
1.5-02	Has the State established inspector procedures for the initial review and acceptance of a service provider's SMS?	State Safety Policy, Objectives and Resources	
2.1-01	Has the State promulgated harmonised regulations to require service providers to implement a SMS?	State Safety Risk Management	
2.1-02	Are these SMS requirements and related guidance materials periodically reviewed to ensure they remain relevant and appropriate to the service providers?	State Safety Risk Management	
2.2-01	Has [State] accepted individual service provider's safety performance indicators and their respective target levels?	State Safety Risk Management	
2.2-02	Are the accepted safety performance indicators appropriate to the individual service provider's specific operational context?	State Safety Risk Management	
2.2-03	Does the State monitor the safety performance of the service provider?	State Safety Assurance	
2.2-04	Have the international general aviation (IGA) operators implemented SMS in accordance with Annex 19?	State Safety Risk	

		Management	
2.2-05	Have all the approved training organizations in the State, in accordance with Annex 1, implemented SMS?	State Safety Risk Management	
2.2-06	Have all the operators of aeroplanes or helicopters, in the State, authorized to conduct international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, implemented SMS?	State Safety Risk Management	
2.2-07	Have all the approved maintenance organizations, in the State, providing services to operators of aeroplanes or helicopters engaged in international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, implemented SMS?	State Safety Risk Management	
2.2-08	Have all the approved organizations, in the State, responsible for the type design or manufacture of aircraft, engines or propellers in accordance with Annex 8, implemented SMS?	State Safety Risk Management	
2.2-09	Have all the approved organizations, in the State, responsible for the air traffic services (ATS) providers in accordance with Annex 11 implemented SMS?	State Safety Risk Management	
2.2-10	Have all the approved organizations, in the State, responsible for the operators of certified aerodromes in accordance with Annex 14, Volume I, implemented SMS?	State Safety Risk Management	
2.3-01	Has [State] assigned or delegated the task of analyzing the safety data and safety information from the SDCPS and associated safety databases to appropriately trained and qualified personnel?	State Safety Risk Management	
2.3-02	Has the State established a process for the assessment of safety risks?	State Safety Risk Management	
2.3-03	Has the State established a process for the mitigation of safety risks?	State Safety Risk Management	
3.1-02	Has the State established a process for the initial review and acceptance of individual service providers' SMS?	State Safety Risk Management	

3.1-03	Has State established procedures for the review of individual service providers' safety performance indicators and their relevant target levels?	State Safety Risk Management	
3.1-04	Does the State's surveillance programme include an assessment of the effectiveness of the service provider's SMS?	State Safety Assurance	
3.1-05	Does the State's SMS monitoring programme include review of service provider's hazard identification and safety risk assessment processes?	State Safety Assurance	
3.1-06	Does the State's SMS monitoring programme include a periodic review of service provider's safety performance indicators and associated target levels to ensure they remain acceptable to the State?	State Safety Assurance	
3.2-01	Has the State established a Safety Data Collection and Processing System (SDCPS) to capture, store, aggregate and enahble the analysis of safety data and safety information?	State Safety Risk Management	
3.2-02	Has the State established a voluntary safety reporting system to collect safety data and safety information not captured by mandatory safety reporting systems?	State Safety Risk Management	
3.2-03	Has [State] established and maintained a process to analyse the safety data and safety information from the SDCPS and associated safety databases?	State Safety Risk Management	
3.2-04	Has [State] established an acceptable level of safety performance (ALoSP) as defined by selected safety performance indicators with corresponding target levels as appropriate?	State Safety Assurance	
3.2-06	Does the State have a mechanism for periodic monitoring of the SSP safety performance indicators to assure that corrective or follow up actions are taken for any undesirable trends, or if safety performance targets are not achieved?	State Safety Assurance	
3.3-01	Has [State] developed a risk-based surveillance programme to prioritize inspections, audits and surveys towards those areas of greater safety concern or need?	State Safety Assurance	
3.3-02	Is the prioritization of inspections and audits associated with the analysis of relevant internal/ external safety or quality data?	State Safety Assurance	
4.1-06	Has State identified the competencies required to perform the activities as part of the implementation and operation of the SSP?	State Safety Policy, Objectives and Resources	

4.1-07	Has [State] updated existing job descriptions to include safety management competencies and activities related to SSP implementation and maintenance?	State Safety Policy, Objectives and Resources	
4.1-02	Has [State] developed and approved an SSP training plan for the personnel involved in the implementation and maintenance of the SSP?	State Safety Policy, Objectives and Resources	
4.1-03	Does the State maintain a mechanism for the consolidation, communication and sharing of safety information amongst its authorities involved in the SSP?	State Safety Promotion	
4.1-05	Has the State established formal communication channels between the members of the SSP Coordination Group (State entities involved in implementing and maintaining the SSP)?	State Safety Promotion	
4.2-01	Does the State promote sharing and exchange of safety information with and amongst its service providers?	State Safety Promotion	
4.2-02	Does the State regulatory authority participate in regional and global aviation safety information sharing and exchange, and facilitate the participation of their respective service providers?	State Safety Promotion	
4.2-05	Has the State established safety promotion channels and media to support the promotion of a positive safety culture?	State Safety Promotion	
4.2-06	Does the State assess the effectiveness of its safety promotion channels and media to ensure they are appropriate to convey each message to its targeted audience?	State Safety Promotion	

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Appendix 3: SSP Implementation Plan Checklist

1. Phase I Implementation Plan:

In this phase, the legislative requirement, other initial frameworks and the initial plan and draft of SSP implementation shall be ensured. Focus shall be given for the establishment of SSP foundation.

S.No.	Element	Milestones	Deliverables
1	1.2	Identify the Accountable Executive for the SSP	
2	1.2	Establish a national-level group to develop the SSP implementation plan and ensure the coordinated participation of other related organizations to the SSP	
3	1.2, 4.1	Develop, implement and communicate a State safety policy Statement.	
4	1.2, 3.2	Identify, define and document the requirements, responsibilities and accountabilities regarding the establishment and maintenance of the SSP	
5	1.1	Development of Procedure Manual of Safety Management functions.	
6	1.3	Develop and establish the mechanisms to ensure an independent accident and incident investigation process	
7	4.1	Develop initial training materials and programme about SSP and SMS concepts for all staff.	
8	4.1	Develop a training programme on key components of an SSP and SMS for the staff members according to their	

		involvement within the SSP.	
9	1.4	Develop and promulgate an enforcement policy for service providers operating under an SMS environment	
10	2.1	Establish timeframe to periodically review the requirements and specific operating regulations	
11	3.2	Develop and establish the State safety library	
12.	4.1	Establish means to communicate the safety related information internally and externally	
13.	1.2	Develop SSP to describe how the components and elements of the SSP prescribed in SMM are implemented in Nepal (SSP procedures to be effective and compliant with ICAO provisions).	
14.	1.2	Perform the GAP as prescribed by ICAO Doc. 9859 (SMM)	

2. Phase II Implementation Plan:

This phase shall ensure the initial level of SSP implementation with focus on collection of Safety data/information and management of safety risk.

S.No.	Elements (ICAO Doc. 9859)	Milestones	Deliverables
1	3.2	Initial Selection of State Performance Indicators, Targets and ALoSP.	
2	3-2	Develop and establish a State mandatory and confidential hazard	

		reporting system	
3	3-2	Develop and establish a State hazard database	
4	4-1	Develop training material to staff as appropriate in hazard identification and risk management	
5	3.1	Develop the mechanisms to ensure that regulatory safety risk controls are appropriately integrated into the service providers' SMS	
6	2.2	Establish a timeframe in consultation with service providers related to the phased approach of their SMS.	
7	3.1	Develop the mechanisms to monitor that service provider's hazard identification and safety risk management processes follow established regulatory requirements	
8	3.2	Develop mechanisms to exchange safety information with service providers and/or other States as appropriate	
9	4.2	Develop and establish the means of communication to support SMS implementation among service providers, including small operators.	
10	4.2	Establish and communicate initial ALoSP	

3. **Phase III Implementation Plan:**

In this phase, the matured SSP shall be ensured for effective Safety Management in State. This phase shall ensure the effective safety data/information collection and Risk Management.

S.No.	Element (ICAO Doc. 9859)	Milestones	Deliverables
1	2.2	Develop and implement a procedure for the agreement on safety performance of individual service providers' SMS	
2	3-2	Establish means to develop safety data collection capabilities on both high and low consequence outcomes	
3	3-2	Establish means to collect information on hazards at an aggregate State level as well as at individual service provider level	
4	3-2	Implement mechanisms to exchange safety information with service providers and/or other States as appropriate	
5	2-2	First round of agreements upon safety performance indicators and targets for various service providers' SMS	
6	3-3	Establish procedures to prioritize inspections, audits and surveys, based on analysis of hazards and safety risks	
7	4-1, 4-2	Establish and communicate mature ALoSP	

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Appendix 4

Procedure for defining SPIs, SPTs and Alert Levels

D. Defining SPIs

SPIs are the parameters that provide the organization with a view of its safety performance: where it has been; where it is now; and where it is headed, in relation to safety. This picture acts as a solid and defensible foundation upon which the organization's data-driven safety decisions are made. These decisions, in turn, positively affect the organization's safety performance. The identification of SPIs shall therefore be realistic, relevant, and linked to safety objectives, regardless of their simplicity or complexity.

A more complete and realistic picture of the organization safety performance will be achieved if SPIs encompass a wide spectrum of indicators.

The two most common categories to be used by CAAN to classify its SPIs are lagging and leading.

i. Lagging Indicator

Lagging SPIs measure events that have already occurred. They are also referred to as "outcome-based SPIs".

Lagging SPIs are divided into two types:

a) low probability/high severity: outcomes such as accidents or serious incidents. The low frequency of high severity outcomes means that aggregation of data (at industry segment level or regional level) may result in more meaningful analyses. An example of this type of lagging SPI would be "number of bird strike resulting aircraft and/or engine damage".

b) high probability/low severity: outcomes that did not necessarily manifest themselves in a serious accident or incident, these are sometimes also referred to as precursor indicators. SPIs for high probability/low severity outcomes are primarily used to monitor specific safety issues and measure the effectiveness of existing safety risk mitigations. An example of this type of precursor SPI would be "number of bird radar detections", which indicates the level of bird activity rather than the amount of actual bird strikes.

Leading Indicator:

Leading SPIs measure processes and inputs being implemented to improve or maintain safety. These are also known as "activity or process SPIs" as they monitor and measure conditions that have the potential to lead to or contribute to a specific outcome.

Examples of leading SPIs driving the development of organizational capabilities for proactive safety performance management include such things as "percentage of staff who have successfully completed safety training on time" or "frequency of bird scaring activities".

Leading SPIs may also inform the organization about how their operation copes with change, including changes in its operating environment. The focus will be either on anticipating weaknesses and vulnerabilities as a result of the change, or monitoring the performance after a change. An example of an SPI to monitor a change in operations would be "percentage of sites that have implemented procedure X".

E. **Defining SPTs**

Safety performance targets (SPTs) define short-term and medium-term safety performance management desired achievements. They act as "milestones" that provide confidence that the organization is on track to achieving its safety objectives and provide a measurable way of verifying the effectiveness of safety performance management activities. SPT setting shall take into consideration factors such as the prevailing level of safety risk, safety risk tolerability, as well as expectations regarding the safety of the particular aviation sector. The setting of SPTs shall be determined after considering what is realistically achievable for the associated aviation sector and recent performance of the particular SPI, where historical trend data is available.

CAAN normally adopts the SPT setting approach by establishing general high level safety objectives with aligned SPIs and then identifying reasonable levels of improvements after a baseline safety performance has been established. These levels of improvements in comparison to previous year shall be based on specific targets (e.g. percentage decrease or increase) or simply the achievement of a positive trend. Another approach which can also be applied when the safety objectives are SMART is to have the safety targets act as milestones to achieving the safety objectives.

F. **Setting Alert Levels (Trigger values)**

An Alert (trigger) is an established level or criteria value that serves to trigger (start) an evaluation, decision, adjustment or remedial action related to the particular indicator. Triggers provide early warnings which enable decision makers to make informed safety decisions, and thus improve safety performance.

The method to be used for setting out-of-limits trigger criteria for SPTs is the use of the population standard deviation (STDEVP) principle. This method derives the standard deviation (SD) value based on the preceding historical data points of a given safety indicator. The SD value plus the average (mean) value of the historical data set forms the basic trigger value for the next monitoring period. The SD principle (a basic statistical function) sets the trigger level

criteria based on actual historical performance of the given indicator (data set), including its volatility (data point fluctuations).

Procedure to follow for setting alert levels and calculating Standard Deviation (SD) values.

Alert 1= Average value of previous year + 1 Standard Deviation (AV_0 + 1 SD)

Alert 2 = Average value of previous year + 2 Standard Deviation (AV_0 + 2 SD)

Alert 3 = Average value of previous year + 3 Standard Deviation (AV_0 + 3 SD)

Standard Deviation (SD) = $\sigma = \sqrt{\dfrac{\Sigma\,(x-\mu)^2}{N}}$ *(for manual calculation)*

Standard Deviation (SD) "= STDEVP" (formula for excel worksheet)

where "x" is the value of each data point; "N" is the number of data points and "μ" is the average value of all the data points.

Following format shall be used while measuring and monitoring safety performance of CAAN.

Safety Performance Indicators (SPIs)	Safety Performance Targets (SPTs) for preceding year	Preceding year rate of average.	Current Year Alert Setting			Current Year Target
			Alert 1	Alert 2	Alert 3	

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Appendix 5: SMS Audit Procedure

Chapter 1
Introduction

1.1 General

In accordance with CAR-19, the service provider organizations that need to implement SMS include:

a) approved training organizations in accordance with Personnel Licensing Requirement (PELR) that are exposed to safety risks related to aircraft operations during the provision of their services;

b) Certified operators of Aeroplane or Helicopter authorized to conduct commercial air transport, in accordance with Flight Operations Requirement (Aeroplane) ((FOR (A)) and Flight Operations Requirement (Helicopter) ((FOR (H)), respectively;

Note.— When maintenance activities are not conducted by an approved maintenance organization in accordance with NACR chapter D.1 or NCAR 145, but under an equivalent system as in NCAR part M, they are included in the scope of the operator's SMS.

c) approved maintenance organization providing services to operators of aeroplane or helicopter engaged in commercial air transport, in accordance with FOR A and H, Section II, respectively;

d) an organization responsible for the type design of aircraft, in accordance with NCAR, shall be made acceptable to CAAN.

e) Air Traffic Services (ATS) providers in accordance with CAR- 11; and

f) operators of certified aerodromes in accordance with CAR- 14.

It is the responsibility of the CAAN (ASSRD) to ensure that the services providers (listed above) implement an SMS and their safety performance indicators and targets are acceptable to authority. Hence, audits and inspections need to be conducted to ensure the compliance and verify performance of the SMS processes and procedures to be at the acceptable level.

The audits are also meant to serve the purpose of maintaining standardized oversight and continuous monitoring of service providers with regards to their implementation of SMS throughout the organization through adoption of globally applicable safety standards and

procedures. This responsibility of conducting safety management system (SMS) audits rests with the Safety Management Division under the ASSRD in CAAN.

Besides serving the above - mentioned purpose, the audits also help to strengthen the SSP in Nepal by ensuring the compilation of Standard and uniformly processed data from all service providers. This manual outlines general Safety Management audit procedures and serves as the principal guidance document for the conduct of Safety Management audits carried out by the Safety Management Division.

Normally, routine SMS audit shall be conducted at the designated base of the service providers where their majority of operational activities take place.

Note: The policy and procedures outlined in this manual are also applicable to inspections conducted at times other than during audits. Although such inspections may be less formal in planning and execution, the principles outlined in this manual remain; this is especially true as it pertains to using checklists, documenting findings, obtaining corrective actions and following up to ensure that such corrective actions are effective.

1.2 Authority

Audits and Inspections are conducted pursuant to Rule 84 of the CAAN Civil Aviation Regulations 2058.

1.3 Delegation of Authority

Inspectors receive the authority to conduct inspections through delegation of authority issued by the Director General in accordance to 84 (2) of the Regulation.

1.4 Audit Principles

The following internationally accepted auditing principles shall be followed.

a) Transparency and disclosure: Audits conducted as per the procedure detailed shall be fully transparent and open for examination by the concerned. There shall be full disclosure of final audit reports. The reports shall provide sufficient information for service providers to understand the Non-compliance, non- adherence, observations and/or deficiencies.

b) Timeliness: Results of the audit shall be provided and submitted on a timely basis in accordance with a predetermined schedule for the preparation and submission of audit reports. Service provider shall submit their comments, action plan and all documentation required for the audit/inspection process within the prescribed time.

c) All-inclusiveness: The scope of the safety oversight audit program includes the relevant aviation legislation, civil aviation rules, operating regulation, prescribed standards and procedures, directives and circulars and all safety related provisions. This also includes the guidance material and related procedure and practices prescribed by the ICAO in documents.

d) Systematic together with consistency and objectivity: Safety oversight audit shall be conducted in a systematic, consistent and objective manner.

e) Fairness: Audit is to be conducted in a manner such that service providers are given every opportunity to monitor, comment on and respond to the audit process and to do so within the established time frame.

f) Confidentiality: Information collected during audits shall remain confidential and shall not be disclosed or used for malicious purposes.

1.5 Audit Types

1.5.1 The type of audit is determined by the circumstances under which the audit is convened and includes the following:

    a) Routine audit (on-site)
    b) Special-purpose audit
    c) Remote Audit

a) Routine Audit (on - site)

    A routine audit is conducted for the purpose of determining an organization's overall level of compliance with regulatory requirements together with its performance regarding those requirements. It is carried out annually.

b) Special-Purpose Audit

    A special-purpose audit is one conducted to respond to circumstances other than those requiring a routine audit. For example, a special-purpose audit may be convened with little or no notice arising from safety concerns. A "no-notice" audit may preclude certain team-member activities and responsibilities that would be normally associated with other types of audits.

c) Remote Audit

    In case of any circumstance facing civil aviation, if it is not possible or desirable for the auditor to conduct an on-site audit, Civil Aviation Authority of Nepal may perform remote audits as an alternative method of continued surveillance of the service providing organizations. Thus, Remote audit refers to the use of ICT to gather information, interview an auditee, etc., when "face-to-face" methods are not possible or desired. There are a variety of reasons that an auditor may not be present due to safety

constraints, pandemics, travel restrictions or any such reason. Remote SMS audit shall be conducted according to the Remote Audit Procedure, 2020.

1.6 Audit Team and information to auditee

An audit team shall normally consist of two SM inspectors but this number may vary as and when required depending upon the scope, size, function and complexity of the task. Prior to the commencement of an audit, the service provider to be audited will be informed about the audit at least 7 working days prior to audit date through the audit agenda. There will be one Auditor-in-lead and Auditor -Member(s) in the audit team composition. The format of Audit Agenda is attached in appendix 11.

1.7 Audit/inspection plan

SMD shall develop an annual audit/inspection plan and carry out the activities in line with the plan. The inspection plan shall be approved by DGCA and uploaded in CAAN official website under Safety Management Division > documents.

1.8. Audit Checklist

The checklist for carrying out SM audit provides a systematic approach for the conduct of inspection and is designed to identify specific items for review without limiting the inspector's ability to explore other areas where warranted. In some cases, the checklist may be limited as a result of the size and complexity of their respective aviation activities. Nevertheless, depending on on-site situations, the team leader may increase or decrease the checklist to be used.

SMS audit checklist shall be developed following the principle of Present, Suitable, Operating and Effective (PSOE) and get approved by DGCA before implementing.

The checklist for SM audit typically evaluates:

- Management Commitment
- Safety Accountabilities and Responsibilities
- Appointment of key personnel
- Emergency Response Planning
- SMS manual and other operational records.
- Safety Reporting System and Proactive Hazard Identification
- Risk Assessment and Mitigation
- Safety Performance Monitoring and Measurement
- Management of Change
- Continuous Improvement of SMS
- Training and Education
- Safety Communication

The checklist shall be reviewed periodically to keep it always updated. The Checklist shall be communicated to the operators before conduction of audit or immediately after doing any changes in the existing ones.

The checklist shall be maintained separately in SMD and a sample copy of the checklist has been attached to Appendix 10.

1.9 Audit findings

An SMS audit is measuring the auditee's effectiveness in complying with standards. Audit results with many audit findings ostensibly indicate to management that the safety team is not doing their job.

Audit results shall be analyzed in terms with their gravity rather than with mere numbers. Well-meaning and hardworking safety managers may still have audit findings because the scope of an SMS programme is organization-wide and not simply an audit of the safety department. An SMS audit involves the organization as a whole.

Finding shall be recorded with a clear indication of how and why they were made. Each of the checklist items shall be evaluated as either compliant or non-compliant. The compliant items are further classified as 'Present', 'Suitable', 'Operating' and 'Effective'.

For the initial certification assessment all processes (markers) shall be Present and Suitable, if not, certification shall not be granted. During other assessments than initial certification, if a marker (process) is found not to be operating a finding shall be raised.

After the audit is completed, the audit team shall review all findings and recommendations to ensure that they reflect objectivity and are comprehensive.

It is preferable for audit findings to be recorded whilst the situation is clear in the mind of both the auditor and the auditee. This will save time later trying to completely recall the situation from memory and ensure that the final report is accurate and objective. At this point all findings based upon the deficiencies established in the evaluation phase (with supporting evidence), need to be completed in draft form ready for presentation in the closing meeting.

If auditors feel that there are minor safety issues but they do not qualify for findings shall be recorded as observations and included in audit report.

It is the responsibility of the audit team to document, supported by evidences, the findings and recommendations in a clear, concise manner and prepare the final report.

No information related to the audit of the service provider shall be provided to the media.

After conduction of audit, auditor shall compile the checklists of all auditors and conclude the compliance or performance level of each marker. Then after, an audit draft report shall be prepared within 7 working days from the day of last day of audit and communicated to the auditee for comment. Auditee shall provide comment on draft report within 3 working days. If there are any valid comments from auditee such comments shall be incorporated in the report and final audit report shall be provided to auditee within next 4 working days.

Audit report shall, at least, include a summary of overall implementation status of SMS in organization, list of audit findings and observations and analysis of audit result reflecting the implementation percentage of SMS as a whole and components and elements wise percentages.

While calculating the SMS implementation percentage following formula shall be used:

$$\text{SMS Implementation Percentage} =$$

$$.10 \times \frac{\Sigma \begin{array}{c} operating\ and\ effective\ markers \\ of\ component\ no.1 \end{array}}{\Sigma \begin{array}{c} applicable\ markers \\ of\ component\ no.1 \end{array}} + .40 \times \frac{\Sigma \begin{array}{c} operating\ and\ effective\ markers \\ of\ componet\ no.2 \end{array}}{\Sigma \begin{array}{c} applicable\ markers \\ of\ component\ no.2 \end{array}} +$$

$$.30 \times \frac{\Sigma \begin{array}{c} operating\ and\ effective\ markers \\ of\ component\ no.3 \end{array}}{\Sigma \begin{array}{c} applicable\ markers \\ of\ component\ no.3 \end{array}} + .20 \times \frac{\Sigma \begin{array}{c} operating\ and\ effective\ markers \\ of\ componet\ no.4 \end{array}}{\Sigma \begin{array}{c} applicable\ markers\ of \\ component\ no.4 \end{array}}$$

1.10 Corrective Action Plan (CAP)

Auditee shall prepare the CAP of each along with the Root Cause Analysis for each finding in the format specified. Auditee shall submit the CAP within 30 days of audit report received. One copy of audit report shall also be communicated to auditee in email as well therefore, the day the audit report is dispatched from CAAN is considered as the day of audit report received by auditee. The format of CAP is attached in appendix 12.

1.11. Correspondence/communication with Auditee

All the communication regarding safety management shall be done with Safety Manager in written or through the formal email address of safety department provided by auditee. If there

is no safety manager, during the vacant period, such communications shall be done with Accountable Manager.

1.12 Follow up

Follow up audit shall be done after 3 months of CAP submission date to monitor the implementation of CAP. Follow up could be physical or remote. For remote follow up, progress reports of each CAP with evidence shall be requested and evaluated. If the auditor feels the provided evidences need to be physically inspected, a physical follow shall be done. After follow up and evaluation of implementation of CAP, if required, audit report shall be updated and communicated to the auditee.

Chapter 2

Audit Process

2.1 Audit Phases

The audit process consists of the following three distinct phases:

(a) pre-audit;
(b) physical audit and;
(c) post-audit;

(a) Pre – Audit

Planning and preparation phase of the audit is called pre-audit. It is meant for the purpose of ensuring that the objectives of the audit are achieved effectively and efficiently. This phase includes the planning of resources such as human and financial together with time needed for the completion of the audit. Normally, the time schedule and the resources required depend on the scope of the proposed audit and shall be determined by the Safety Management Division. In case of routine audits, the auditees, through their safety managers, shall be notified about the audit at least seven working days before the audit date. Along with the notification, audit programme, including the areas to be inspected on a given date, shall be provided to the auditee.

Prior to conducting physical audit, it is important for the audit team to have an overview of the safety management system of the auditee and their trends and practices in existence. Information gathered during the pre-audit phase will assist the audit team in

a)   identifying the specific areas, systems and activities to be inspected;
b)   selecting the appropriate inspection checklists;
c)   determining if the scope of the audit is adequate; and

d)   finalising the audit plan.

The auditees shall send the latest version of their SMS manual and other associated documents to the address: nast@caanepal.gov.np after receiving the audit notice.

Postponement of audit, if necessitated by unforeseen circumstances, shall be notified to the auditee verbally or in written and fresh audit date shall be provided.

(b) Physical Audit

Physical audit shall be carried out on the date notified to the auditee during the pre-audit phase. The audit shall be systematic and objective and all audit findings shall be recorded on prescribed standardized form/checklist with reference made to the relevant Rules, Regulations, Standards, Recommended Practices and/or guidance materials for which the finding was made.

Entry Meeting

The audit shall commence with entry meeting. The purpose of this meeting is to provide an opportunity for all attendees to understand the audit process, scope and clarify any problems or conditions that may arise. Entry meeting minute format is attached in Appendix 13.

Auditing

The audit team shall test and observe whether the items in the respective checklist are being complied with and desired outcome is being produced. Evidence may be gathered through:

- Interviews with employees and managers
- Review of SMS documentation;
- Visual indicators of safety promotion;
- Discussions with top management; and
- Visits to different units, organization and facilities.

Closing meeting

Debriefing shall usually be done during the closing meeting held after carrying out physical audit. The accountable executive, the safety manager, Departmental heads and other safety personnel shall be present during the debriefing. During the closing meeting, the audit team shall brief on observations made during the audit and possible findings and recommendations of the team. Closing meeting minute format is attached in Appendix 14.

Post-Audit

Post-audit activities include completion of administrative details and production of the audit report. Final report shall be sent to the auditee within the above specified time period. Service provider shall submit corrective action plan within 30 days upon receipt of SM audit report.

Chapter- 3

Safety Management (SM) Inspector

1.7 SM Inspector Qualifications

1. Training and extensive knowledge of SMS and its implementation;
2. Training and extensive knowledge of SSP and its implementation;
3. Aviation Auditor/Safety oversight/Inspector training;
4. Human Factors in Aviation Training
5. Train the Trainer/Training Instructor Course
6. Training and knowledge on Aircraft Accident and Incident Investigation or Safety Investigation Techniques
7. Working experience in service provider's safety related roles for at least 5 years or working experience in safety oversight role for at least 3 years.

SM inspectors shall have refresher/recurrent trainings on SSP implementation, SMS implementation and Aviation Audit/Safety Oversight/inspector in every 2 years.

SM inspector's duties and responsibilities are attached to appendix 9.

1.8 Inspector Credential, Validity and Currency

1. CAAN Inspector Identification (Inspector Credential), that identifies the Inspector as an "Authorized Person" shall be issued by Director General of CAAN for the purpose to perform the duties and exercise the powers;

2. An Inspector must display his/her credential on an outer garment to be permitted entry into airport secured areas, and while working in these areas;

3. The validity of the credential will be two years of issuance of such credential;

4. If the credential is lost, stolen, or damaged, the Inspector should report the to the Chief of Safety Management Division immediately;

5. To maintain the currency, the inspector must conduct at least 20 % of total number of annual audits conducted including at least one from each area (eg, Air Operators, Certified Aerodrome Operators etc.) to be audited by SMD;

6. The format of credential of inspector is as follows:

2) Front side of credential
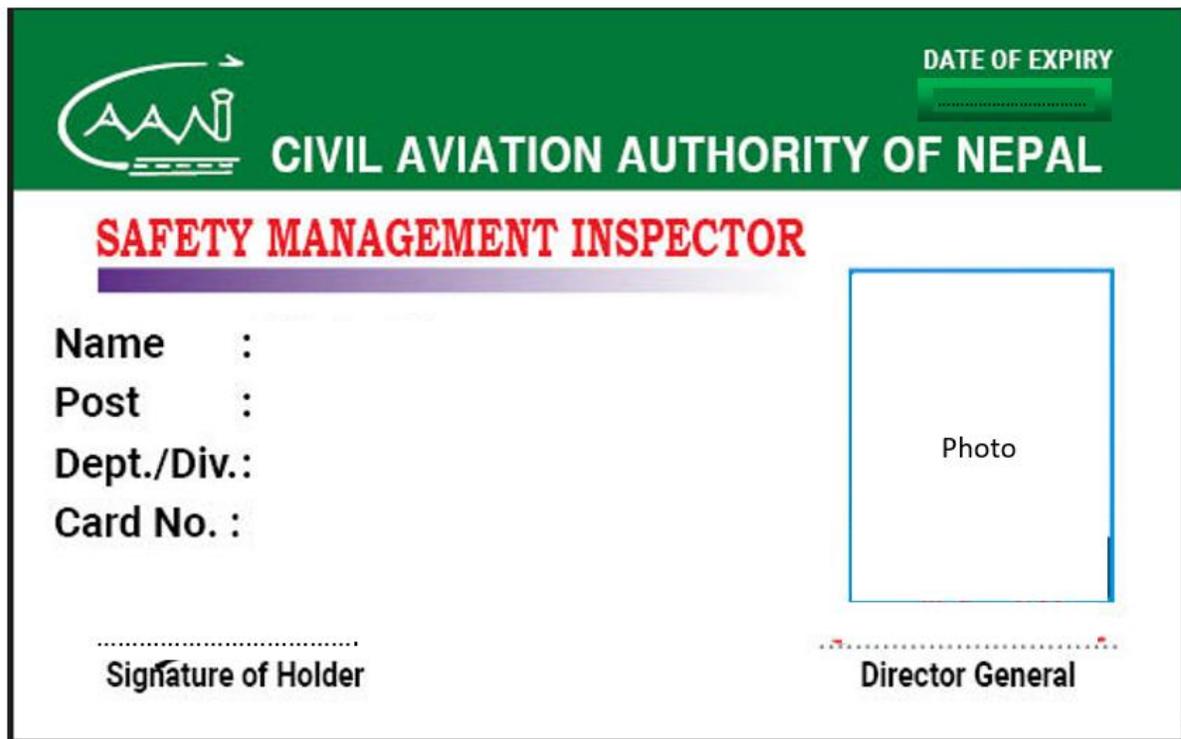
	DATE OF EXPIRY
CIVIL AVIATION AUTHORITY OF NEPAL	

SAFETY MANAGEMENT INSPECTOR

Name   :
Post   :
Dept./Div.:
Card No. :

Photo

....
Signature of Holder

....
Director General

Back side of credential
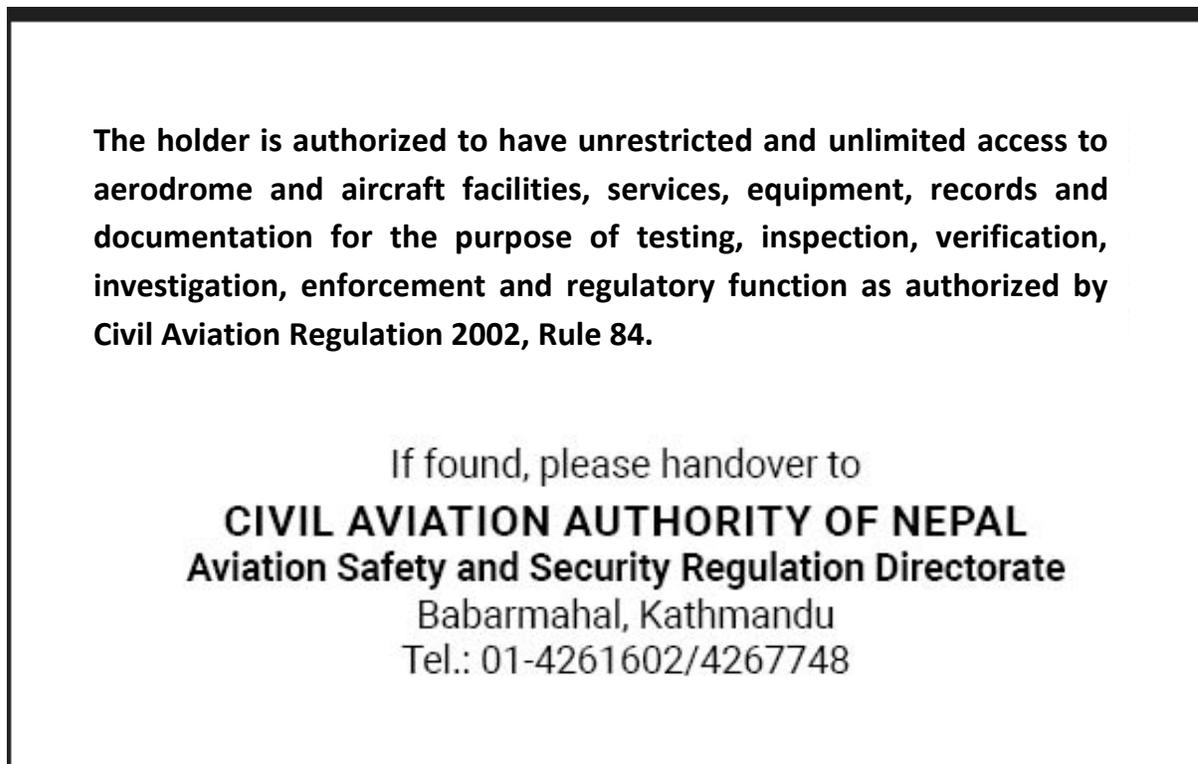
The holder is authorized to have unrestricted and unlimited access to aerodrome and aircraft facilities, services, equipment, records and documentation for the purpose of testing, inspection, verification, investigation, enforcement and regulatory function as authorized by Civil Aviation Regulation 2002, Rule 84.

If found, please handover to
CIVIL AVIATION AUTHORITY OF NEPAL
Aviation Safety and Security Regulation Directorate
Babarmahal, Kathmandu
Tel.: 01-4261602/4267748

1.9 Requirements regarding OJT (on the job trainee)

a. After achieving qualifications mentioned in 1.7, having familiarization of office, demonstrating sufficient knowledge on required safety management related documents and participating in an actual audit as an observer candidate may be appointed as OJT for SM inspector under the supervision of one of the working SM inspectors.

b. The candidate shall participate in at least 20 % of total number of annual audits conducted including at least one from each area (eg, Air Operators, Certified Aerodrome Operators etc.) to be audited by SMD;

c. The candidate shall have consolidated knowledge on audit planning including coordination with auditee, writing meeting minutes, writing audit agenda, understanding and implementing audit checklist, preparing audit reports etc.

d. When the supervisor finds the candidate is capable for performing all audit processes and can carry out SMS audit independently; he/she shall go through an assessment (oral or/and written) and if the result is found satisfactory, the supervisor may recommend to the Director General for granting full authorization to the OJT candidate.

e. After approval of the authorization from DGCA, OJT shall be entitled to exercise the full authorization of SM inspector.

OJT recommendation form is included in Appendix 20.

_____

Appendix- 6

Corrective Action Plan (CAP) Implementation Tracking Form

Name of Operator:

SMS Implementation Percentage:

Audit Date:

CAP Submission Deadline:

CAP Submitted date:

Finding No.	Finding details	Categorization	Corrective Action Plan (CAP) (Submitted by Operator)	Timeline for Implementation (short term and long term)	1st Month CAP Implementation progress				2nd Month CAP Implementation progress				3rd Month CAP Implementation progress			
					Description of CAP implementation	List of Evidences (if any)	CAA Remarks *(to be filled by CAA)*	Status of Finding *(to be filled by CAA)*	Description of CAP implementation	List of Evidences (if any)	CAA Remarks *(to be filled by CAA)*	Status of Finding *(to be filled by CAA)*	Description of CAP implementation	List of Evidences (if any)	CAA Remarks *(to be filled by CAA)*	Status of Finding *(to be filled by CAA)*

Appendix-7

Process for Management of Change (MOC)

Management of Change (MOC)

MOC REF:

1.   What is the change?

Describe the change including timescales

2.Who?

Detail who is responsible to implement the change and who needs to be involved

3   Define the major components or activities of the change

This will help you identify the main risks of each component or activity that will be populated in table 7 below

4   Who does the change affect?

Consider who it affects individuals, departments and organisations? Who needs to be notified of the change?

5   What is the impact of the change?

Consider why the change is taking place and the impact on the organisation and its processes and procedures. Will it impact the safety culture? Does it meet all regulatory requirements?

6   What follow up action is needed? (assurance)

Consider how the change will be communicated and whether additional activities such as audits are needed during the change and after the change has taken place

1. Hazard Registration Sheet
    List all the hazards identified for from the change in the hazard registration sheet.

S.No.	Reported Date	Area/ Operation/ Equipment	Hazard (H)				Unsafe Event (UE) /Top Event (Reported/Projected)	Consequence (C) (Reported/ projected)	Initial Hazard Priority Level (H/M/L)	Recommended Action		Status	Follow up	Remarks
			Description of Hazard	Threats of Hazard	Hazard Code	Source of information				Corrective Action (yes/No)	SRM Action (Yes/ No)			

2. Safety Risk assessment and Mitigation

Conduct safety risk assessment and mitigation for each identified hazard.

a. Perform Bow-Tie Analysis

Date:
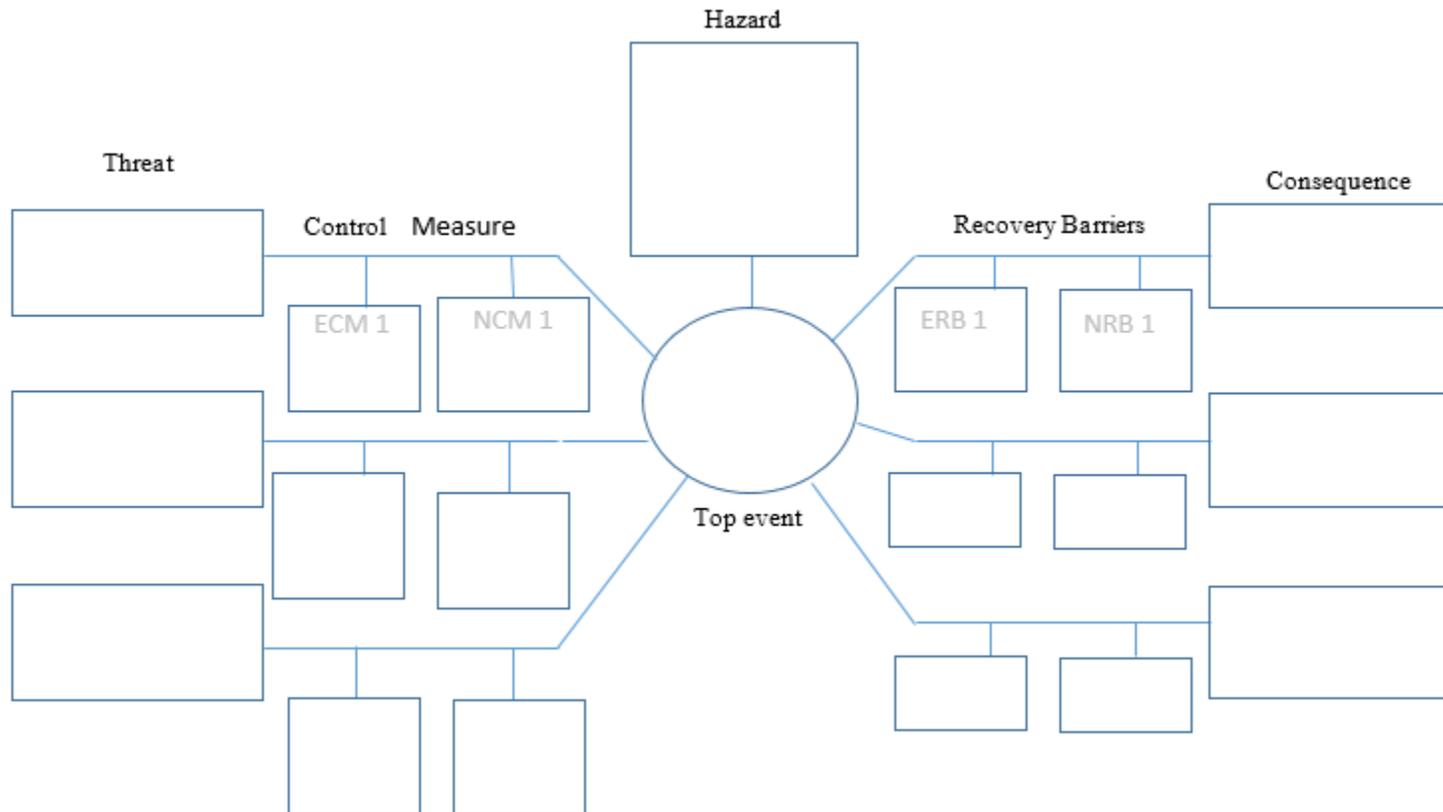
3. Risk Profile

(fill the gaps in order from a to o following the steps as described in Safety Risk Management Procedure Manual, CAAN)

Current Risk				Resultant Risk							
Existing Control Measures (ECM) (b)		Existing Recovery Barriers (ERB) (c)		New Control Measures (NCM) (i)				New Recovery Barriers (NRB) (j)			
Type of Measures	BSV	Type of Barriers	BSV	Type of Measures	BSV	Action by whom and When		Type of Barrier	BSV	Action by whom and when	
Sub- total BSV-		Sub-total BSV-		Sub- total BSV-				Sub-total BSV-			
Total BSV (d) -				Total BSV(k) -							
Consolidated Barrier Strength Value (CBSV)(L) = (d+k)											
Risk Probability (e)				**Risk Probability (m)**							
Risk Severity (a)				**Risk Severity (h)**							
Risk Index (f)				**Risk Index (n)**							
Risk Tolerability(g)				**Risk Tolerability (o)**							

4. Acceptance of risk

All the required processes of Safety Risk Management have been duly followed and the resultant risk is accepted.	
Dept. / Div. Chief *(Dept. / Div. Chief can accept the level of risk if the resultant risk tolerability is Acceptable).*	Name: Signature:
Accountable Manager *(Management's decision is required to accept the level of risk if the resultant risk tolerability is Tolerable).*	Name: Signature:

5. Barrier Register

Once the Safety risks assessment and mitigation process is completed and Master risk register is updated, maintain the Barrier register and follow up the effectiveness of barriers to ensure the barriers and working and effective.

S.No.	Barrier Description	Hazard Code	SRM Date	Barrier Type (Control/Recovery)	Barrier Strength	Implementation Status	Action by whom and when	Follow - up date

6. Master Risk Register

Once the Safety risks assessment and mitigation process is completed, update the Master Risk register and follow up the risk level.

S.No.	Hazard Code	SRM Date	Consequence(s)	Existing Risk				Resultant Risk				Status		Follow up
				Severity	Probability	Risk Index	Risk Tolerability	Severity	Probability	Risk Index	Risk Tolerability	Open	Close/date	

Appendix -8

Checklist for Evaluation of

Safety Risk Management (SRM)

Submitted by Operators

This checklist has been prepared in accordance with the process mentioned in Safety Risk Management Procedure Manual, CAAN.

S.No.	Particulars	Status	Remarks
1.	All possible safety hazards have been appropriately identified.	*Yes* *No*	
2.	The safety risk of each hazard has been mitigated individually.	*Yes* *No*	
3.	A defined process has been used to determine the probability and severity of consequence of the identified hazards to ensure the risk is appropriately analyzed and assessed.	*Yes* *No*	
4.	A defined process has been used to determine the robustness of the controls and mitigation measures to ensure the applied controls and mitigation measures are effective.	*Yes* *No*	
5.	Timeline and allocation of responsibility have been clearly mentioned to implement and follow up the controls and mitigation measures.	*Yes* *No*	
6.	Key stakeholders of the change are appropriately identified and involved in the Management of Change process.	*Yes* *No*	
7.	The implementation and follow up process of controls and mitigation measures are clearly mentioned.	*Yes* *No.*	
8.	The resultant risk has been accepted by the appropriate level of management.	*Yes* *No*	
9.	All the measures and barriers applied for the management of risk are ensured for effective implementation before introduction of the change.	*Yes* *No*	

Checked by   Verified by

Name and Signature   *Name and Signature*

Date: Date:

_____

Appendix 9

Duties and Responsibilities of Safety Management (SM) Inspector

As an SM inspector your duties and responsibilities shall be as follows:

1. Develop/review/update the annual SMS surveillance/oversight plan and programme;
2. Conduct surveillance/oversight activities in accordance with the approved SMS Surveillance/oversight plan;
3. Conduct non-scheduled/random surveillance/oversight activities to address the immediate risk exposed to the service providers;
4. Accept SMS and other safety management related manuals developed by service provider;
5. Develop/review/update Safety Management Related documents, as required;
6. Conduct/participate in the State level Safety Risk Management activities, as required;
7. Develop/review/update training plan and programme for SM Inspector;
8. Participate in the Safety Management related domestic and (or) international training, workshops, meetings and seminars;
9. Conduct/participate in the safety investigation or accident and incidents investigations conducted by CAAN or Nepal Government, as required;
10. Accept the Corrective Action Plans (CAPs) of service providers and track the implementation for effective resolution of safety issues;
11. Take enforcement actions according to the Aviation Enforcement Policy and Procedure Manual, CAAN;
12. Perform any other duties and responsibilities assigned by Director General of CAAN.

……………………….   …………………………….....
Accepted by   Director
Name: Administration Department

Appendix 10

CAAN SMS Evaluation Tool

CAAN SMS Evaluation Tool

(Sample only)

Organization:	CAA Acceptance Reference (s):
Name and Signature:	**Position:**
SMS Manual Revision:	**Date of acceptance:**

To be completed and signed by the Safety Manager or Accountable Manager

For CAA use only

CAAN inspector (s)			
Department/Division			
Date of assessment:			

SMS Evaluation Tool Instructions for use

This tool evaluates the effectiveness of the SMS at five different maturity levels based on the ICAO SMS Framework. An introductory paragraph is given for each element along with a cross reference to Civil Aviation Requirement for Safety Management (CAR-19). For each of the elements there are a series of markers that are assessed for their Non-compliance (NC), presence (P), suitability (S), operating (O) and being effective (E) using the definitions below. The CAAN shall sample the evidence and assess each marker.

Definitions for individual markers

Present (P):   There is evidence that the 'marker' is clearly visible and is documented within the organisation's SMS or MS Documentation.

Suitable (S):   The marker is suitable based on the size, nature, complexity and the inherent risk in the activity

Operating (O):   There is evidence that the marker is in use and an output is being produced

Effective (E):   There is evidence that the marker is effectively achieving the desired outcome and has a positive safety impact

Non-compliant (NC):   There is evidence that the 'marker' is not documented within the organisation's SMS or MS Documentation.

Some markers are annotated with a 'C' that reflects the organisation's safety culture and 'HF' that reflects a Human Factors related marker

1.0   SAFETY POLICY AND OBJECTIVES

1.1   MANAGEMENT COMMITMEN. *(Ref. CAR-19, Appendix 2, para. 1.1)*

The organisation should define its safety policy which should be in accordance with international and national requirements, and which shall be signed by the Accountable Executive/Accountable Manager of the organisation. The safety policy should reflect organisational commitments regarding safety, including a clear statement about the provision of the necessary human and financial resources for its implementation and be communicated, with visible endorsement, throughout the organisation. The safety policy should include the safety reporting procedures and clearly indicate which types of behaviours are unacceptable and shall include the conditions under which disciplinary action would not apply. The safety policy should be periodically reviewed to ensure it remains relevant and appropriate to the organisation.

S.No.	Regulatory requirement references	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
1.1.1	CAR- 19 Appendix 2, para 1.1.1 (a)	Does the Safety policy reflect organization commitment regarding safety, including the promotion of a positive safety culture?	P S O E NC	• Management Commitment is reflected in safety policy. • All managers are familiar with the key elements of safety policy • Evidence of senior management participation in safety meetings, trainings, conferences etc. • Feedback from safety culture surveys on policy	
1.1.2	CAR- 19 Appendix 2, para 1.1.1 (b)	Does the safety policy include a clear statement to provide appropriate resources for implementation of safety policy?	P S O E NC	• Policy includes a statement to provide appropriate resources. • Review available resources including personnel, equipment and finance. • Review planned manpower vs actual manpower.	

1.1.3	CAR- 19 Appendix 2, para 1.1.1 (f)	Has the Safety policy been communicated with visible endorsement to all staff and stakeholders?	P S O E NC	• There is a means in place for the communication of the safety policy. • Review how safety policy is communicated including contracted organizations. • Safety policy is clearly visible. • Question managers and staff regarding knowledge of the safety policy.	
1.1.4C	CAR- 19 Appendix 2, para 1.1.1 (c)	Does the safety policy actively encourage safety reporting?	P S O E NC	• Review safety policy explicitly encourages safety reporting. • Question all levels of personnel; • Number and variety of safety reports; • Do people know what to report? • Staff are reporting their own errors and events they are involved in (events where no-one was watching).	
1.1.5C	CAR- 19 Appendix 2, para 1.1.1 (d)	Have the Just culture Policy and principles been adopted that clearly identifies acceptable and unacceptable behaviours?	P S O E NC	• Safety Policy clearly indicate which types of behaviors are acceptable and unacceptable. • Review the enforcement policy and procedure. • How has it been promoted? • Evidence where just culture principles have been applied following an event or during investigation. • Talk to staff to check they are aware and trust the just culture policy and principles.	
1.1.6	CAR- 19	Does the Safety policy include a commitment towards achieving the	P	• The commitment is well documented in policy. • Signature by Accountable Executive/Manager. • Talked to AM to assess their knowledge and understanding	

	Appendix 2, para 1.1.1	highest safety standards observing all applicable national and international legal requirements, standards and best practices?	S O E NC	of the policy. • Interview staff to determine how readable and understandable it is. • Review the level of standards (Processes and procedures) implemented in the organization.	
1.1.7	CAR- 19 Appendix 2, para 1.1.1 (g)	Is the safety policy reviewed periodically to ensure it remains current?	P S O E NC	• Provision of revision in documentation. • Evidence of periodic review of policy.	

1.2 SAFETY ACCOUNTABILITY AND RESPONSIBILITIES. *(Ref. CAR-19, Appendix 2, Para. 1.2)*

The organisation shall identify the accountable executive who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the organisation, for the implementation and maintenance of the SMS. The organisation shall also identify the safety accountabilities of all members of senior management, irrespective of other functions, as well as employees, with respect to the safety performance of the SMS. Safety responsibilities, accountabilities and authorities shall be documented and communicated throughout the organisation, and shall include a definition of the levels of management with authority to make decisions regarding safety risk tolerability.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
1.2.1	CAR-19, Appendix 2, Para.	Does the organization identify Accountable Manager who, irrespective of other functions, is accountable on behalf of the organization, for the	P S O E NC	• An Accountable Manager has been appointed with full responsibility and ultimate accountability for SMS. • Evidence that Accountable Manager has ability to access funding for relevant safety improvements and control of resources.	

	1.2 (a)	implementation and maintenance of SMS and has control of the financial and human resources required for the implementation of an effective SMS?		• Evidence of decision making on unacceptable risks • SMS activities are being carried out in a timely and resourcefully. • Evidence of activities being stopped due to unacceptable level of risks.	
1.2.2	CAR-19, Appendix 2, Para. 1.2 (b), (c) and (d)	Does organization clearly define and communicate safety authorities, responsibilities of senior management other members of management and rest of the employees throughout the organization?	P S O E NC	• Documented organizational diagram clearly depicting the direct lines of safety accountability of key safety positions. • Safety accountabilities, authorities and responsibilities are defined and documented throughout the organisation. • JDs including safety accountabilities, responsibilities and authorities have been issued and accepted by respective personnel. • Question managers and staff regarding their roles and responsibilities. • Confirm AM and senior managers are aware of the organisation's safety performance and its significant risks. • Evidence of managers having safety related performance targets.	
1.2.3	CAR-19, Appendix 2, Para. 1.2 (e)	Does the organization clearly define the levels of management with authority to make decision regarding safety risk	P S O E NC	• Definition of levels of Management authorised to accept risk. • Evidence of appropriate risk mitigation, action and ownership. • Evidence of acceptance of risk is aligned	

		tolerability?		with authorisations.	

1.3 APPOINTMENT OF KEY PERSONNEL. (*Ref. CAR- 19, Appendix 2, Para. 1.3)*

The organisation shall identify a safety manager to be the responsible individual and focal point for the implementation and maintenance of an effective SMS. In addition, the safety committees that support the Accountable Manager and the Safety Manager in delivering an effective SMS should be defined and documented.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
1.3.1	CAR-19, Appendix 2, Para. 1.3, AOCR Appendix 4 (f)	Has the organization appointed a competent safety manager who is responsible for the implementation and maintenance of the SMS?	P S O E NC	• A safety manager has been appointed. • Appropriate safety training received. • Evidence of maintained competency.	
1.3.2	CAR-19, Appendix 2, Para. 1.2 (b), (c) and (d)	Do the Safety Accountability, Responsibilities and Authorities of Safety Manager clearly mentioned?	P S O E NC	• Safety Manager's Accountability, Responsibilities and Authorities in documentation. • Review the direct reporting with AM. • Review the communication access to regarding safety issues. • Review safety manager role	

				including credibility and status. • Review how the safety manager gets access to internal and external safety information. • Review safety manager workload / allocated time to fulfil role. • Check the authority for safety manager for conducting SMS activities such as safety investigation, analysis, auditing, safety meeting attendance and promotion.	
1.3.3	CAR-19, Appendix 2, Para. 1.1.1 (b)	Does the organization allocate sufficient resources to manage the SMS including, but not limited to, competent staff for safety investigation, analysis, auditing and promotion?	P S O E NC	• Evidence of allocation of budget for SM activities. • Review planned and actual level of staffing for safety management processes like audit, AIG, promotion etc; • Evidence that organisation is not under resourced • Review of report action and closure timescales.	
1.3.4	ICAO Doc. 9859 Para. 9.3.6.7, 9.3.6.8,	Are there appropriate safety committees(s) that discuss and address safety risks and	P S	• Review safety committees (SRB and SAG) structure; • Review Terms of Reference	

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
	9.3.6.9	compliance issues and includes the Accountable Manager and the heads of functional areas?	O E NC	for each committee. • Review meeting attendance level, minutes and actions. • Interview with SRB/SAG members in random to ensure that people have come to the meeting prepared, participate and willing to challenge.	
1.3.5	CAR-19, Appendix 2, Para. 4.1.1, 4.1.2	Are the staff in key safety roles kept current through additional training and attendance at conferences and seminars?	P S O E NC	• Review the evidence of attendance in additional training/seminars etc.	

1.4   CO-ORDINATION OF EMERGENCY RESPONSE PLANNING *(Ref. CAR-19, Appendix 2, Para. 1.4)*

The organisation shall ensure that an emergency response plan that provides for the orderly and efficient transition from normal to emergency operations and the return to normal operations, is properly coordinated with the emergency response plans of those organisations it must interface with during the provision of its service.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks

1.4.1	CAR-19, Appendix 2, Para. 1.4	Does the organization maintain an emergency response plan (ERP), which is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its products and services?	P S O E NC	• An appropriate emergency response plan (ERP) has been developed and distributed that defines the procedures, roles, responsibilities and actions of the various organisations and key personnel. • Review how co-ordination with other organisations is planned. • Review how ERP is distributed and where copies are held. • Review how ERP and changes are communicated. • Talk to key personnel and check they have access to the ERP • Different types of foreseeable emergencies have been considered.	
1.4.2	CAR-19, Appendix 2, Para. 1.4	Is the ERP periodically tested for the adequacy of the plan and the results reviewed to improve its effectiveness?	P S O E NC	• There is clear provision in documentation about periodic testing of ERP with standard process of conduction with timelines. • Review when plan was last reviewed and tested and any actions taken as a result • Review whole process of testing.	

1.5   SMS DOCUMENTATION *(Ref. CAR-19, Appendix 2, Para 1.5)*

The organization shall develop and maintain SMS documentation describing the safety policy and objectives, the SMS requirements, the SMS processes and procedures, the accountabilities, responsibilities and authorities for processes and procedures, and the SMS outputs. The organization shall incorporate the SMS documentation into its existing organization documentation, or shall develop and maintain a safety management system manual (SMSM) to communicate its approach to the management of safety throughout the organization.

	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
1.5.1	CAR-19, Appendix 2, Para 1.5.1	Does the organization maintain an SMS documentation describing the safety policy and objectives, the SMS requirements, the SMS processes and procedures, the accountabilities, responsibilities and authorities for processes and procedures, and the SMS outputs?	P S O E NC	• The SMS documentation includes the policies, processes and procedures that describe the organization's safety management system. • Review the SMS Documentation and amendment procedures • SMS manual includes a System description including SMS interfaces, Gap analysis and implementation plan.	
1.5.2	CAR-19, Appendix 2, Para 1.5.2	The organization has maintained and well communicated SMS operational records as part of its SMS documentation and they are readily available to all relevant personnel.	P S O E NC	• Review the supporting SMS documentation ie (hazard logs, meeting minutes, safety performance reports, risk assessments. System description, Gap analysis, implementation plan etc). • Check how safety records are stored and version controlled. • Data protection and confidentiality rules have been defined and are consistently applied. • There is clear communication channel of SMS documentation and records defined and documented. • Check for easy access to the documentation of the relevant personnel. • Check appropriate staff are aware of the documentation and records and its	

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
				control processes and procedures.	
1.5.3	ICAO Doc. 9859 Para 9.7.5.1	Are the Safety Management Processes integrated into exiting organizational manuals and in implementation?	P S O E NC	• Check integration of Safety management processes with other org. manuals, eg, the cross references to other documents and procedures. • Check the implementation of SMS processes in other departments and its integration with Safety dept. • Check staff know SMS processes.	
1.5.4	FOR (A), Para 3.3.6 FOR(H), Para 1.3.5	Is there a documentation system in place to maintain the standardization and uniformity among the organizational documents?	P S O E NC	• Review the Organizational Documentation system. • Review the implementation of processes and procedures while developing documents in organization consistently.	

2.0   SAFETY RISK MANAGEMENT

2.1   HAZARD IDENTIFICATION *(Ref. CAR-19 Appendix 2 Para2.1)*

The organization shall develop and maintain a formal process that ensures that aviation safety hazards are identified. This should include the investigation of incidents and accidents to identify potential hazards. Hazard identification shall be based on a combination of reactive and proactive methods of safety data collection.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks

2.1.1	CAR-19, Appendix 2, Para 2.1.1 ICAO Doc.9859 Para 9.4.4.3, 9.4.4.5	Is there a reporting system including confidential system that captures errors, hazards and occurrences that is simple to use and accessible to all staff?	P S O E NC	• Reporting System (in addition to MORs) is available to all personnel and is in use; • Staff are familiar with it; • Review how data protection and confidentiality is achieved. • Assess volume, content and quality of reports. • Check availability to contracted organizations and customers to make reports.
2.1.2	CAR-19, Appendix 2, Para 2.1.1 ICAO Doc.9859 Para 9.4.4.7 and 8	Are Safety reports prioritized and acted on in a timely manner.	P S O E NC	• Review the reports prioritization and acting on process. • Evidence of acknowledgement of reports • Check the time taken to act on safety reports.
2.1.3	CAR-19, Appendix 2, Para 2.1.2	Is there a process that defines how reactive and proactive hazard identification gathered from multiple sources (internal and external)?	P S O E NC	• Review how hazards are identified, analysed and recorded. • Review internal and external sources of hazards such as Safety reports, audits, safety surveys, Investigation, Training, brainstorming, Medical reports, carriage of dangerous goods etc. • Hazards related to third party Organisations. • Hazards being identified from FDAP (for the organizations requiring FDAP).

| 2.1.4 | ICAO Doc.9859 Para 9.4.5 | Are the Safety investigations carried out by appropriately trained personnel to identify root causes (why it happened, not just what happened)? | P S O E NC | • Review methods for carrying out investigations including identification of human and organizational factors.
• Evidence of root cause analysis, Evidence of rectification action.
• Sample recent investigations.
• Review competency level of Investigators involved and training obtained including HF and investigation techniques. | |

2.2   RISK ASSESSMENT AND MITIGATION *(Ref. CAR-19 Appendix 2 Para. 2.2)*

The organization shall develop and maintain a formal process that ensures analysis, assessment and control of safety risks in operations are to an acceptable level.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
2.2.1	CAR-19, Appendix 2, Para 2.2 ICAO Doc. 9859 Para 9.4.6.1	Is there a process for the management of risk that includes the analysis, assessment of the risk associated with identified hazards, expressed in terms of likelihood and severity?	P S O E NC	• Sample an identified hazard and how it is processed/ recorded in hazard log; • Review risk classification scheme and procedures; • Review layout of risk register • Process defines who can accept what level of risk • Risk register being reviewed and updated.	

2.2.2	CAR-19, Appendix 2, Para 2.2. ICAO Doc. 9859 Para 9.4.6.1	Are there criteria for evaluating the level of risk the organization is willing to accept and risk assessments and ratings are appropriately justified.	P S O E NC	• Risk tolerability criteria defined; • Risk classifications are clearly defined and applied consistently. • Defined process for determination of severity and probability. • Management sign off is in line with defined authorities	
2.2.3	CAR-19, Appendix 2, Para 2.2 Doc.9859 Para. 9.4.6.8	Does the organization have a process in place to decide and apply appropriate and effective mitigation and risk controls and where applicable corrective actions?	P S O E NC	• Review the process to evaluation of effectiveness of risk controls and corrective actions. • Ensure the risk mitigations are practical and robust; • Do not create additional risks;	
2.2.4	CAR-19, Appendix 2, Para 2.2 ICAO Doc. 9859 Para. 9.4.6.8	Is there clearly documented timeline and allocation of responsibility to implement and follow up the Corrective actions and risk mitigation controls?	P S O E NC	• Evidence of risk mitigation measures including timeline and responsibility; • Evidence of ownership of responsibility; • evidence of corrective actions and follow up.	
2.2.5		Does the senior	P	• organizational safety performance is shared to senior	

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
	CAR-19, Appendix 2, Para 2.2 ICAO Doc. 9859 Para.	management have visibility of medium and high- risk hazards and their mitigation and controls?	S O E NC	management, safety committees • Significant risks are being reviewed and monitored by safety committees • Senior Managers are aware of the biggest risks • Senior Managers are responsible for the acceptance of medium and high risks • Review the decision taken by senior mngt.	
2.2.6	CAR-19, Appendix 2, Para 3.3.2.2	Are the State significant risks and Nepal Aviation Safety Plan (NASP) SEIs being considered and addressed as appropriate?	P S O E NC	• State risks and NASP SEIs implementation and monitoring mechanism. • Evidence of the addressing State significant risks and NASP SEIs.	

3.0 SAFETY ASSURANCE

3.1 SAFETY PERFORMANCE MONITORING AND MEASUREMENT *(Ref. CAR-19 Appendix 2 Para 3.1)*

The organization shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risks controls. The safety performance of the organization shall be verified in reference to the safety performance indicators and safety performance targets of the SMS.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
3.1.1.	CAR-19,	Have the safety objectives have established that are consistent with the safety policy and there is a means to communicate them	P S O E	• Safety objectives have been established that are consistent with the safety policy and there is a means to communicate them throughout the organization. • The safety objectives are appropriate and relevant.	

	Appendix 2, Para 1.1.2	throughout the organization?	NC	• Leads to an improvement of a positive safety culture. • They are communicated throughout the organization. • Objectives are being measured to monitor achievement through SPIs and SPTs.	
3.1.2	CAR-19, Appendix 2, Para 3.1.2	Are Safety Performance Indicators and Targets established, promulgated, analysed for trends and are being monitored?	P S O E NC	• Check the process for definition of SPIs and SPTs • Use of different types of indicators (leading and Lagging). • Are the SPIs and SPTs communicated? • Are the SPIs and SPTs being monitored and analysed for trends? • SPIs being used to identify safety issues and management actions. • Check Linkage between SPIs, SPTs and the organization objectives. • Evidence that they are being periodically reviewed.	
3.1.3	CAR-19, Appendix 2, Para 3.1.1	Are the risk mitigations and controls being audited and verified to confirm they are working and effective?	P S O E NC	• Review the Internal audit process • Evidence of controls being audited and verified for effectiveness through audits and surveys, inspection etc.) • Review the Interfaces between Compliance Monitoring and Safety • Review where risk controls have failed and subsequently changed.	

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
3.1.4	ICAO Doc. 9859 Para. 9.5.4.7, 9.5.4.8	Are the safety assurance and compliance monitoring activities fed back into the SMS process?	P S O E NC	• Review the process of sharing of compliance monitoring activities outcomes with safety. • Review the hazard identified from compliance monitoring activities outcomes. • Evidence of feeding back the outcome of audit, survey, inspection etc. into SMS SRM process.	
3.1.5	ICAO Doc. 9859 Para.4.1.6.1	Does the safety assurance take into account activities carried out in all directly contracted organisations?	P S O E NC	• Review the process of conducting safety audit of contracted organizations • Evidence of safety assurance and compliance monitoring being applied to contracted organisations / third parties.	
3.1.6	ICAO Doc. 9859 Para.5.2.2.4 5.2.2.5	Is the organization monitoring its current and future safety risks and is taking action to address them?	P S O E NC	• Review the process of identification of top risk areas, (current and future risks) • Evidences of top safety risks identified • Evidence of identified risks being addressed appropriately by the appropriate level of authority.	

3.2   THE MANAGEMENT OF CHANGE *(Ref. CAR-19, Appendix 2 Para 3.2)*

The organization shall develop and maintain a formal process to identify changes within the organization and its operation, which may affect established processes and services, to describe the arrangements to ensure safety performance before implementing changes, and to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
3.2.1	*CAR-19, Appendix*	Does the organization identify changes that have	P	• Check the documented list of changes requiring for MOC. • Review recent changes to see a formal process was used;	

	2 Para 3.2 ICAO Doc. 9859 Para. 9.5.5.2, 9.5.5.5	an impact on safety and manages any identified risks in accordance with existing safety risk management processes.	S O E NC	• Evidence of identification of all possible hazards and mitigation of risks. • Review what triggers the process. • Safety accountabilities, authorities and responsibilities are reviewed and change managed.	
3.2.2	*CAR-19, Appendix 2 Para 3.2.* *ICAO Doc. 9859 Para 9.5.5.3*	Are all key stakeholders properly identified and involved in the change management process?	P S O E NC	• Review the documented provision for stakeholder involvement. • Check the stakeholders are identified appropriately. • Review the process to ensure their participation.	

3.3   CONTINUOUS IMPROVEMENT OF THE SMS *(Ref. CAR-19, Appendix 2 Para 3.3)*

The organisation shall develop and maintain a formal process to identify the causes of substandard performance of the SMS, determine the implications of substandard performance of the SMS, determine substandard performance in operations, and eliminate or mitigate such causes.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
3.3.1	*ICAO Doc. 9859 Para 9.3.6.8*	Does the Safety Review Board or equivalent have the necessary authority to make decisions related to improvement and	P S O E	• Review the documented provisions of the Authority and responsibility of the Board. • Check the level of personnel involved in Board. • Evidence of decision making related to SMS	

		effectiveness of SMS?	NC	performance/improvement	
3.3.2	*CAR-19, Appendix 2 Para 3.3* *ICAO Doc. 9859 Para 9.5.6.1*	Is the organisation continuously monitoring and assessing its SMS processes to maintain or continuously improve the overall effectiveness of the SMS?	P S O E NC	• Lessons learnt being incorporated into SMS and operational processes; • Best practice being sought and embraced; • Surveys and assessments of organisational culture being carried out and acted upon; • Data being analysed and results shared with Safety Committees; • Evidence of Management decisions based on data analysis outputs. • Evidence of follow up actions.	
3.3.3	*ICAO Doc. 9859 Para 6.3.3, 9.5.4.3*	Is there a mechanism in place to monitor the implementation of recommendations of investigation (external and internal) and other regulatory circulars and take corrective actions if required?	P S O E NC	• Review the documented Provision in manual • Review the Evidence of list of Investigation recommendations applicable to the organization prepared. • Evidence of monitoring the implementation of recommendations. • Review the mechanism to monitor other regulatory circulars and their implementations. • Evidence of corrective actions taken after follow up.	
3.3.4	*ICAO Doc. 9859 Para 6.4.1.1, 3.2.6.2, 5.2.1.2*	Is the organization continuously participating and contributing in common safety forums/meetings?	P S O E NC	• Review the level of participation and contribution in NAST and similar type of forums/meetings. • Evidence of implementing NAST and similar type of forums/meetings' conclusions and recommendations.	

4.0   SAFETY PROMOTION

4.1   TRAINING AND EDUCATION *(Ref. CAR-19, Appendix 2, Para 4.1)*

All personnel are trained and competent to perform their SMS related duties and the training programme is monitored for its effectiveness and updated.

S.No.	Req. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
4.1.1	CAR 19, Appendix 2, Para. 4.1.1 *ICAO Doc. 9859 Para 9.6.4.1*	Is there an annual training plan/programme for SMS in place that includes initial and recurrent training? Does the training cover individual safety duties (including roles, responsibilities and accountabilities) and how the SMS operates?	P S O E NC	• Review the SMS initial and recurrent training programme including course content and delivery method. • Review the training need analysis (TNA) conducted for identifying trainings for individuals. • Training considers feedback from external occurrences, investigation reports, safety meetings, hazard reports, audits, safety data analysis, training, course evaluations etc. • Ask staff when they last received SMS training and what they remember from it.	
4.1.2	CAR 19, Appendix 2, Para. 4.1.1 *ICAO Doc. 9859 Para 9.6.4.5*	Is there a process in place to measure the effectiveness of training and to take appropriate action to improve subsequent training?	P S O E NC	• Review any training evaluation methods adopted by org. • Review the analysis of evaluations records to identifying training deficiencies. • Evidences of future training improvement. • Ask staff about their own understanding of their role in the organisation's SMS and their safety duties.	
4.1.3HF	FOR (A)	Is the competence of		• Review trainer competencies assessment methods and how the	

Para. 16.23 ICAO Doc. 9859 Para 9.6.4.5	trainers defined and assessed and appropriate remedial action taken when necessary?	P S O E NC	competence of the instructors is being assessed. • Evidences of any remedial action taken after the assessment.	

4.2 SAFETY COMMUNICATION *(Ref. CAR-19, Appendix 2 Para 4.2)*

The organisation shall develop and maintain formal means for safety communication that ensures that all personnel are fully aware of the SMS, conveys safety critical information, and explains why particular safety actions are taken and why safety procedures are introduced or changed.

S.No.	Reg. Req. Ref.	COMPLIANCE + PERFORMANCE MARKERS	Status	What to look for	CAA Remarks
4.2.1	CAR- 19, Appendix 2, Para 4.2 *ICAO Doc. 9859 Para 9.6.5.3*	Is there a defined process in place to communicate safety initiatives, strategies, significant events and Investigation outcomes which is suitable to size, nature and complexity of organization?	P S O E NC	• Review the methods in use for communication. • The effectiveness of safety communication is being reviewed. • Safety communication is easy to read and understand • Evidences of significant events, changes and investigation (external and internal) outcomes are being communicated. • Ask staff about any recent communications.	

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Appendix 11

Audit/Inspection Agenda

AUDIT AGENDA

ANNUAL SCHEDULED AUDIT- SMS		
Audit Team:	Start Audit	
	End Audit	

Day 1:

#	Time	Agenda Item	Present
1.		•	
2.		•	

Day 2:

#	Day / Time	Agenda Item	Present
1.		•	
2.		-	
3.			

Notes:

- It is requested that they provide the audit team with access to the Internet as well as the possibility of printing and photocopying.

- Both the reflected time windows and the points to be treated each day are estimates and, as such, are susceptible to be modified by audit needs or to facilitate the availability of the auditees.

- Attendees at each item on the agenda will be adapted to the needs of the audit of the requirements indicated.

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Appendix 12

Audit Findings CAP Format

CORRECTIVE ACTION PLAN (CAP) FORM

Company Name:			
Base Location:		**Date(dd-mm-yy):**	
Area/System of Interest		**Associated Finding Number:**	**File:**

Factual Review of the Findings
Identify what happened, how widespread it is, where it occurred within your operations, and what type of problem it is

See 5.1(1)

Root Cause Analysis (RCA)
State the root cause identified and the method used for RCA

See 5.1(2)

Proposed Corrective Action

1. Short Term Corrective Action

See 5.1(3)

2. Long Term Corrective Actions(Including an assessment of any induced hazards or risks associated to the implementation of the corrective action(s)

See 5.1(4)

Timeline for implementation of all Corrective Actions

See 5.1(5)

Managerial Approval/Name/Signature:	Date (dd-mm-yy):

Guidance on root cause analysis and corrective action process to address CAA Nepal findings.

5.1 Completing the Corrective Action Form

1. The purpose of the 'Factual Review of the Finding' section of the CAP Form is not to repeat the finding, but to define the scope of the problem in the organization's system. CAA Nepal expects the organization to:

   a. Identify the policy/policies, process (es), procedure(s), and practice(s) involved (that allowed the non-compliance to occur). Processes and procedures are usually established through documentation; however, also consider undocumented practices, attitudes and tolerances that may have developed. Any or all of these factors may be involved.

   b. Define the problem (see sub-section 6.1 of this document); and

   c. State how widespread/far-reaching the non-compliance is in the organization's system. This means the level to which the non-compliance affects that system:

      i. Is it isolated to one area/organizational level?; or
      ii. Does it spread or reach into other areas/organizational levels?

   Note: In explaining how widespread the problem is, don't use an output of a risk management system (e.g. a risk rating), or repeat CAA Nepal's classification of the finding severity (e.g. Minor, Moderate, Major).

2. The purpose of the 'Root Cause Analysis' section of the CAP Form is to clearly show the process the organization used and the factors it considered, to determine what caused the finding to occur. CAA Nepal expects the organization to:

   a. Name the process used for the root cause analysis;

   b. Provide the root cause analysis (you may summarize the root cause analysis on the corrective action form, as long as the full root cause analysis is attached); and

   c. Identify the root cause(s) and all contributing causes.

   Note: CAA Nepal does not prescribe or recommend any specific method to conduct root cause analysis on findings. Organizations should use root cause analysis methods suitable for the size and complexity of their organization. CAA Nepal expects organizations that have a Safety Management System to use the root cause analysis process defined in their SMS documentation.

   d. CAA Nepal does not require organizations to prepare the final product of root cause analysis with computer software (e.g. flowcharting programs). CAA Nepal will accept simpler methods (e.g. a handwritten diagram on a sheet of paper, or a digital photo of a diagram drawn on a whiteboard or brainstormed using peel and stick notes on a flipchart) as long as the information is legible and clearly shows the logical flow of the analysis.

3. The purpose of the 'Short-Term Corrective Actions' section of the CAP Form is to provide short-term solutions to address non-compliance quickly. CAA Nepal expects the organization to:

   a. Review their internal processes associated with each finding to determine if other examples of non-compliance exist; and

   b. Describe the short-term actions to address all examples of non-compliance, prioritized according to safety risk.

      Note: If you have implemented some or all short-term corrective actions before submitting the CAP, document these actions as completed in this section of the form.

4. The purpose of the 'Long-Term Corrective Actions' section of the CAP Form is to provide long-term solutions to correct problems in the system/process that led to the finding, thus preventing recurrence. CAA Nepal expects the organization to:

   a. Describe the long-term action(s) to correct the identified root cause(s), all contributing causes, and the system/process associated with the finding (see sub-section 6.3 of this document);

   b. Identify the name and position of the person(s) in the organization responsible for implementing the corrective action(s); and

      Note: The person(s) assigned this responsibility must have the necessary authority and access to resources to effectively complete the identified action(s).

   c. Explain how any potential hazards or risks from implementing the corrective action(s) are assessed, and mitigated or eliminated.

5. The purpose of the 'Timelines for Implementation of all Corrective Actions' section of the CAP Form is to identify the shortest reasonable timeframe to implement each corrective action. CAA Nepal expects the organization to:
   a. Identify timelines (day/month/year) to implement each corrective action, and the date the corrective actions will be complete (normally within 90 days of CAP acceptance, unless CAA Nepal specifies a different timeframe); and
   b. State target dates for follow-up actions to determine effectiveness of the corrective actions, within a reasonable interval from their implementation (including who in the organization is responsible to conduct follow-up).
6. The purpose of the 'Managerial Approval' section of the CAP Form is to identify the person in the organization's management structure who has the authority to commit the necessary resources to fulfill the CAP. This may be the Accountable Manager (AM), or it may be another manager when the AM has delegated responsibility for the system/process(es) subject to corrective action. CAA Nepal expects the organization to:
   a. Identify that individual by name; and

   b. Have them approve the CAP; and date their signature.

Appendix 13

Audit Entry meeting

Meeting Minute - Civil Aviation Authority of Nepal

SMS Audit Entry Meeting

Name of Operator:

Venue:

Date:

Start Time: End Time:

CAA Auditors

    1.

    2.

Attendees- Operators

1.

2.

3.

4.

5.

6.

Appendix 14:

Audit Closing Meeting

Meeting Minute – Civil Aviation Authority of Nepal

SMS Audit – Closing Meeting

Name of Operator:

Venue:

Date:

Start Time: End Time:

CAA Auditors

1.
2.
3.

Attendees

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Appendix 15

Competency Assessment of Safety Manager

COMPETENCY ASSESSMENT OF SAFETY MANAGER

(Prepared pursuant to AOCR-2012)

Name of Assessor:

Name of Assessee:

Name of organization:

Experience as safety/quality manager or risk manager (in years):

Experience in aviation field (in years):

Date:

Starting Time: Ending Time:

Place:

> *Notes:*
> - *Assessment questions shall be asked from Roles, Responsibilities, authorities and qualifications of Safety Manager (references doc. 9859).*
> - *For the easiness and consistency, there shall be expected answer for each question in the checklist. Assessor shall compare the answer given by assessee against the answer in checklist and give the score.*
> - *For each area, an average score (ranging from 0 to 10) shall be given circling the number in the given figure.*
> - *At the end of the assessment, an overall average score is determined and obtained percentage is derived.*
> - *Candidate scoring average 70 % or more in all areas (Key Roles, Responsibilities, Qualifications,and Authorities) shall be declared passed.*
> - *Candidate scoring not being able to achieve average 70 % or more in all areas (Key Roles, Responsibilities, Qualifications,and Authorities) shall be given one change for supplementary assessment.*

Sample question and Scoring:

1. How do you promote reporting culture? (*Expected Ans: following by non – punitive approach, increasing awareness, providing prompt response to reports, developing trust, communicating success stories etc.*)

Score *(circle or tick the appropriate number)*

1	2	3	4	5	6	7	8	9	10

Score Summary

S.N.	Particulars	Marks (in Percentage)
1.	Roles (average)	
2.	Responsibilities	
3.	Qualifications	
4.	Authority	

Competency Assessment of Safety Manager
(Result page)

Name of Assessee:

Name of organization:

Marks scored

S.N.	Particulars	Marks (in percentage)				
		Assessor 1	Assessor 2	Assessor 3	Assessor 4	Average
1.	Roles					
2.	Responsibilities					
3.	Qualifications					
4.	Authority					
	Total average					

Result:

Assessors

1.

2.

3.

4.

_____

Appendix 16

Office Familiarization Record Form for OJT

[To fulfill the Requirements regarding OJT (on the job trainee), after achievement of qualifications mentioned in 1.7 of Procedure Manual for Safety Management Functions, CAAN]

Name:

Division:

Date of Familiarization Visit:

Topics to be Covered during departmental familiarization (not limited to):

- *Roles/Functions of Department*
- *Organization Structure*
- *Job Description of Departmental officers*
- *Activities conducted by the Department*
- *Review of related ICAO Annexes and Documents*
- *Other Manuals/ Standard Operating Procedures*
- *Coordination and communication procedures with other departments/ divisions*

S. No.	Department		Responsible person			Remarks (If any)
			Name	Designation	Signature	
1.	Air Navigation Services Safety Standards Department (ANSSSD)					
2.	Flight Safety Standards Department (FSSD)					
3.	Aerodrome Safety Standards Department (ASSD)					

Verified By

Name:

Designation:

Appendix: 17

Note to File Form

Civil Aviation Authority of Nepal

Safety Management Division

NOTE TO FILE FORM

Interlocuter: Date:

Organization: Time:

CAAN Officer(s):

Telephone conservation   ☐   ☐   Meeting   Location: SMD, CAAN

Others (please specify):

_____

Summary of Discussion and agreements

1.
2.
3.
4.
5.

Signature (CAAN Officer):

Signature (Interlocuter):

Appendix - 18

SMS Instructor's Competency Assessment Tool

Name of Instructor:

Name of Operator:

Training Date and Time:

Training Venue:

(Note: Candidate scoring less than 80 points shall be considered as unsatisfactory for SMS Instructor)

Assessment Criteria

1. **Organization** • Opening, Body and Closing Logical Order addressing all major points) ………………	10 Points Maximum
2. **Speaking Abilities** • Tone • Volume ……………… • Voice Inflection • Pronunciation	10 Points Maximum
3. **Use of Slides, Handouts and other material** • Kept on track with content • Enhance material eg. Slide content with speaking ……………….. • Use of Handouts and other material if appropriate	10 Points Maximum
4. **Non- Verbal Communications** • Gestures • Eye Contact ……………… • Facial expressions • Using the room or locked to the podium	10 Points Maximum
5. **Topic Knowledge** • Relating to the course topic ………………	40 Points Maximum
6. **Class Management** • Encourage involvement • Correctly handles disruptions ……………… • Asked and received feedback from trainees	10 Points Maximum
7. **Time Management** • Under 5 minutes or over 10 minutes will detract ……………….	10 Points Maximum

Final Score [ ]

CAA Inspector's remark:

Name: Signature and Date: _____

Appendix - 19

SSP Training Syllabi

A. Accountable Executive and Senior Managers (1 days/ 8 hours)

The SSP training syllabus for Accountable Executives and Senior Managers of CAAN shall contain, at least, the following contents:

Module- 0

GENERAL

1. SSP legal framework in Nepal
2. Concept about SSP and SMS implementation
3. State Safety Oversight system critical Elements
4. State safety programme Overview (Framework)
5. Delegation of Safety Management functions and activities

Module - 1

STATE SAFETY POLICE, OBJECTIVES AND RESOURCES

6. Primary aviation legislation (CE-1)
7. Specific Operating Regulations (CE-2)
8. State System and Functions (CE-3)
   - i. Organizations responsible for coordinating the implementation of SSP
   - ii. SSP implementation coordination Groups
   - iii. SSP functions and Activities
   - iv. State Safety Policy
   - v. State Safety Objectives
   - vi. State Safety resources
   - vii. National Aviation Safety Plan (NASP)
   - viii. SSP Documentation
9. Qualified Technical Personnel (CE-4)
10. Technical guidance, tools and provision of safety-critical information (CE-5)
11. Accident investigation
    - i. State Level Accident investigation
    - ii. Regulatory accident investigation
12. Surveillance Obligation (CE-6)

    i.   State safety surveillance

    ii.   Prioritization of surveillance (Risks Based Surveillance) (RBS)

    iii.   Service provider organizational safety risks profiles

    iv.   Monitoring a service provider's safety performance

13. State Safety Performance

    i. Establishing ALOSP

    ii. Establishing State Safety Indicators and Targets

14. Management of Change (MOC)

_____

B. Safety Inspectors (3 days/24 hours)

The SSP training syllabus for Safety Inspectors of CAAN shall contain, at least, the following contents:

Module- 0

GENERAL

1. SSP legal framework in Nepal
2. Concept about SSP and SMS implementation
3. State Safety Oversight system critical Elements
4. State safety programme Overview (Framework)
5. Delegation of Safety Management functions and activities

Module - 1

STATE SAFETY POLICE, OBJECTIVES AND RESOURCES

6. Primary aviation legislation (CE-1)
7. Specific Operating Regulations (CE-2)
8. State System and Functions (CE-3)

    i.   Organizations responsible for coordinating the implementation of SSP

    ii.   SSP implementation coordination Groups

    iii. SSP functions and Activities

    iv. State Safety Policy

    v.   State Safety Objectives

    vi. State Safety resources

vii.   National Aviation Safety Plan (NASP)

viii.   SSP Documentation

9. Qualified Technical Personnel (CE-4)

10. Technical guidance, tools and provision of safety-critical information (CE-5)

Module 2

STATE SAFETY RISK MANAGEMENT

11. Licensing, certification, authorization and approval obligations

12. Safety management system obligations

   i.   SMS regulatory requirements

   ii.   SMS acceptance

   iii.   Acceptance of SPIs and SPTs

   iv.   one SMS across multiple service providers

   v.   Integrated management systems

13. Accident investigation

   iii.   State Level Accident investigation

   iv.   Regulatory accident investigation

14. Hazard Identification and Safety risks assessment and mitigation

   i.   State level hazard identification

   ii.   State level safety risks assessment and mitigation

   iii.   Management of Safety risks

   iv.   Exercise on risks assessment and mitigation

Module 3

STATE SAFETY ASSURANCE

15. Surveillance Obligation (CE-6)

   v.   State safety surveillance

   vi.   Prioritization of surveillance (Risks Based Surveillance) (RBS)

   vii.   Service provider organizational safety risks profiles

   viii.   Monitoring a service provider's safety performance

16. State Safety Performance

   i. Establishing ALOSP

   ii. Establishing State Safety Indicators and Targets

   iii. Exercise on defining SPIs and SPTS

17. Management of Change (MOC)
    i. Exercise on conduction of MOC

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Module 5

STATE SAFETY PROMOTION

</div>

18. communication and dissemination of information
    i. Internal communication and dissemination of information
    ii. External communication and dissemination of information

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</div>

C. Other General Staff (1 days/ 8 hours)

The SSP training syllabus for other general staff of CAAN shall contain, at least, the following contents:

<div align="center">

Module- 0

GENERAL

</div>

1. SSP legal framework in Nepal
2. Concept about SSP and SMS implementation
3. State Safety Oversight system critical Elements
4. State safety programme Overview (Framework)
5. Delegation of Safety Management functions and activities

<div align="center">

Module - 1

STATE SAFETY POLICE, OBJECTIVES AND RESOURCES

</div>

6. Primary aviation legislation (CE-1)
7. Specific Operating Regulations (CE-2)
8. State System and Functions (CE-3)
    i. Organizations responsible for coordinating the implementation of SSP
    ii. SSP implementation coordination Groups
    iii. SSP functions and Activities
    iv. State Safety Policy
    v. State Safety Objectives
    vi. State Safety resources
    vii. National Aviation Safety Plan (NASP)
    viii. SSP Documentation

9. Qualified Technical Personnel (CE-4)
10. Technical guidance, tools and provision of safety-critical information (CE-5)
11. Accident investigation
    i. State Level Accident investigation
    ii. Regulatory accident investigation
12. Surveillance Obligation (CE-6)
    i. State safety surveillance
    ii. Prioritization of surveillance (Risks Based Surveillance) (RBS)
    iii. Service provider organizational safety risks profiles
    iv. Monitoring a service provider's safety performance

13. State Safety Performance
    i. Establishing ALOSP
    ii. Establishing State Safety Indicators and Targets
14. Management of Change (MOC)

_____

Appendix- 20

OJT Recommendation Form

S.No.	Particulars	Description (to be filled by OJT)	Supervisor/OJTI's remarks (Sat./UnSat.)
01.	Required qualifications		
02.	Office Familiarization		
03.	Knowledge on Safety Management related documents		
04.	Participation in an audit as observer		
05.	Participation as an OJT in at least 20 % of total number of annual audits conducted including at least one from each area to be audited by SMD;		
06.	Consolidated knowledge and performance on audit processes like: a. audit planning, b. writing meeting minutes, c. writing audit agenda; d. understanding and implementing audit checklist e. preparing audit report		
07.	Assessment's result		

Concluding Remarks of Supervisor/OJTI:

Signature and date   Signature and Date

(Supervisor/OJTI)   (OJT)