CIVIL AVIATION AUTHORITY OFNEPAL

Acceptance Manual for ATS Safety Management System

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RECORD OF AMENDMENTS AND CORRIGENDA

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FOREWORD

This Manual has been prepared pursuant to **Rule-82, Schedule-3 of Civil Aviation Regulation, 2058 (2002)** for the use and guidance to the ATS Inspectors in ANS Safety Standard Department (ANSSSD) in performing their safety oversight duties especially aboutthe acceptance of ATS providers' SMS including the SMS manual.

This manual contains thebasic concepts of SSP, Safety Oversight and SMS, and various checklists for the ATS SMS Acceptance.It brings uniformity in the procedures of acceptance of whole SMS activities of ATS providers giving the elucidative guidelines to the ATS Inspectors in conducting audits and inspection of ATS providers in the parts of SMS implementation. This manual also helps ATS providers in understanding the regulatory requirements for theirSMSimplementation.

ANSSSD will maintain this manual as complete, accurate and up-date as possible. Comments and suggestions for revision/amendment to this manual should be forwarded to the Director of ANS Safety Standards Department.

Sanjiv Gautam
Director General
Civil Aviation Authority of Nepal

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GLOSSARY

A.1 ACRONYMS AND ABBREVIATIONS

ADREP	Accident/incident data reporting (ICAO)
ALoSP	Acceptable level of safety performance
ANS	Air navigation service
ATC	Air traffic control
ATM	Air traffic management
ATS	Air traffic service(s)
CAA	Civil aviation authority
CAN	Corrective action notice
CBA	Cost-benefit analysis
CEO	Chief executive officer
CFIT	Controlled flight into terrain
Cir	Circular
CM	Condition monitoring
CMA	Continuous monitoring approach
CMC	Crisis management centre
CNS	Communications, navigation and surveillance
CP	Command post
Doc	Document
EC	Escalation control
ECCAIRS	European Coordination Centre for Accident and Incident Reporting Systems
EF	Escalation factor
ERP	Emergency response plan
FIR	Flight information region
FL	Flight level
FRMS	Fatigue risk management systems
GAQ	Gap analysis questionnaire
H	Hazard
HF	Human factors
HIRA	Hazard identification and risk assessment
HIRM	Hazard identification and risk mitigation
ICAO	International Civil Aviation Organization
ILS	Instrument landing system
IMC	Instrument meteorological conditions
LEI	Lack of effective implementation
LOC-I	Loss of control in flight
LOS	Loss of separation
LOSA	Line operations safety audit
MOR	Mandatory occurrence report
MSL	Mean sea level
N/A	Not applicable
OPS	Operations
ORP	Organization risk profile
OSC	Organization safety culture
PC	Preventive control

QA	Quality assurance
QC	Quality control
QM	Quality management
QMS	Quality management system
RM	Recovery measure
SA	Safety assurance
SAG	Safety action group
SARPs	Standards and Recommended Practices (ICAO)
SD	Standard deviation
SDCPS	Safety data collection and processing system
SHEL	Software/hardware/environment/ live ware
SM	Safety management
SMM	Safety management manual
SMP	Safety Management Panel
SMS	Safety management system(s)
SOPs	Standard operating procedures
SPI	Safety performance indicator
SRB	Safety review board
SRC	Safety review committee
SRM	Safety risk management
SSO	Safety services office
SSP	State safety programme
STDEVP	Population standard deviation
TBD	To be determined
TOR	Terms of reference
UC	Ultimate consequence
UE	Unsafe event
USOAP	Universal Safety Oversight Audit Programme (ICAO)
WIP	Work in progress

A.2 DEFINITIONS

Acceptable level of safety performance (ALoSP). The minimum level of safetyperformance of civil aviation in a State,as defined in its State safety programme, or of a service provider, as defined in its safety management system,expressed in terms of safety performance targets and safety performance indicators.

Accident. An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

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

Air Traffic Service. A generic term meaning variously, flight information service, alerting service, air traffic advisory service, and air traffic control service (area control service, approach control service or aerodrome control service).

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

Consequence. Potential outcome(s) of the hazard.

Defenses. Specific mitigating actions, preventive controls or recovery measures put in place to prevent the realization ofa hazard or its escalation into an undesirable consequence.

Errors. An action or inaction by an operational person that leads to deviations fromorganizational or the operationalperson's intentions or expectations.

External audit. An audit conducted by an entity outside of the organization being audited.

Hazard. Acondition, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

High-consequence indicators. Safety performance indicators pertaining to the monitoring and measurement of high-consequenceoccurrences, such as accidents or serious incidents. High-consequence indicators are sometimesreferred to as reactive indicators.

Gap analysis. An analysis of the safety system to determine which components and elements of CAAN safety programme are currently in place and which components and elements must be added or modified to meet the implementation requirements.

Incident. An incident is an occurrence, other than an accident, associated with the operation of an aircraft that effect or could affect the safety of operation. A serious incident is an incident involving circumstances indicating that an accident nearly occurred.

Internal audit. An audit conducted by, or on behalf of, the organization being audited.

Internal Safety Investigations. An activity to determine and assess any risks associated with an event using the hazard assessment process.

Likelihood. the estimated probability or frequency, in quantitative or qualitative terms, of an occurrence related to the hazard.

Lower-consequence indicators. Safety performance indicators pertaining to the monitoring and measurement oflower-consequence occurrences, events or activities such as incidents, non-conformance findings or deviations.Lower-consequence indicators are sometimes referred to as proactive/predictive indicators.

Mitigation. The action taken either to contract, reduce or remove a hazard or to reduce the probability or the severity of a risk, the result of an action to make milder or less severe.

Occurrence reporting. Establishmentof formal procedures for reporting safety occurrences and other unsafe conditions.

Proactive. Means the adoption of an approach which emphasizes prevention, through the identification of hazards and the introduction of risk mitigation measures before the risk-bearing event occurs and adversely affects safety performance.

Risk. The potential adverse consequences of a hazard, and are assessed in terms of their severity and likelihood.

Risk assessment. Assessment to establish that the achieved or perceived risk is acceptable or tolerable.

Risk mitigation. The process of incorporating defenses or preventive controls to lower the severity and/or likelihood of a hazard's projected consequence.

Risk Probability. The likelihood that an unsafe event or condition might occur.

Risk Severity. See Severity.

Safety.A state in which the risk of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management.

Safety assessment.means analysis of proposed changes to equipment or procedures to identify and mitigate weakness before change is implemented.

Safety assurance. All planned and systematic actions necessary to provide adequate confidence that a product, a service, an organisation or a system achieves acceptable or tolerable safety.

Safety audit. Scheduledformal reviews and verifications to evaluate conformity with policy, standards and regulatory requirements.

Safety culture. the product of individual and group values, attitudes, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, the organization's management of safety. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures.

Safety management system. A systematic approach to managing safety, including the necessary organizationalstructures, accountabilities, policies and procedures.

Safety manager. Person to whom the Accountable Executive has assigned the day-to-day management functions of the SMS. The safety manager is the responsible individual and focal point for the development and maintenance of an effective SMS.

Safety monitoring. A systematic action conducted to detect changes affecting the System with the specific objective of identifying that acceptable or tolerable safety can be met.

Safety Oversight.a function of the regulator to examine organisation's consistency with rules, regulations, standards, associated procedures, etc.

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 data-based safety parameter used for monitoring and assessing safety performance.

Safety performance targets. Targetsdetermined by considering what safety performance levels are desirable and realistic for individual operators/service providers. A safety performance target comprises one or more safety performance indicators, together with desired outcomes expressed in terms of those indicators.

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

State safety programme. An integrated set of regulations and activities aimed at improving safety.

Safety Policy.A statement of the organisation's fundamental approach to achieve acceptable or tolerable safety.

Safety promotion. a combination of safety culture, training, and datasharing activities that support the implementation and operation of an SMSin an organization.

Safety records. Information about events or series of events that ismaintained as a basis for providing safety assurance and demonstrating theeffective operation of the safety management system.

Safety Requirements. Stepsthat need to be taken to achieve thesafety performance targets. They include the operational procedures,technology systems and program to which measures of reliability,availability, performance and/or accuracy can be specified.

Safety Risk Management.A description on how an organisation willidentify hazards and assesses the safety risks of the consequences of hazardsin aviation operations.

Safety survey. A systematic review, to recommend improvements whereneeded, to provide assurance of the safety of current activities, and toconfirm conformance with applicable parts of the Safety ManagementSystem.

Service Provider. An entity who provides service in the designated sectorof civil aviation as authorized to do so by the State.The term includes approved training organizations that are exposed tooperational safety risks during the provision of their services, aircraftoperators, approved maintenance organizations, organizations responsiblefor type design and/or manufacture of aircraft, air traffic services providersand certified aerodromes, as applicable.

Severity.the consequence or impact of a hazard in terms of degree of lossor harm. Severity of risk ranked as 'Catastrophic', Hazardous', 'Major', 'Minor', orNegligible with a descriptor for each indicating the potentialseverity ofconsequences.

SMS output. The result or product of an SMS process. In this context, theresult of a process, which is intended to meet a requirement (e.g., results ofsafety risk analyses, safety audits, and safety investigations).

System. A combination of physical components, procedures and human resources organised to perform a function.

Systematic. Safety management activities are in accordance with apredeterminedplan, and applied in a consistent manner throughout theorganisation.

CHAPTER 1.

OVERVIEW OF THE MANUAL

1.1 GENERAL

1.1.1 This manual "SMS Acceptance Manual for ATS SMS" is intended to provide ANSRegulators, especially the inspectors working in the field of ATM, the guidance on accepting and approving the ATS providers' SMS as well as their SMS Manual, in accordance with the provision of Civil Aviation Requirements for Safety Management (CAR-19).

1.1.2 It should be noted that this manual is intended to be used in conjunction with other appropriate CARs, guidancematerials which can be used to complement or enhance the concepts or guidance in this document.

1.1.3 Besides the guidelines for accepting ATS provider's safety management, this manual also provides the theoretical concept on the fundamentals of Safety Management System as well as State Safety Programme, and their inter-relations.

Note.— In the context of safety management, the term "service provider" here refers to any organization providing Air Trafficservices.

1.2 OBJECTIVE

The objective of this manual is to provide guidelines to inspectors of ANSSSD, CAAN for accepting the safety management adopted by the ATS providers and their ATS Safety Management documents.

1.3 STRUCTURE

Chapter 1 presents an Overview of the Manual. Chapter 2 and Chapter 3 mention about State Safety Management Responsibilitiesand Safety Management System respectively in brief. Chapter 4 deals with the Relationship between SSP and SMS and Chapter 5 the Process for Acceptance of ATS Provider's SMS. Finally, Chapter 6 presents the Requirements for ATS Provider's SMS Manual. To provideclarity and practical guidanceabout the subject matter, there are 6 appendices included in this manual.

CHAPTER 2.
STATE SAFETY MANAGEMENT RESPONSIBILITIES

2.1 General

Note 1. This chapter gives the basic concept of SSP and how it links with SMS.

Note 2. This chapter outlines the basic concept of State Safety Programme (SSP) including safety management responsibilities of the Civil Aviation Authority of Nepal (CAAN), focusing on the SMS implementation in Air Traffic Services (ATS), through compliance with requirements, the conduct of its own safety management functions and the surveillance of SMS implemented in accordance with the provisions of CAR-11, Air Traffic Services and CAR-19, Safety Management.

2.1.1 As being State Aviation Authority of Nepal, CAAN has the responsibilities of ensuring as well as managing the overall safety of aviation in the country.

2.1.2 In this regard, CAAN has two major state responsibilities- one is implementation of SSP and other is performing safety oversight.

2.1.3 This chapter introduces the objectives of and framework for implementation approach to a State safety programme (SSP). It also safety oversight system and the objectives of implementing critical elements of State's safety oversight system.

2.2 State Safety Programme (SSP)

2.2.1 Introduction

2.2.1.1 An SSP is a management system for the regulation and administration of safety by the State.Theimplementation of an SSP is commensurate with the size and complexity of the State's civil aviation system and requires coordination among multiple authorities responsible for the aviation functions of the State. The objectives of the SSP are to:

a. ensure that a State has the minimum required regulatory framework in place;
b. ensure harmonization amongst the State's regulatory and administrative organizations in their respective safety risk management roles;
c. facilitate monitoring and measurement of the aggregate safety performance of the State'saviation industry;
d. coordinate and continuously improve the State's safety management functions; and
e. support effective implementation and interaction with the service provider's SMS.

2.2.1.2 It is a platform for the State to apply the two basic safety management principles throughout its civil aviation organizations

a. Safety Risk Management (SRM)
b. Safety Assurance (SA)

2.2.2 SSP Nepal

2.2.2.1 CAAN has established an SSP Nepal for the management of safety in Nepal to achieve an acceptable level of safety performance in civil aviation.

2.2.2.2 The SSP Nepal includes specified safety activities that must be performed by the CAAN, and regulations and directives promulgated by the CAAN to support fulfillment of its responsibilities concerning safe and efficient delivery of aviation activities of the country.

2.2.2.3 The SSP Nepal provides an overview of civil aviation safety programme to the personnel involved in safety regulations as well as to all stakeholders with a responsibility of SMS implementation.

2.2.2.4 The service provider's SMS requires effective regulatory oversight. CAAN, through its SSP functions, both provides the oversight functions and facilitates implementation of SMS effectively.

2.2.2.5 Prescriptive and performance-based approaches in combination are applied in facilitating the effective implementation and oversight of SMS by industry.

2.2.2.6 The SSP framework includes the set of State activities confined in four components and 11 elementswhich is briefly presented in Appendix 1 to this manual and CAR 19.

2.2.2.7 The elements of the framework comprise the processes or activities undertaken by the State to manage safety.

2.2.2.8 As part of its SSP, CAAN under its authority requires that,among the other aviation service providers,ATS providers too to implement an SMS acceptable to it.

Note.— The provision of AIS, CNS, MET and/or SAR services, when under the authority of an ATS provider,are included in the scope of the ATS provider's SMS. When the provision of AIS, CNS, MET and/or SARservices are wholly or partially provided by an entity other than an ATS provider, the related services thatcome under the authority of the ATS provider, or those aspects of the services with direct operationalimplications, are included in the scope of the ATS provider's SMS.

2.3 State safety oversight

2.3.1 Introduction

2.3.1.1 Safety oversight is the foundation by means of which States ensure effective implementation of the safety-related SARPs and associated procedures contained in the Annexes to Chicago Convention and related ICAO documents.

2.3.1.2 Safety oversightalso ensures that the national aviation industry provides asafety level equal to, or better than, that defined by the State. As such, an individual State's responsibility for safety oversight is the foundation upon which safe global aircraft operations are built.

2.3.1.3 The State's safety oversight system on the implementation part includes obligations related to the initial approval and continuedsurveillance of its aviation service providers to assure compliance with national regulations established in accordancewith ICAO SARPs, as well as the recommended actions that are coordinated for resolution of any safety concerns, where necessary.

Note.—

a. *The initial approval obligation includes the State's authorization, certification or designation of serviceproviders as appropriate and surveillance obligation includes regulatory audits, inspections, assessments, monitoring and evaluations.*
b. *Acceptance of service provider's SMS Implementation Plan falls under initial approval obligation whereas acceptance of SMS implemented by service provider falls under surveillance obligation.*

2.3.2 Safety Oversight System of CAAN

2.3.2.1 CAAN has a system of overseeing the overall aviation activities performed in the country except in aircraft accident and incident investigation.

2.3.2.2 Safety oversight system of CAAN comprises of 8 critical elements which is briefly presented in Appendix 2to this manual and falls under the Component 3 and Element 3.1 of SSP Nepal.

2.3.2.3 Critical elements are essentially the safety defence tools of a safety oversight system and are required for the effective implementation of safety related policy and associated procedures.

2.3.2.4 CAAN must implement safety oversight critical elements assuming the shared responsibility of the State and the aviation community towards the safety of overall aviation system.

2.3.2.5 Critical elements of a safety oversight system encompass the whole spectrum of civil aviation activities.One of them is air traffic services delivery. The effective implementation of such CEs in ATS is an indication of a CAAN's capability for safety oversight in that area.

2.3.2.6 Under the safety oversight obligation, among the various other activities of Service providers, CAAN also oversees the SMS implementation activities.

2.3.2.7 On behalf of CAAN, ANSSSD is overseeing the SMS implementation activities in the areas of Air Traffic Services as per the guidelines and checklist mentioned inthe ANS Policy and Procedure Manual, as required by MATS Nepal.

2.3.2.8 ANSSSD does not conduct the in-depth SMS audits in the areas of ATS separately. However, during conduct of ATS audits/inspections, ANSSSD checks the compliance of some of the components and elements of SMS as part of such audits.

CHAPTER 3.
SAFETY MANAGEMENT SYSTEM (SMS)

3.1 General

3.1.1 An SMS is a system to assure the safe operation of aircraft through effective management of safety risk. This system is designed to continuously improve safety by identifying hazards, collecting and analyzing data, continuously assessing safety risks and finally, proactively containing or mitigating risks to an acceptable level before they result in aviation accidents and incidents.

3.1.2 It is a system that is commensurate with the organization's regulatory obligations and safety goals.

3.1.3 SMS is necessary for an aviation organization to identify hazards and manage safety risks encountered during the delivery of its products or services. An SMS includes key elements that are essential for hazard identification and safety risk management by ensuring that:

a. the necessary information is available;
b. the appropriate tools are available for the organization's use;
c. the tools are appropriate to the task;
d. the tools are commensurate with the needs and constraints of the organization; and
e. decisions are made based on full consideration of the safety risk.

3.1.4 SMS addresses the aviation activities of an aviation service provider that are related to the safe operation of aircraft. The scope of an SMS may indirectly include other organizational activities that support operational or product development, such as finance, human resources and legal. It is therefore essential to involve all internal and external aviation system stakeholders having a potential impact on the organization's safety performance. Furthermore, any potential inputs should be taken into consideration at an early stage of SMS implementation and throughout future internal evaluations of the SMS. The following stakeholders may provide inputs to service providers depending upon their potential impact on safety performance:

a. aviation professionals;
b. aviation regulatory and administrative authorities;
c. industry trade associations;
d. professional associations and federations;
e. international aviation organizations;
f. subcontractors or principals of a service provider; and
g. the flying public.

3.2 SMS implementation

3.2.1 Introduction

3.2.1.1 As part of SSP Nepal, CAAN requires that the SMS of a service provider shall:

a. be established in accordance with the framework elements contained in Appendix 1 of this manual; and
b. be commensurate with the size of the service provider and the complexity of its aviation products or services.

3.2.1.2 Each aviation service provider whose activities during the provision of the service are exposed tooperational safety risks are subject to provision of SMS implementation. Such

3.2.1.3 services are aircraftoperators, approved maintenance organizations, organizations responsiblefor type design and/or manufacture of aircraft, air traffic services providersand certified aerodromes, as applicable.

3.2.1.4 In order to be acceptable to CAAN, a service provider's SMS shall meet the requirements set forth in CAR 19.

3.2.2 Implementing SMS in the Air Traffic Services Operations

3.2.2.1 To meet the regulatory requirements mentioned in CAR 19 and MATS Nepal, anATS provider has an obligation to implement SMS in Air Traffic Services Operations, the framework of which shall include four components and twelve elements that is briefly presented in Appendix 3 to this manual.

3.2.2.2 ANSSSD on behalf of CAAN shall ensure that the level of air traffic services (ATS) and communications, navigation and surveillance, as well as the ATS procedures applicable to the airspace or aerodrome concerned within Kathmandu FIR, are appropriate and adequate for maintaining an acceptable level of safety performance in the provision of ATS.

3.2.2.3 To maintain the safety in provision of ATS, an ATS provider shall implement an SMS thatisacceptable to CAAN, and shall, as a minimum:

a. identify safety hazards;
b. ensure the implementation of remedial action necessary to meet and/or maintainthe agreed or established safety performance;
c. provide for continuous monitoring and regular assessment of thesafety performance; and
d. aim at continuous improvement of the overall performance of thesafety management system, including the implementation of safety related enhancements whenever necessary.

Note.— The provision of AIS, CNS, MET and/or SAR services, when under the authority of an ATS provider, are included in the scope of the ATS provider's SMS. When the provision of AIS, CNS, MET and/or SAR services are wholly or partially provided by an entity other than an ATS provider, the related services that come under the authority of the ATS provider, or those aspects of their services with direct operational implications, are included in the scope of the ATS provider's SMS.

3.2.2.4 An ATS SMS shall include, among the others as specified by the requirements for Safety Management, the following activities with respect to the provision of air traffic services:

a. monitoring of overall safety levels and detection of any adverse trend;
b. safety reviews of ATS units;
c. safety assessments in respect of the planned implementation of airspacereorganizations, the introduction of new equipment systems or facilities, and new or changed ATS procedures; and
d. a mechanism for identifying the need for safety enhancing measures.

3.2.2.5 The ATS provider shall establish, maintain and adhere to an SMS that is appropriate to the size, nature and complexity of the operations authorized to be conducted and the safety hazards and risks related to the operations.

3.2.2.6 A safety management system shall clearly define lines of safety accountability throughout the ATS organization, including a direct accountability for safety on the part of senior management.

3.2.2.7 All activities undertaken in an ATS SMS shall be fully documented and retained. All documentation shall be retained for a specific period, if and as specified.

3.2.2.8 In fulfilling the provisions of this manual regarding the development of SMS implementation plan and its execution, ICAO Doc 9859 shall be followed as a guidance.

Chapter 4.
Relationship between an SSP and an SMS

4.1 General

4.1.1 The safety management SARPs are aimed at two audience groups: States and service providers.

4.1.2 States are responsible for developing and establishing an SSP, whereas service providers are responsible for developing and establishing an SMS.

4.1.3 States are responsible, as part of the activities of their SSP, to accept and oversee the development, implementation and operational performance of the service provider's SMS.

4.1.4 SSP is a framework that allows the State safety oversight authority and service providers to interact more effectively in the resolution of safety concerns

4.1.5 The basic objective of a State, through its SSP, is to ensure, to the extent possible, public safety during service delivery by service providers.

4.1.5 The objective as mentioned above is achieved by defining the ALoSP for the SSP, and through the control of safety risks within acceptable level by the two operational components of the SSP: safety risk management and safety assurance.

4.1.6 SSP is the bridge that closes the gap that could potentially develop between the safety processes of a State and the safety processes of service providers.

4.2 Link between SSP and SMS

4.2.1 Personnel from SMS organization submits report to the organisation through Internal reporting system and Safety Team of the organization analyzesthe report. The organization develops Safety Plan with the Mitigating actions for the existing hazards that pose the unacceptable risks in the operation.

4.2.2 The whole reports of operator through SMS is received by the State regulator under its SSP obligation. The report then analyzed by the State and mitigation plan including the relevant actions are checked and followed up. Areas of greater concern are discussed, if required and such concerns are attempted to resolve.

CHAPTER 5.
Process for acceptance of ATS provider's SMS

5.1 General

5.1.1 The acceptance process of SMS startswith the application for approval of their SMS documentations along with the implementation plan to the regulatory body for acceptance.

5.1.2 Regulatory acceptance of service provider's SMS is provided through the grant of the approvals after:

a. reviewing the submitted documentations, and
b. if the submitted documents are acceptable auditing or inspecting the ATS provider's SMS.

5.1.3 The acceptance process of ATS providers' SMS start with the application for CAAN approval of relevant documentations as mentioned below:

a. SMS Manual
b. SMS Implementation Plan
c. Emergency Response Plan
d. name list of the key safety personnel and their qualification and
e. other relevant documents.

5.1.4 ATS providers who submit their initial application for approval of their SMS must meet full compliance to the CAR-19 and SSP Nepal.

5.1.5 With the receipt of above documents, a review and acceptance process will take place and applicant will be contacted directly throughout the process.

Note: Guidelines for ANSSSDpersonnel for accepting the SMS manual is mentioned in the Chapter 6 and associated Appendix 6 of this Manual.

5.1.6 ANSSSD personnel under the regulatory acceptance procedure shall follow the checklist as mentioned in Appendix 4 to this manual for the initial assessment of the ATS provider's SMS.

5.1.7 For the routine assessment of the ATS provider's SMS, checklist as mentioned in the Appendix 5 shall be followed.

5.2 SMS Acceptance Procedure

5.2.1 The ATS provider submits (SMS) Manual, SMS Implementation Plan and all related documents to CAAN for the acceptance of the SMS.

5.2.2 Designated ANSSSD personnel on behalf of CAANas assigned to review the submitted SMS documentations verify their compliance with the CAR 19 and SSP Nepal requirements.

5.2.3 After reviewing the such documents, ATS Provider will be notified about any commentsthat need correction, and after the refinement of the documents, ATS Provider will be scheduled for an SMS Pre-acceptance inspection.

5.2.4 Any findings about the Pre-acceptance inspection will be sent to the ATS Provider for correction before a formal acceptance is granted.

5.2.5 Once findings are addressed, formal acceptance to the ATS provider's SMS is granted.

Chapter 6.
Requirements for ATS providers SMS Manual

6.1 GENERAL

6.1.1 This chapter serves the requirements to theATS providers for developingtheir ownstand-alone top-level SMS manualto define their SMS framework and its associated components and elements

6.1.2 This chapter also provides necessary guidelines to ANSSSD personnelin the form of checklist for accepting such manual developed by ATS providers which is mentioned in the Appendix 6 to this manual.

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

6.1.4 The manual will serve to communicate the organization's SMS framework internally as well as with relevant external organizations. The manual may be subject to endorsement or approval by the CAAN as an evidence of the acceptance of the SMS.

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

6.2 FORMAT OF THE SMS MANUAL

6.2.1 The format of SMS manual of ATS provider should have the following structure:

a. section heading;
b. objective;
c. criteria;
d. cross-reference documents.

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

6.3 Content of Manual for ATS SMS

6.3.1 The desirable contents of the manual include the following sections:

1. Document control;
2. SMS regulatory requirements;
3. Scope and integration of the safety management system;
4. Safety policy;
5. Safety objectives;
6. Safety accountabilities and key personnel;
7. Safety reporting and remedial actions;

8. Hazard identification and risk assessment;
9. Safety performance monitoring and measurement;
10. Safety-related investigations and remedial actions;
11. Safety training and communication;
12. Continuous improvement and SMS audit;
13. SMS records management;
14. Management of change; and
15. Emergency/contingency response plan.

6.3.2 Detail of each section using the format prescribed in 6.2 shall be included in the manual as guided in the Appendix 6 to Chapter 6 (Guidance on the development of an SMS manual) of Doc 9859.

Appendix 1.
SSP FRAMEWORK
(Paragraph 2.2.2.7 of Chapter 2)

1. The implementation of an SSP is commensurate with the size and complexity of the State's aviation system and necessitates coordination among the authorities responsible for individual elements of civil aviation functions in the State.
2. The SSP framework introduced in this Appendix, and the SMS framework specified in Appendix 3, must be viewed as complementary, yet distinct, frameworks.

3. The framework includes four components and eleven elements, representing the minimum requirements for SSP implementation by the CAAN. Those components and elements of an SSP are:

Components	Elements
1. State safety policy and objectives	1.1 State safety legislative framework 1.2 State safety responsibilities and accountabilities 1.3 Accident and incident investigation 1.4 Enforcement policy
2. State safety risk management	2.1 Safety requirements for the service provider's SMS 2.2 Agreement on the service provider's safety performance
3. State safety assurance	3.1 Safety oversight 3.2 Safety data collection, analysis and exchange 3.3 Safety-data-driven targeting of oversight of areas of greater concern or need
4. State safety promotion	4.1 Internal training, communication and dissemination of safety information 4.2 External training, communication and dissemination of safety information

4. Additional details regarding each of the four components and eleven elements are mentioned in the latest amendments to the SSP Nepal and ICAO Doc 9859.

Appendix 2.
Critical Elements of ATS Safety Oversight System
(Paragraph 2.3.2.2 to Chapter 2 refers)

1. Effective implementation of all critical elements of ATS safety oversight system is an indication of capability of CAAN, in particular ANSSSD, for safety oversight in the areas of ATS.

2. The critical elements of ATS Safety Oversight System, eight in number are:

Components	Elements
Establishment part	1. Primary aviation legislation 2. Specific operating regulations 3. State system and functions 4. Qualified technical personnel 5. Technical guidance, tools and provision of safety-critical information
Implementation part	6. Licensing, certification, authorization and/or approval obligations 7. Surveillance obligations 8. Resolution of safety issues

3. Additional details regarding each of the eight elements are mentioned in the latest amendments to the Appendix 1 to CAR 19 and ICAO Doc 9734, Part A.

Appendix 3.
SMS FRAMEWORK
(Paragraph 3.2.2.1 of Chapter 3 refers)

1. A framework for SMS implementation by ATS provider should be commensurate with the size of the organization and the complexity of the services provided by it.

2. The framework includes four components and twelve elements, representing the minimum requirements for SMS implementation. Those components and elements of an SMS are:

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

3. Additional details regarding each of the four components and twelve elements are mentioned in the latest editions/amendments to the CAR 19 and ICAO Doc 9859.

Appendix 4.
SMS REGULATORY ACCEPTANCE CHECKLIST
(Paragraph 5.1.6 of Chapter 5 refers)

1. Table below is a regulatory SMS assessment checklist (86 questions- Check no. of questions with Doc 9859) which can be used for the initial assessment and acceptance of a service provider's SMS. For an initial acceptance process, the assessment questions need to be comprehensive in order to adequately address all SMS elements of the ATS provider's organization. This will ensure that all elements and their related processes are in place within the organization. The operational aspects of the SMS would be more appropriately addressed during subsequent routine/annual assessment of the SMS.

2. The minimum acceptable performance procedure illustrated provides for a three-stage minimum acceptable score criteria. This procedure can facilitate the ANSSSD's progressive assessment of the ATS provider's SMS implementation process, instead of auditing only after a service provider's SMS has been fully implemented or is mature. Such a progressive assessment protocol will also ensure that the ANSSSD is actively involved in monitoring the industry's SMS implementation from the early phases.

3. Where a phased SMS implementation approach is adopted, the questions in the checklist may need to be re-configured and adapted to align with the specific spread of elements across the relevant phases, as may be determined by the ANSSSD.

4. An illustrative corrective action notice (CAN) procedure is provided at the end of the checklist.

SMS Assessment Checklist — Initial Acceptance						SMS audit checklist ----------			
Input column: Annotate "Y" for Yes," N " for No, "N/A" for not applicable									
Organization name:		Date of assessment:				Assessed by ATS Inspector:		Ref.	
SMS Element	**Level 1**	**Input**	**Doc ref/ remarks**	**Level 2**	**Input**	**Doc ref/ remarks**	**Level 3**	**Input**	**Doc ref/ remarks**
Management commitment and responsibilities [1.1]	**SMS Component 1. Safety Policy and Objectives**								
	1.1/L1/1			1.1/L2/1			1.1/L3/1		
	There is a documented safety policy statement			There is evidence that the safety policy is communicated to all employees with the intent that they are made aware of their individual safety			There is a periodic review of the safety policy by senior management or the safety committee.		

				obligations.					
	1.1/L1/2			1.1/L2/2			1.1/L3/2		
	The safety policy is relevant to aviation safety.			The safety policy is endorsed by the accountable manager.			The accountable manager's terms of reference indicate his overall responsibility for all safety issues.		
	1.1/L1/3			1.1/L2/3			1.1/L3/2		
	The safety policy is relevant to the scope and complexity of the organization's operations.			The safety policy addresses the provision of the necessary human and financial resources for its implementation.			ATS provider has developed the SMS implementation plan.		
Safety accountabilities [1.2]	1.2/L1/1			1.2/L2/1					
	There is a documented safety (SMS) accountability within the organization that begins with the accountable manager.			The accountable manager's terms of reference indicates his ultimate responsibility for his organization's safetymanagement.					
	1.2/L1/2			1.2/L2/2					
	The accountable executive has final authority over all the aviation activities of his organization.			The accountable manager's final authority over all operations conducted under his organization's certificate(s) is indicated in his terms of reference.					

	1.2/L1/3			1.2/L2/3			1.2/L3/1		
	There is a safety committee (or equivalent mechanism) that reviews the SMS and its safety performance.			For a large organization, there are departmental or section safety action groups that work in conjunction with the safety committee.			The safety committee is chaired by the accountable manager or (for very large organizations) by an appropriately assigned deputy, duly substantiated in the SMS manual.		
	1.2/L1/4			1.2/L2/4			1.2/L3/2		
	The safety committee includes relevant operational or departmental heads as applicable.			There is an appointed safety (SMS) coordinator within the safety action group.			The safety action groups are chaired by thedepartmental or section head where applicable.		
Appointment of key safety personnel [1.3]	1.3/L1/1			1.3/L2/1			1.3/L3/1		
	There is a manager who performs the role of administering the SMS			The manager responsible for administering the SMS does not hold otherresponsibilities that may conflict or impair his role as SMS manager			The SMS manager has directaccess or reporting to the accountablemanager concerning the implementation and operation of the SMS.		
	1.3/L1/2						1.3/L3/2		
	The manager performing the SMS role has relevant SMS functions included in his terms of reference.						The SMS manager is a seniormanagement position not lower than or subservient to other operational or production positions.		

Emergency response planning [1.4]	1.4/L1/1			1.4/L2/1			1.4/L3/1		
	There is a documented ERP or equivalent operational contingency procedure.			The ERP includes procedures for the continuing safe production, delivery orsupport ofaviation products or services during such emergencies or contingencies.			The ERPaddressesrelevantintegration with external customer or subcontractor organizations where applicable.		
	1.4/L1/2			1.4/L2/2			1.4/L3/2		
	The ERP is appropriate to the size, nature and complexity of the organization.			There is a plan for drills or exercises with respect to the ERP.			There is a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness.		
	1.4/L1/3			1.4/L2/3					
	The emergency plan addresses possible or likely emergency/crisis scenarios relating to the organization's aviation product or service deliveries.			ERP drills or exercises are carried outaccording to plan and the result of drills carried out are documented.					
SMS documentation [1.5]	1.5/L1/1			1.5/L2/1			1.5/L3/1		
	There is an SMS document or exposition which is approved by the accountable manager and accepted by the CAA.			The SMS document is accepted or endorsed by the organization's nationalaviation authority.			The SMS procedures reflectappropriate integration with other relevantmanagement systems within the organization, such as QMS, OSHE, security, as applicable		

	1.5/L1/2			1.5/L2/2			1.5/L3/2		
	The SMS document provides an overview or exposition of the organization's SMS framework and elements.			The SMS document's exposition of each SMS element includes cross-references to supporting or related procedures, manuals or systems as appropriate.			The SMS procedures reflect relevant coordination or integration with external customer or subcontractor organizations where applicable		
	1.5/L1/3			1.5/L2/3			1.5/L3/3		
	The SMS document is a standalone controlled document or a distinct part/section of an existing CAA endorsed/ accepted document.			Records are maintained pertaining to safety committee/SAG meeting (or equivalent) minutes.			There is a process to periodically review the SMS exposition and supporting documentation to ensuretheircontinuing relevance.		
	1.5/L1/4			1.5/L2/4					
	All components and elements of SMS regulatory requirements are addressed in the SMS document.			Records pertaining to periodic review of existing safety/risk assessments or special review in conjunction with relevant changes are available.					
	1.5/L1/5								
	Records are maintained pertaining to safety risk assessments performed.								
	1.5/L1/6								

	Records pertaining to identified or reported hazards/threats are maintained.								
Hazard identification [2.1]	**SMS Component 2. Safety Risk Management**								
	2.1/L1/1			2.1/L2/1			2.1/L3/1		
	There is a procedure for voluntary hazards/ threats reporting by all employees.			In the hazard identification system, there is a clear definition of and distinction between hazards and consequences.			There is a procedure to identify hazards/threats from internal incident/ accidentinvestigation reports for follow-up risk mitigation where appropriate.		
	2.1/L1/2			2.1/L2/2			2.1/L3/2		
	There is a procedure forincident/accident reporting by operational or productionpersonnel.			The hazard reporting system is confidential and has provisions to protect the reporter's identity.			There is a procedure to reviewhazards/threats from relevant industry service or incident/ accident reports for risk mitigation where applicable.		
	2.1/L1/3			2.1/L2/3			2.1/L3/3		
	There is a procedure forinvestigation of incident/accidents relating to quality or safety.			The organization's internalinvestigation and disciplinary procedures distinguish between premeditated and deliberate violations and unintentional errors andmistakes.			There is a procedure for periodic review of existing risk analysis records.		
Safety ris	2.2/L1/1			2.2/L2/1					
	There is a documented			Risk assessment					

	HIRM procedure involving the use of objective risk analysis tools.			reports are approved by departmental managers or at a higherlevel where appropriate.					
	2.2/L1/2			2.2/L2/2					
	There is a procedure foridentification of operations,processes, facilities and equipment which are deemed (by the organization) as relevant for HIRM.			Recommended mitigation actions which require senior managementdecisio n orapproval are accounted for and documented.					
	2.2/L1/3			2.2/L2/3			2.2/L3/1		
	There is a programme forprogressive HIRA performance ofall aviation safety-related operations, processes, facilities andequipment as identified by the organization.			There is aprocedure toprioritize HIRA performance for operations, processes, facilities and equipment with identified or known safety-critical hazards/risks.			There is evidence of progressive compliance and maintenance of the organization's HIRA performance programme.		
Safety performance monitoring and measurement [3.1]	**SMS Component 3. Safety Assurance**								
	3.1/L1/1			3.1/L2/1			3.1/L3/1		
	There are identified safety performance indicators formeasuring and monitoring the organization's safety performance.			There are lower-consequence safety performance indicators (e.g. noncompliance, deviation events).			There is a procedure for corrective or follow-up action to be taken when targets are not achieved, and/or alert levels are breached.		
	3.1/L1/2			3.1/L2/2			3.1/L3/2		
	There arehigh-consequence			There are alert and/or target level			Safety performance indicators are		

	databased safety performance indicators (e.g. accident and serious incident rates).			settings within the safety performance indicators where appropriate.			reviewed by the safety committee for trending, alert levels that have been exceeded and target achievement where applicable.		
The management of change [3.2]	3.2/L1/1			3.2/L2/1			3.2/L3/1		
	There is a procedure for review of relevant existing aviation safety related facilities and equipment (including HIRArecords) wheneverthere are pertinentchanges tothose facilities or equipment.			There is a procedure for review of new aviation safety-related facilities and equipment for hazards/risks before they are commissioned.			There is a procedure for review of relevant existing facilities, equipment, operations or processes (including HIRM records) whenever there are pertinent changes external to the organization such asregulatory/industry standards, best practices or technology.		
	3.2/L1/2			3.2/L2/2					
	There is a procedure for review ofrelevant existing aviation operations and processes (including HIRA records) whenever there are pertinent changes to those operations or processes.			There is a procedure for review of new aviation safety-related operations andprocesses for hazards/risks before they are commissioned.					
Continuous improvement	3.3/L1/1			3.3/L2/1			3.3/L3/1		
	There is a procedure for periodicinternal audit/assessment of the			There is a follow-up procedure to address audit			SMSaudit/assessment has been carried out according to		

	SMS.			corrective actions.			plan.		
	3.3/L1/2			3.3/L2/2			3.3/L3/2		
	There is a current internal SMS audit/assessment plan.						There is a process for SMS audit/assessment reports to be submitted or highlighted for the accountable manager's attention when necessary		
	3.3/L1/3			3.3/L2/3			3.3/L3/3		
	There is a documented internalSMS audit/assessment procedure.			The SMS audit plan includes the sampling of completed safety assessments.			The SMS audit plan covers the SMS roles/inputs of contractors where applicable.		
Training and communication [4.1, 4.2]	**SMS Component 4. Safety Promotion**								
	4.1/L1/1			4.1/L2/1			4.1/L3/1		
	There is a documented SMStraining/familiarization policy for personnel.			Personnel involved in conducting risk evaluation are provided with appropriate risk management training or familiarization.			There is evidence of organization-wide SMS education or awarenessefforts.		
	4.1/L1/2			4.1/L2/2			4.1/L3/2		
	The manager responsible for SMS administration has undergone an appropriate SMS training course.			Personnel directly involved in the SMS (safety committee/ SAG members) have undergone appropriate SMS			There is evidence of a safety (SMS) publication, circular or channel for communicating safety and SMS		

				training or familiarization.			matters toemployees.		
	4.1/L1/3								
	The accountable manager hasundergone appropriate SMS familiarization, briefing or training.								

SUBTOTAL	CATEGORY 1	CATEGORY 2	CATEGORY 3
Y			
N			
N/A			
Number of questions completed			

GRAND TOTAL	
Y	
N	
N/A	

ASSESSMENT RESULT (% OF YES): ---- %

CORRECTIVE ACTION NOTICE (CAN) PROCEDURE

1) Minimum overall acceptable performance (phased SMS implementation):
   First year/phase of assessment — 45%.
   Second year/phase of assessment — 65%.
   Third year/phase of assessment and thereafter — 85%.

   Ninety (90) days for corrective action to obtain not less than 45% overall performance.

2) Baseline performance (Level 1 questions) (during any year/phase of assessment subsequent to State's SMS required applicability date:

   Corrective action notice (CAN) to be issued for "No" answers to any Level 1 questions (during any year/phase of assessment).

   Sixty (60) days for corrective action to obtain a "Yes" answer to the relevant question(s)

Appendix 5
SMS Routine Assessment Checklist
(Paragraph 5.1.7 of Chapter 5 refers)

1. Table below is a sample regulatory SMS assessment checklist (39 questions) which can be used for subsequent routine SMS assessment. After an organization's SMS has satisfied the regulator's initial assessment and acceptance process, there will be many assessment questions from the initial assessment checklist that will no longer be expedient or necessary for routine assessment purposes. A routine SMS assessment checklist need only focus on the operational aspects of an SMS and evidence of the satisfactory implementation of its supporting processes.

2. Routine SMS assessment may be conducted on a stand-alone basis or incorporated as part of a routine organization/systems audit. In case of the latter, such SMS routine assessment questions may be accordingly incorporated as a section within the normal organization audit checklist. The normal corrective action notice (CAN) protocol of the regulator can also be applied to the routine SMS assessment.

Input column: Annotate "Y" for Yes," N " for No, "N/A" for not applicable

SMS Element		Assessment Question	Input	Doc. Ref.	Remarks
Management commitment and responsibilities [1.1]	1	The safety policy is relevant to the scope and complexity of the organization'soperations.			
	2	There is evidence that the safety policy is communicated to all employees with the intent that they are made aware of their individual safety obligations.			
	3	There is a periodic review of the safety policy by senior management or thesafety committee.			
	4	The accountable manager's terms of reference indicate his overall responsibility for all safety issues.			
Safety accountabilities [1.2]	1	There is a safety committee (or equivalent mechanism) that reviews the SMS and its safety performance.			
	2	The accountable manager's final authority over all operations conducted under his organization's certificate(s) is indicated in his terms of reference.			
Appointment of key	1	The manager performing the SMS role has relevant SMS functions included inhis terms of reference.			

safety personnel [1.3]	2	The manager responsible for administering the SMS does not hold otherresponsibilities that may conflict or impair his role as SMS manager.			
	3	The SMS manager has direct access or reporting to the accountable managerconcerning the implementation and operation of the SMS.			
	4	The SMS manager is a senior management position not lower than orsubservient to other operational or production positions.			
Emergency response planning [1.4]	1	The ERP addresses possible or likely emergency/crisis scenarios relating to theorganization's aviation service deliveries.			
	2	The ERP includes procedures for the continuing safe production, delivery orsupport of its aviation products or services during emergencies or contingencies.			
	3	ERP drills or exercises are carried out according to plan and the result of drillscarried out are documented.			
	4	The ERP addresses relevant integration with external customer or subcontractor organizations where applicable.			
	5	There is evidence of periodic review of the ERP to ensure its continuingrelevance and effectiveness.			
SMS documentation [1.5]	1	The organization's SMS components and elements are adequately manifested inthe SMS document.			
	2	The organization's documented SMS components and elements are in line withthe aviation authority's SMS requirements.			
	3	There is evidence of relevant SMS coordination or integration with externalcustomer or subcontractor organizations where applicable.			
	4	There is evidence of procedures for periodic review of the SMS document andsupporting documentation to ensure their continuing relevance.			
	5	Records pertaining to periodic review of existing safety/risk assessments areavailable.			

Hazard identification [2.1]	1	The number or rate of the organization'sregistered/collected hazard reports iscommensurate with the size and scope of the organization's operations.			
	2	The hazard reporting system is confidential and has provisions to protect thereporter's identity.			
	3	There is evidence that hazards/threats uncovered during the incident/accident investigation process are registered with the HIRM system.			
	4	There is evidence that registered hazards are systematically processed for riskmitigation where applicable.			
Safety risk assessment and mitigation [2.2]	1	There is evidence that operations, processes, facilities and equipment withaviation safety implications areprogressively subjected to the organization'sHIRM process.			
	2	Completed risk assessment reports are approved by an appropriate level ofmanagement.			
	3	There is a procedure for periodic review of completed risk mitigation records			
Safety performance monitoring and measurement [3.1]	1	The organization's SMS safety performance indicators have been agreed withthe relevant national aviation authority.			
	2	There are high-consequence data-based safetyperformance indicators (e.g.accident and serious incident rates).			
	3	There are lower-consequence safety performance indicators (e.g. noncompliance, deviation events).			
	4	There are alert and/or target level settings within the safety performanceindicators where appropriate.			
	5	The organization's management of change procedure includes the requirement for a safety risk assessment to be conducted whenever applicable.			
	6	There is evidence of corrective or follow-up action taken when targets are notachieved and/or alert levels are breached.			
The management of change [3.2]	1	There is evidence that relevant aviation safety-related processes and operationshave been subjected to the organization's HIRM process as applicable.			

	2	The organization's management of change procedure includes the requirement for a safety risk assessment to be conducted whenever applicable.			
Continuous improvement of the SMS [3.3]	1	There is evidence that an internal SMS audit/assessment has been planned andcarried out.			
Training, education and communication [4.1, 4.2]	1	There is evidence that all personnel involved in SMS operations have undergoneappropriate SMS training or familiarization.			
	2	Personnel involved in conducting risk evaluation are provided with appropriate risk management training or familiarization.			
	3	There is evidence of a safety (SMS) publication, circular or channel forcommunicating safety and SMS matters to employees.			

Appendix 6
Checklist for accepting ATS providers SMS manual
(Paragraph 6.1.2 of Chapter 6 refers)

- The manual will be checked for the provisions as tabulated below.
- In the input column, annotate "Y" for Yes," N " for No, "N/A" for not applicable

S. No.	Subject Matter	Manual Assessment Items	Input	Doc Ref.	Remarks
1	Document control	Hard or electronic copy and Distribution list			
		Correlation with ATS OM			
		Process for Periodic Review			
		Manual's administration, approval and regulatory acceptance process			
2	SMS regulatory requirements	SMS regulations/standards			
		Compliance time-frame of regulations/standards			
		Explanation of Significance and implication of the regulations to organization			
		Correlation with other safety regulations/standards, where applicable			
3	Scope and integration of the safety management system	Nature of the ATS organization's aviation business and its role within the overall aviation industry.			
		Identification of major areas, departments, workshops and facilities of organization where SMS will apply			
		Identification of the major processes, operations and equipment which are deemed eligible for the organization's SRM programme			
		Identify the relevant integration of QMS within the ATS SMS, if applicable			
4	Safety policy	Contains the safety policy of ATS organization			
		Safety policy appropriate to the size and complexity of organization			
		Safety policy approved and signed by accountable executive			
		Safety policy reviewing provision			

		Personnel at all levels involved in SMS establishment and maintenance			
		Safety policy is communicated within organization			
5	Safety objectives	Contains safety objectives of the organization			
		safety objectives are expressed as a top-level statement describing the organization's commitment to achieving safety			
		safety objectives are publicized and distributed			
		Resources have been allocated for achieving the objectives			
		safety objectives are linked to safety indicators			
6	Safety accountabilities and key personnel	Appointment of Accountable executive, safety review board, safety manager, safety committee or safety action group as appropriate			
		Accountable executive's authorities, responsibilities and accountabilities			
		Safety Manager's authorities, responsibilities and accountabilities			
		Safety authorities, responsibilities and accountabilities of all other personnel at different levels			
		SMS organizational accountabilities diagram			
7	Safety reporting and remedial actions	Procedure for the capturing the internal occurrences including accidents, incidents and other occurrences relevant to SMS			
		Distinction between mandatory reports and other routine occurrence reports			
		Voluntary and confidential hazard/occurrence reporting system, incorporating appropriate identity/data protection as applicable			
		reporting processes are simple, accessible and commensurate with the size of theorganization			
		High-consequence reports and associated recommendations are addressed to and			

		reviewed bythe appropriate level of management.			
		Reports are collected in an appropriate database to facilitate the necessary analysis			
8	Hazard identification and risk assessment	Identified hazards are evaluated, prioritized and processed for risk assessment as appropriate.			
		Structured process for risk assessment followed: evaluation of severity, likelihood, tolerability and preventive controls.			
		Hazard identification and risk assessment procedures focus on aviation safety as their fundamental context.			
		The risk assessment process utilizes worksheets, forms or software appropriate to the complexity of the organization and operations involved.			
		Completed safety assessments are approved by the appropriate level of management.			
		There is a process for evaluating the effectiveness of the corrective, preventive and recovery measures that have been developed.			
		There is a process for periodic review of completed safety assessments and documenting their outcomes.			
9	Safety performance monitoring and measurement	The formal process to develop and maintain a set of safety performance indicators and their associated performance targets.			
		Correlation established between the SPIs and the organization's safety objectives where applicable and the process of regulatory acceptance of the SPIs where required.			
		The process of monitoring the performance of these SPIs including remedial actionprocedure whenever unacceptable or abnormal trends are triggered.			
		Any other supplementary SMS or safety			

		performance monitoring and measurement criteria or process.			
10	Safety-related investigations and remedial actions	Procedures to ensure that reported accidents and incidents are investigated internally.			
		Dissemination of completed investigation reports internally as well as to the CAA as applicable.			
		A process for ensuring that corrective actions taken or recommended are carried out and for evaluating their outcomes/effectiveness.			
		Procedure on disciplinary inquiry and actions associated with investigation report outcomes.			
		Clearly defined conditions under which punitive disciplinary action would be considered (e.g. illegal activity, recklessness, gross negligence or willful misconduct).			
		A process to ensure that investigations include identification of active failures as well as contributing factors and hazards.			
		Investigation procedure and format provides for findings on contributing factors or hazards to be processed for follow-up action by the organization's hazard identification and risk management system where appropriate.			
11	Safety training and communication	The training syllabus, eligibility and requirements are documented.			
		There is a validation process that measures the effectiveness of training.			
		The training includes initial, recurrent and update training, where applicable.			
		The organization's SMS training is part of the organization's overall training programme.			
		SMS awareness is incorporated into the employment or indoctrination programme.			
		The safety communication processes/channels within the organization.			
12	Continuous	The process for regular internal audit/review of			

	improvement and SMS audit	the organization's SMS to ensure its continuing suitability, adequacy and effectiveness.			
		Describe any other programmes contributing to continuous improvement of the organization's SMSand safety performance, e.g. internal monitoring and evaluations, internal/external audits, safety surveys, etc.			
13	SMS records management	The organization has an SMS records or archiving system that ensures the retention of all recordsgenerated in conjunction with the implementation and operation of the SMS.			
		Records to be kept include hazard reports, risk assessment reports, safety action group/safety meeting notes, safety performance indicator charts, SMS audit reports and SMS training records.			
		Records should be traceable for all elements of the SMS and be accessible for routine administration of the SMS as well as internal and external audits purposes.			
14	Management of change	Procedures to ensure that substantial organizational or operational changes take into consideration any impact which they may have on existing safety risks.			
		Procedures to ensure that appropriate safety assessment is performed prior to introduction of new equipment or processes which have safety risk implications.			
		Procedures for review of existing safety assessments whenever there are changes to the associated process or equipment.			
15	Emergency/contingency response plan	The organization has an emergency plan that outlines the roles and responsibilities in the event of a major incident, crisis or accident.			
		There is a notification process that includes an emergency call list and an internal mobilization process.			

		The organization has arrangements with other agencies for aid and the provision of emergency services as applicable.			
		The organization has procedures for emergency mode operations where applicable.			
		There is a procedure for overseeing the welfare of all affected individuals and for notifying next of kin.			
		The organization has established procedures for handling the media and insurance-related issues.			
		There are defined accident investigation responsibilities within the organization.			
		The requirement for preservation of evidence, securing the affected area, and mandatory/ governmental reporting is clearly stated.			
		There is emergency preparedness and response training for affected personnel.			
		A disabled aircraft or equipment evacuation plan has been developed by the organization in consultation with aircraft/ equipment owners, aerodrome operators or other agencies as applicable.			
		A procedure exists for recording activities during an emergency response.			