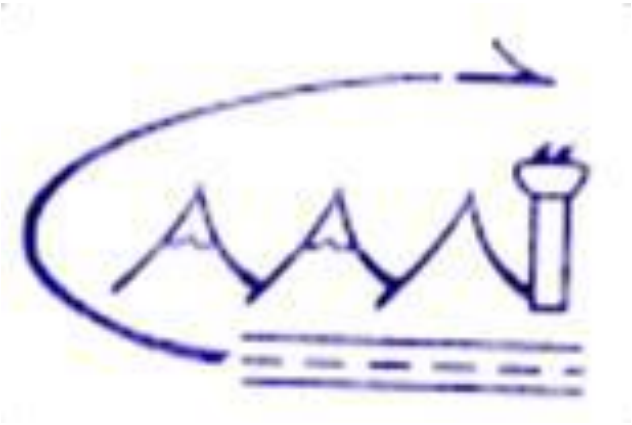

# CIVIL AVIATION AUTHORITY OFNEPAL

# ANS Regulatory Policy and Procedure Manual

## Third Edition

## March 2022

# Contents

# FOREWORD

This Manual has been prepared pursuant to **Clause-35 of Civil Aviation Authority of Nepal Act, 2053 (1996) and Rule-82 of Civil Aviation Regulation, 2058 (2002**) for the use and guidance of ANS Inspectors in performing their duties.

It is emphasized that all matters pertaining to an inspector's duties and responsibilities may not be completely covered in this manual. Inspectors are expected to use their good judgment in matters where specific guidance has not been given.

This edition includes the modifications in Audit/Inspection procedures and ANS Inspection Checklists as per the international practices as well as the ICAO guidelines.

This is a controlled document and is subject to periodic review. ANS Safety Standards Department will maintain this document as complete, accurate and up-dated as possible. Comments and recommendations for revision/amendment action to this publication should be forwarded to the Director of ANS Safety Standards Department.

**This manual supersedes the ANS Policy and Procedure Manual second edition.**

Er. Pradeep Adhikari
Director General
Civil Aviation Authority of Nepal

# RECORD OF AMENDMENTS AND CORRIGENDA

| Amendments | | | |
|---|---|---|---|
| No. | Date of Issue | Date Entered | Entered By |
| 1. | September, 2022 | September, 2022 | ANSSSD |
| 2. | March, 2023 | March, 2023 | ANSSSD |
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# PART 1 ANS POLICY

# CHAPTER 1 GENERAL

## 1.1. Definitions

**Air navigation services:** A generic term meaning variously, the Air Traffic Services, the Communication, Navigation and Surveillance (CNS) Services, the Meteorological Services for Air Navigation, the Search and Rescue (SAR) Services and the Aeronautical Information Services.

**Air navigation service provider (ANSP):** An Air Navigation Service Provider (ANSP) is an organization that provides the air navigation services for managing the aircraft in flight or on the maneuvering area of an aerodrome vested in it and which is the legitimate holder of that responsibility.

**Air traffic:** All aircraft in flight or operating on the maneuvering area of an aerodrome.

**Air traffic management (ATM):** The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

**Air traffic service (ATS):** A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

**Approval:** The formal act of approving a change submitted by a requesting organization. This action is required prior to the proposed change being implemented.

**Assessment:** An evaluation based on engineering, operational judgment and/or analysis methods or an appraisal of procedures or operations based largely on experience and professional judgment

**ATM Service:** A service for the purpose of Air Traffic Management

**Audit**: Asystematic and objective review of state's aviation framework to verify compliance with

the provision of the Chicago Convention or national regulation, conformance with or adherence to Standards and Recommended Practices (SARPs), Procedures and good aviation practices including the effective implementation of the critical elements of a safety oversight system.

**Audit Finding:** The determination with respect to the compliance with the provision of the Chicago Convention or national regulation, conformance with or adherence to Standards and Recommended Practices (SARPs), Procedures and good aviation practices including the effective implementation of the critical elements of a safety oversight system.

**Audit Report**:A report that outlines the audit process and provides a summary of the audit findings.

**Closing Meeting:** A meeting of the inspection team and the representatives of the service provider at the end of the inspection, the purpose of which is to provide the service provider authorities with preliminary information on inspection findings and proposed recommendations to enable the service provider to start working on its corrective action plan.

**Conformance:** The state of meeting the requirements of a Standard.

**Corrective action:** Action to eliminate the cause of a detected non-conformity or noncompliance or other undesirable situation.

***Note: -*** *Corrective action does not mean the action taken to restore a non-conforming situation to a conforming situation. This is known as remedial action. If the root cause of non-conformity is not addressed then it is very likely that similar non-conformities will recur)*

**Corrective Action Plan**: An action plan submitted to regulatory body by an audited service provider detailing the purposed action the service provider to resolve identified deficiencies on the basis of recommendations made by an audit team.

**Deficiency:** Lacking of something essential, imperfect, defective and if such hazards allowed to exist within a system, result in a system deficiency.

**Entry Meeting:** A meeting of the audit/inspection team and representative of the service provider to be audited before the commencement of the audit, the purpose of which is to provide

the Authorities with information on the audit process and the scope of the audit

**Event:** Any incident that occurs or a situation arises at a particular place during a particular interval of time.

**Exit Meeting**: A meeting of the audit/inspection team and representative of the audited service provider at the end of the audit, the purpose of which is to provide the service provider authorities with preliminary information or audit findings and proposed recommendations to enable the service provider to start working on its corrective action plan.

**Hazard:** Conditions, 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.

**Hazard Identification:** The process of determining what can happen, why and how.

**Human Factor:** The factor pertaining to human's capabilities, limitations, and behaviors and its integration into the design of a system to enhance the safety performance.

**Human Factor principles:** Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance

**Human Performance:** Human capabilities and performance limitations which have an impact on the safety and efficiency of aeronautical operations.

**Incident:** An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

**Inspection:** The basic activity of an audit which involves examination of the specific characteristics of the safety oversight programme of the contracting state.

**Inspection Activities:** Those activities and procedures by which information is obtained in order to verify that the inspected location/airport is in conformance with, or adherence to, applicable Standards and Recommended Practices (SARPs), described in Civil Aviation Ordinance 1960, Civil Aviation Rules 1984, Civil Aviation Ordinance 1985, relevant Air

Navigation Orders and CNS Inspectors Hand Book. Such activities may include, but are not limited to, interviews, observations, inspections, and the review of files and documents.

**Inspection Report:** A standardized means of reporting the inspection findings to the designated authorities.

**Inspector:** A person trained and authorized to undertake oversight inspections/audits.

**Lack of Effective Implementation (LEI):**A measure of the state's safety oversight capability, calculated for each critical element for each audit area. The overall lack of effective implementation (LEI) published in the USOAP audit reports is the average of the eight LEIs for each critical element.

**Monitoring:** The processes to check, supervise, observe critically, or record the progress of an activity/function or system on a regular basis in order to identify change

**Non-adherence:** A deficiency in characteristic, documentation or procedure with respect to a Recommended Practice, procedure, guideline or good aviation safety practice.

**Non-compliance:** A deficiency in characteristic, documentation or procedure with respect to provisions of the Chicago Convention or a national regulation.

**Non-conformance:** A deficiency in characteristic, documentation or procedure with respect to an ICAO Standard.

**Observation:**An area in which, in the view of the safety Oversight Inspection team, could improve efficiency and/or generate e improved safety outcome, and which the Safety Oversight Inspector could note and address.

**Opening meeting:** A meeting of the inspection team and the representatives of the Service provider to be audited/inspected before the commencement of the inspection the purpose of which is to provide the Authorities with information on the audit/inspection process and the scope of theaudit/inspection.

**Operation Manual:** A manual containing procedures, instructions and guidance, for use by the operational personnel in the execution of their duties.

**Oversight:** The active control of the aviation industry and service providers by the competent regulatory authorities to ensure that the State's international obligations and national requirements are met through the establishment of a system based on the eight critical elements.

**Recommendation:** Those controls that have the potential to mitigate a hazard or risk but have not yet been validated as a part of the system or its requirements.

**Regulation:** The giving of authoritative direction to bring about and maintain a desired degree of order

**Requirement:** An essential attribute or characteristic of a system. It is a condition or capability that must be met or passed by a system to satisfy a contract, standard specification, or other formally imposed document or need

**Safety:** Safety is the state in which the risk of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management. Safety may also be defined: as a condition in which the risk of harm or damage is limited to an acceptablelevel.

**Safety Directive (SD):** A mandate from the Authority/DGCA (Regulator) to Service Provider(s)/Operator(s) to take immediate corrective action to address a noncompliance/ non-conformance issue that creates a significant unsafe condition.

**Safety Circular (SC):** A guidance and/or information from the Director General /Regulator for Service Provider(s) and Operator(s), necessary to take appropriate measures regarding safety-related issue(s).

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

**Standard Operating Procedure (SOP):** A written procedure prescribed for repetitive use as a practice, in accordance with agreed upon specifications aimed at obtaining a desired outcome.

**Safety Oversight:** A function by means of which the Authority ensures effective implementation of the National Aviation Legislation, Rules, safety-related Standards and Recommended Practices (SARPs) and associated procedures prescribed in the Air Navigation

Orders/Manuals/Directives including amendments thereto; to meet the obligations as contained in the Annexes to the Convention on international Civil Aviation and related ICAO documents. Safety oversight also ensures that the national aviation industry provides a safety level equal to, or better than, that defined by theSARPs.

**Safety Oversight Audit/Inspection Process:**A prescribed three-phase process that consists of the pre-audit/inspection, audit/inspection and post-audit/inspection activities.

**Safety Oversight Audit/Inspection activities**: Audit/Inspection-related activities commencing with the entry meeting of the Inspection/Audit Team with authorities of the service provider and concluding with the exit meeting, including the provision of the draft findings and recommendations.

**Significant Safety Concern (SSC).** Occurs when the audited State allows the holder of an authorization or approval toexercise the privileges attached to it, although the minimum requirements established by the State and by theStandards set forth in the Annexes to the Chicago Convention are not met, resulting in an immediate safety risk tointernational civil aviation

## 1.2. Abbreviations

The following abbreviations and acronyms will be found throughout this manual and in functional area control manuals, including checklists and other guidance materials:

| | |
|---|---|
| ACC | Area Control Centre |
| ADC | Aerodrome Control Tower |
| AIM | Aeronautical Information Management |
| AIP | Aeronautical Information Publication |
| AIRAC | Aeronautical Information Regulation and Control |
| AIS | Aeronautical Information Service |
| AMHS | Aeronautical Message Handling System |
| AMDT/SUPP | Amendment/ Supplement |
| ANS | Air Navigation Services |
| ANSP | Air Navigation Services Provider |
| ANSSSD | Air Navigation Services Safety Standards Department |
| APCH | Approach |
| APP | Approach Control Unit |
| ATC | Air Traffic Control |
| ATCO | Air Traffic Control Officer |
| ATIS | Automatic Terminal Information Service |
| ASSRD | Aviation Safety and Security Regulation Directorate |
| ATM | Air Traffic Management |
| ATO | Approved Training Organization |
| ATS | Air Traffic Services |
| ATSEP | Air Traffic Safety Electronics Personnel |
| CAA | Civil Aviation Academy |
| CAAN | Civil Aviation Authority of Nepal |
| CAP | Corrective Action Plan |
| CARs | Civil Aviation Requirement |
| CAR | Civil Aviation Regulation |
| CMA | Continuous Monitoring Approach |
| CNAD | Communication & Navigation Aid Department |
| CNS | Communication, Navigation and Surveillance |
| CNSD | Communication, Navigation and Surveillance Department |
| COSPAS-SARSAT | Cosmicheskaya Sistyema Poiska Avariynich Sudov- Search and Rescue Satellite |
| DA/H | Decision Altitude/ Height |
| DG | Director General |
| DDG | Deputy Director General |
| DGCA | Director General Civil Aviation |

| | |
|---|---|
| FIR | Flight Information Region |
| GIS | Geographical Information System |
| HF | High Frequency |
| HIRM | Hazard Identification and Risk Mitigation |
| ICAO | International Civil Aviation Organization |
| JD | Job Description |
| LNC | Letter Name Code |
| LOA | Letter of Agreement |
| MATS | Manual of Air Traffic Services |
| MCC | Mission Control Centre |
| MDA/H | Minimum Descent Altitude/ Height |
| MET | Aviation Meteorology |
| MOC | Minimum Obstacle Clearance |
| MOCA | Minimum Obstacle Clearance Altitude |
| MOS-IFPD | Manual of Standard-Instrument Flight Procedure Design |
| NAV AIDS | Navigational Aids |
| NOF | International NOTAM Office |
| NOTAM | Notice to Airmen |
| OCA | Obstacle Clearance Altitude |
| OCH | Obstacle Clearance Height |
| OJT | On the Job Training |
| OLF | Online Framework |
| OPS | Operation |
| PANS | Procedure for Air Navigation Services |
| PBN | Performance Based Navigation |
| PELR | Personnel Licensing Requirement |
| PIB | Preflight Information Bulletin |
| QMS | Quality Management System |
| RCC | Rescue Coordination Center |
| RMA | Regional Monitoring Agency |
| RNP | Required Navigation Performance |
| RNP AR | Required Navigation Performance Authorization Required |
| RVR | Runway Visual Range |
| RVSM | Reduced Vertical Separation Minimum |
| SARPs | Standard and Recommended Practices |
| SAR | Search and Rescue |
| SID | Standard Instrument Departure |
| SMS | Safety Management System |
| SRM | Safety Risk Management |
| SSC | Significant Safety Concern |
| STAR | Standard Terminal Arrival Route |

| | |
|---|---|
| SURV& COMMS | Surveillance and Communication |
| T/AT | Technical/Air Traffic |
| T/ET | Technical/Electronic and Telecommunication |
| TIA | Tribhuvan International Airport |
| TIACAO | Tribhuvan International Airport Civil Aviation Office |
| TPM | Training and Procedure Manual |
| TWR | Tower |
| USOAP | Universal Safety Oversight Audit Programme |
| VHF | Very High Frequency |
| VTC | Video Teleconference |

## 1.3. Objectives of the Manual

(a) To provide guidance to ANS Inspectors and other regulatory staffs in administering the licensing, certification, 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.

## 1.4. Applicability

The categories of Air Navigation Service Providers Inspected/audited under the provisions of this manual are; Air Traffic Services, Aeronautical Information Services, Maps and Chart, Search and Rescue, Communication, Navigation and Surveillance Systems, Meteorological Services and Flight procedure design.

## 1.5. Authority for publication and amendment of the manual

ANS Regulatory Policy and Procedure Manual is developed, published and distributed 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.

**Contact details:**
**Air Navigation Services Safety Standards Department**
**Civil Aviation Authority of Nepal**
**Head Office, Babarmahal Kathmandu**
**Phone No: 014267784**
**Fax No: 014262923**
**Email: ansssd@caanepal.gov.np**

# CHAPTER 2 GENERAL POLICY

## 2.1. Introduction

2.1.1 The Civil Aviation Authority of Nepal (CAAN)is the regulatory body in the field of Civil Aviation primarily dealing with safety and regulatory issues. It is responsible for regulation of air transport services to/from/within Nepal and for enforcement of civil aviation regulations, requirements and the aviation safety standards. Besides that, CAAN is also acting as an Air Navigation Service Provider (ANSP) and Aerodrome Operator. To make a functional separation between service provider and regulator and to carry out safety oversight effectively, CAAN has established a separate Directorate, Aviation Safety and Security Regulation Directorate (ASSRD).

2.1.2 The ANS Safety Standards Department (ANSSSD) has been formed within Aviation Safety and Security Regulation Directorate to perform the safety oversight function of ANSP especially in the field of ATS, PANS- OPS/ Maps & Charts, AIS, SAR, MET and CNS. Accordingly, ATS, PANS-OPS, AIS, SAR, and CNS Inspectors are appointed within ANS Safety Standards Department who will carry out their duties as per the guidelines laid down in this manual. The Director General of CAAN will designate MET inspector as appointment by DHM to perform MET oversight functions under the supervision of CAAN. The Inspectors shall oversee all aspects of ANS concerning services, procedures, method and functions of ANS service provider and their applicability in accordance with relevant CARs, ICAO Annexes, Manuals, CAAN rules, regulation, directives and related documents.

## 2.2. Statutory Authority

2.2.1 ANS inspectors are appointed and authorized under Rule 84 of Civil Aviation Regulation 2058 (2002) by the Director General to maintain continuous safety oversight and conduct audit and inspections of the Air Navigation Services.

2.2.2 Inspector prescribed pursuant to 2.2.1 has authority to enter into airport or structure or area relating to the air navigation services or facility for inspection, enquiry to the concerned person and entity, written or oral statement, scrutiny or seizure of documents, collection of evidences etc.

2.2.3 During the inspection, pursuant to 2.2.2 if it is deemed that the operation of equipment, service or facility is unsafe in view of flight safety, the inspector may stop such operation of equipment, service or facility or immediately forbid or prevent the person or operator involved in such operation from exercising the privilege obtained by means of license, certificate or any other document.

## 2.3. Structure of CAAN as a state aviation regulator

2.3.1 CAAN has the following safety departments under safety directorate.

2.3.2 Aviation Safety and Security Regulation Directorate. (ASSRD)

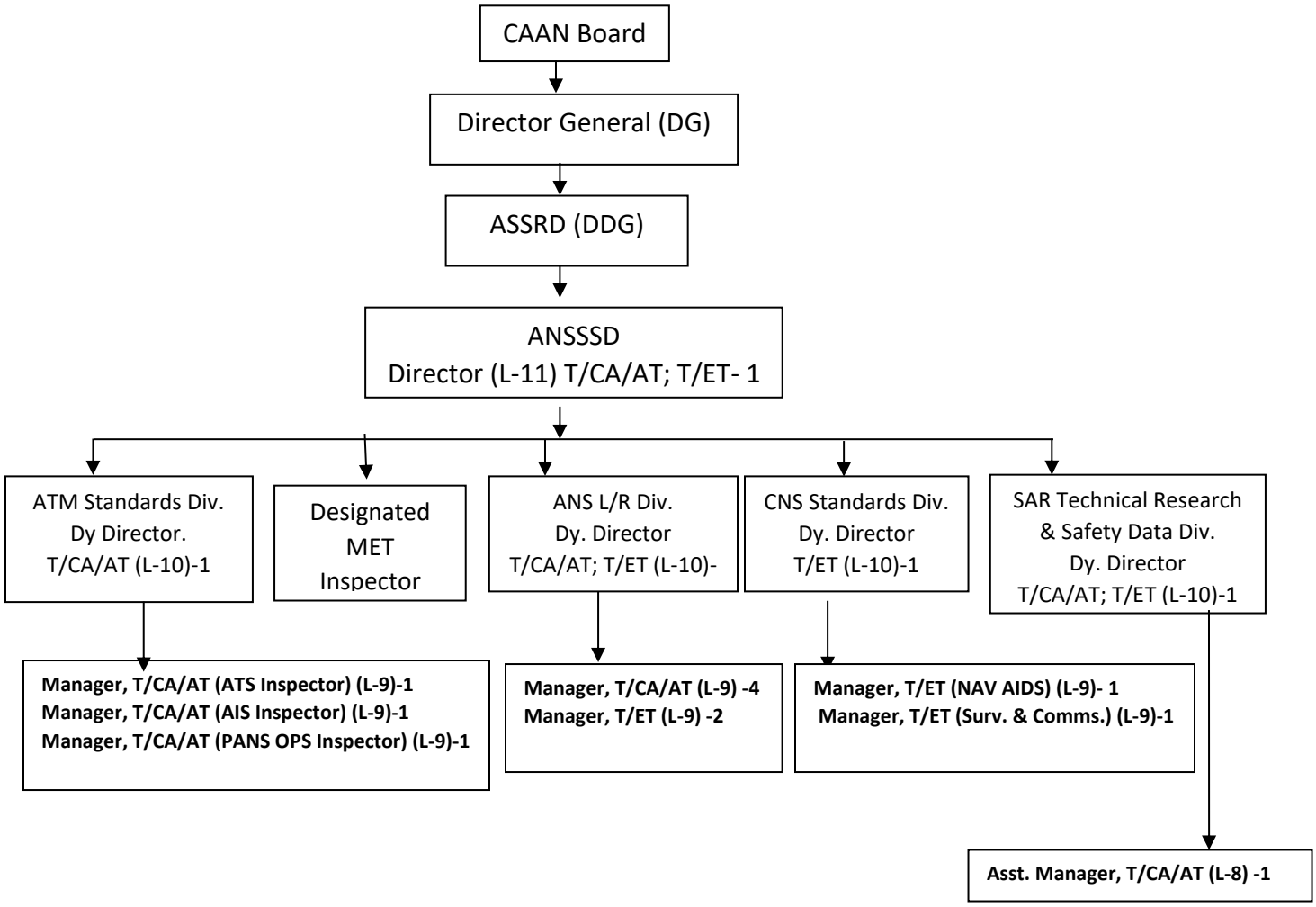
a. Flight Safety Standard Department

b. ANS Safety Standard Department

c. Aerodrome Safety Standard Department

## 2.4. Organization structure of ANSSSD

Organization structure of ANSSSD including its higher authorities is as shown below:



## 2.5. Resources

### 2.5.1 Staff Requirement:

The Authority shall make available a sufficient number of suitable Inspectors, with sound knowledge in related field, experienced, qualified and having the capabilities to accomplish the wide range of safety oversight activities. Adequate number of Inspectors will be assigned to conduct safety oversight task relating to each field based on its volume and activities.

### 2.5.2 Finance and Equipment:

The Authority shall make available necessary finance and equipment resources to meet the ANS safety oversight obligations.

## 2.6. Documentation

All updated/current documents are available in ANS library.
(https://caanepal.gov.np/safety/ansss-department/documents)

## 2.7. Document Control Procedure

There is one receive and dispatch section under Director ANSSSD, which will receive and dispatch official correspondence as letter, memo etc from or To Director ANSSSD.

### 2.7.1 Incoming Document Control Procedure

Whenever any document/letter/application is received either addressed to the Department, must get registered in Receive and Dispatch Section. A separate master register file is maintained (either soft or hard) for recording and registering of such document/letter/application. When any document/letter/application received and registered, each are given individual tracking number. After having registered in master register, the document/letter/application will move to the department Chief and then to respective Division for processing. Then the division Chief will allocate the document/letter/application to the individual officer/ inspector for processing through again respective receive or dispatch section, where it is again entered with information to which the document/letter/application is being forwarded.

### 2.7.2 Outgoing Documents Control Procedure

Whenever any document/letter/application is to be dispatched by department/division, it must be dispatched through receive and dispatch unit. Once document/letter/applicationis signed, it is

handed over to receive and dispatch unit where it is registered and each document /letter/application shall be given unique dispatch no. termed as Ref.: No...or ChalaniNo.....

The recording of dispatch document/letter/application shall either be done in hard or soft copy but shall be recorded. Whenever document/letter/application is dispatched it is again dispatched in two copies, one to addressee and one shall be kept as original copy.

### 2.7.3 Instructor Authorization/ Licensing and Rating Records

Each instructor Authorization / Licensing and Rating are maintained by respective division in separate index file. All individual license applications are processed asper the procedure laid down and must be processed through receive and dispatch unit. A separate file registered is maintained. Each license index file is maintained in respective record section, and is tracked through individual license no. These records are maintained in receive and dispatch unit.

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# CHAPTER 3 TRAINING POLICY, PROGRAMME AND PLAN

## 3.1. Training Policy

3.1.1 The training policy for regulatory personnel is contained in the CAAN Regulatory Technical Personnel Training Policy: Program and Plan document. The policy provides for initial, OJT, recurrent, specialized/advance training for inspectors.

3.1.2 The training program and plan for ANS inspectors is aimed at enhancing the qualifications and competencies of the inspectors and all the regulatory staffs of the department especially with regard to the delivery of safety oversight audit, inspection or surveillance functions.

3.1.3 All inspectors will be trained on basic inspection or audit techniques in the relevant field before conducting an audit as a basic qualification. However, after completing basic or initial training, the inspectors will be given On-the Job Training before assigning the audit task.

3.1.4 All the inspectors will be provided with periodic recurrent or refresher training, and will be provided specialized training as and when required.

## 3.2. Training Programme

3.2.1 ANSSSD will develop a formal training programme to be provided to its inspectors and submit it for approval and implementation.

3.2.2 The programme should be developed with all details like programme detailing what type of training, subject of the training and its contents, period of the training, priority of the training, etc.

3.2.3 The type of programme should include Basic or Initial Training, On-the Job Training, Recurrent or Refresher Training and Specialized Training.

3.2.4 The detailed ANSSSD Training Programme for its inspectors are mentioned in the Appendix 10-15.

3.2.5 The OJT Completion Record for the OJT Inspectors are mentioned in Appendix 17-22.

## 3.3. Type of Training

### 3.3.1 Basic/ Initial Training

**a. Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it

focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b. Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

### 3.3.2 OJT Training

**a) Introduction**

Inspectors once recruited into the Department, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

To develop inspector's confidence in conducting real audits/inspection independently.

### 3.3.3 Currency and Recurrency Training

### 3.3.3.1 Currency Training

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

### 3.3.3.2 Recurrency Training

**a) Introduction**

The ANS operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in

the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

ANS inspectors will undergo re-current training in the following courses:

1) ANS inspector course
2) SMS / SSP related trainings
3) Human Factors training

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

### 3.3.4 Advanced/ Specialized Training

**a) Introduction**

Advanced level training will be conducted in accordance with the training programmes for personal development and to prepare inspectors for advancement into management. specialized training will target the required subject matter expertise as described in the inspector training programme.

**b) Objective**

To enable the inspector to get specialized knowledge regarding safety oversight functions.

## 3.3 Training Plan

3.3.1 ANSSSD will develop annual or bi-yearly training plan for its inspectors and submit it for approval and implementation.

3.3.2 The plan should be developed with all details like person participating in the training, type of the training, contents of the training, period of the training, priority of the training, etc.

3.3.3 Sample training plan is mentioned in the Appendix 9.

## 3.4 Training/OJT Requirements for Inspectors

3.4.1 Initial and Specialized training shall be arranged for all inspectors to perform safety oversight function efficiently.

3.4.2 All ANS inspectors shall be required to satisfactorily complete the safety oversight audit training.

3.4.3 All ANS trainee inspectors shall undergo OJT under supervision of an ANS inspector in accordance with Appendix 17-22. As a part of OJT, trainee must:

a. Familiarization with regulatory audit/inspection procedures including the use of checklist.

b. Participate in at least one inspection conducted by an ANS inspector as an observer, and

c. Conduct at least one inspection under supervision an ANS inspector.

d. Competency Assessment:

1. Report Writing
2. Oral Test

3.4.4 Since the responsibility of inspectors is mainly implementing the civil aviation requirement and various rules and orders, their knowledge on the subject must be current, as such a periodic recurrent of the same is considered imperative. Thus, the recurrent training shall be programmed and the inspector will be trained at least once in two year.

## 3.5 OJT Requirement for newly appointed officials

3.5.1 All newly appointed officials shall undergo OJT under supervision of Department Chief or Division Chief as applicable in accordance with Appendix 16.

## 3.6 Training Record

3.6.1 Training record of all inspectors and other officials shall be retained in ANS Safety Standard Department. Itis the responsibility of individual inspector and other officials to make the record up to date and complete in accordance with Appendix 23.

# CHAPTER 4 DUTY, RESPONSIBILITY AND QUALIFICATION

## 4.1 Air Navigation Service Safety Standard Department

Air Navigation Services Safety Standards Department has been established within the Civil Aviation Safety Regulations Directorate to perform safety oversight of ATS, CNS, PANS-OPS/ MAPS & CHARTS, AIS, MET and SAR areas. MET Surveillance function is provided by personnel designated by Director General of CAAN.

### 4.1.1 Duties and responsibilities

The duties and responsibilities of the department are as follows:

1. Formulate, implement and amend Standards/ Requirements/ Manuals related to Air Navigation Services as required.
2. Carry out required safety regulation and inspection activities for the Safety Oversight Audit of Air Navigation Services provided by CAAN.
3. Carry out ANS safety awareness programme and ANS safety related seminars/workshops.
4. Approve the status of CNS/ATM system and the changes thereof for ensuring the safe and lawful operation of ANS system.
5. Effective implementation of voluntary and mandatory information reporting system of the safety related occurrences in ANS.
6. Cause to implement ATS SMS effectively and make arrangement for the acceptance of that SMS.
7. To investigate the safety related incidents and occurrences in ANS Domain.
8. Make necessary arrangements for incorporating international rules and provisions related to ANS in CAAN legal framework in a timely manner.
9. Issue Safety Directives to the concerned agencies and officials for the resolution of Significant Safety Concerns (SSC) related to ANS.
10. Approve the Operations Manual of Air Navigation Service Provider and any amendment thereof.
11. Approve the Maintenance Manual and Programme of the equipment related to CNS.
12. Carry out the regulatory functions related to Personnel Licensing, Rating and Training of the persons engaged in ANS.
13. Make necessary arrangements for filing of Differences to ICAO if amendments to ICAO SARPs concerning ANS cannot be exactly compliant.
14. Make necessary recommendations for taking action to those responsible for violating existing law related to ANS.

15. Recommend to issue ATS-Approved Training Organization certification manual.
16. Issue ATS-ATO instructor certificates.
17. Carry out necessary regulation and inspection for the safety oversight of services and facilities provided by ATO.
18. Approve the Training and Procedure Manual of ATS-Approved Training Organization.
19. Advise on matters related to ANS.
20. Submit Annual ANS Safety Oversight Report.
21. Perform USOAP CMA activities including OLF (online framework update function.)
22. Enforcement of ANS related requirements including MET

## 4.2 Director ANS Safety Standard Department

### 4.2.1 Duties and responsibilities

1 Carry out/cause to carry out duties assigned to the Department effectively.

2 Carry out/cause to carry out necessary reforms as a consequence of regular monitoring and evaluation of implementation aspect of duties assigned to theDepartment.

3 Advise the Director General on matters within the scope of responsibility of the Department.

4 Carry out and cause to carry out ANS safety awareness programme and ANS safety related seminars/workshops

5 Submit Periodic as well as Annual Progress Report.

6 Make necessary arrangements for proper utilization and protection of the physical facilities and office equipment required by the Department and ensure their availability.

7 Evaluate and cause to evaluate the performance of the subordinates and in accordance to the delegated power and submit it to the concerned authority.

8 Approve the leave request and deputation of the subordinates and cause to keep the record thereof.

9 Carry out the duties in such a way to set example by yourself among the subordinates in accordance to the rules of code of conduct contained in the Employee Rules.

10 Disseminate, in a timely manner, only that information and notice not classified by law as confidential to the concerned official and agency.

11 Implement/cause to implement the approved annual programme of the Department in an economic, efficient and effective way.

12 Implement/cause to implement the ICAO SARPs, Documents, Guidance Materials, as well as Resolutions adopted by International Convention, Meetings and Seminarsas per the need and requirement of the State.

13 Make arrangements for the study, training, workshop and seminar to the employees engaged in various responsibilities under the Department necessary for maintaining their skills and abilities.

14 Implement/cause to implement the safety recommendations concerned with ANS pointed out in aircraft incident/accident investigation reports.

15 Issue an immediate direction for improvement in case something that are hazardousto safety is found out during inspection of activities related to ANS, and may even issue direction to suspend such activities for ensuring flight safety.

16 Keep/ cause to keep the records related to the Department up-to-date.

17 Formulate and implement ANS Safety Oversight (lncluding ATS, SMS oversight) and Surveillance Plan Programme.

18 Identify and demand manpower, needed for an effective discharge of various Departmental responsibilities.

19 Represent CAAN, as required, on domestic and foreign workshops and seminars related to regulation of ANS.

20 Accept the Air Traffic Service Safety Management System (SMS) Manual on the basis of Air Traffic Service SMS Acceptance Manual and carry out Safety Oversight of Air Traffic Service Safety Management System (SMS).

21 Inspect, when needed license, rating and other documents of employees working in ANS areas and if found against the regulation and if serious restrict holder of license from discharging dut and submit report recommending for necessary action.

22 Recommend necessary arrangement for improvement of CAP submitted by concerned agency concerning finding raised during inspection/audit that has not been implemented.

23 Recommend departmental action over the official/employee who obstruct or does not provide necessary cooperation during the performance of assigned duties of ANS Safety Standards Department.

24 Recommend qualified subordinate official as inspectors for ANS Safety Oversight Audit/Inspection.

25 Recommend subordinate employees for reward and punishment according to regulation.

26 Execute other works assigned by Deputy Director General of Aviation Safety And Security Regulation Directorate.

27 Ensure USOAP CMA activities are performed.

28 Issue ATS-ATO instructor certificates.

## 4.3 ATM Standard Division

### 4.3.1 Duties and Responsibilities

1. Formulate implement and amend standards/requirements/manuals related to ATS/PANS-OPS/Maps and Charts/AIS as required.
2. Carry out required safety audit/inspection activities of ATS, PANS-OPS/MAPS and Chart, AIS service provided by relevant service provider.
3. Submit recommendation on status of ATM system and changes thereof to Department Chief for ensuring the safe and lawful observation of ATM System.
4. Ensure effective implementation of voluntary and mandatory information reporting system of safety related occurrence in ATS.
5. Carry out ANS safety awareness programme and ATM related seminars/workshops
6. Cause to implement ATS SMS effectively in ANSP.
7. Collect and submit hazard occurrences related to ATS, PANS-OPS, Maps and Charts, AIS to Department Chief.
8. Investigate the safety related incidents and occurrences in ATM domain.
9. Issue safety directions to the concerned agency and officials for the resolution ofsafety concerns.
10. Make necessary arrangement for incorporating relevant Annexes, documents, manuals, requirements in CAAN legal framework in a timely manner.
11. Forward operation manual of ANSP and any amendment thereof with recommendation for approval.
12. Carryout regulatory function related to Licensing, Rating and training of the personnel engaged in ATS.
13. Make necessary arrangement for filing differences to ICAO.
14. Make necessary recommendation to department chief for taking action to those responsible for violating existing laws.
15. Advice Department Chief on related matters.
16. Prepare and Submit Annual ATM Safety Oversight and surveillance plan/programme schedule to department chief.
17. Prepare and submit training programme related to ATM to Department Chief for approval.
18. To identify and demand of manpower needed for the discharge of various divisional responsibilities of ATM.
19. Recommend to Department Chief as required for the representation in domestic and foreign workshop and seminar related to ATM

## 4.4 Deputy Director of ATM Standard Division.

### 4.4.1 Duty and Responsibilities

1. Carryout/cause to carry out duties assigned to the division effectively.
2. Monitor and evaluate implementation accept of duties assigned to division and carry out/ cause to carry out reforms as necessary.
3. Advise to department chief on matters within the scope of responsibilities of division.
4. Submit Annual Audit/Inspection schedule including ATS SMS for the safety oversight related to ANS service provider to the department chief for the approval.
5. Carry out and cause to carry out ANS safety awareness programme and ATM related seminars/workshops.
6. Act as an inspector if qualified for the safety oversight Audit/Inspection.
7. Prepare and submit periodic as well as annual progress report to the department chief.
8. Carry out duties in such a way to set example by yourself among the subordinates in accordance to the rules of code of conduct contained in the employee rule.
9. Make necessary arrangement for proper utilization and protection of physical facilities and office equipment required by the division and ensure the availability.
10. Implement and cause to implement the approved annual programme of the division in an economy, efficient and effective way.
11. Implement and cause to implement ICAO SARPs, Documents guidance materials as well as regulation adopted by international convention, meeting and seminar as per the need and ground relatively of the state.
12. Make suitable arrangement for the study, training, workshop, seminar to the employee engaged in various responsibilities of the division necessary for maintaining their skills and ability.
13. Implement safety recommendation concern with the ATM pointed out in accident investigate report.
14. Keep/cause to keep the records related to the division up to date.
15. Identify and demand of manpower as necessary for an effective discharge of various divisional responsibilities.
16. Represent CAAN as required on domestic and foreign workshop and seminar related to regulation of ANS.
17. Inspect when needed license and rating and other documents of employee working in ATS operations and if found against the regulation and if serious restrict holder of license from discharging duties and submit report to Department Chief recommending for necessary action.

18. Recommend to department chief regarding necessary arrangement for improvement of Corrective Action Plan (CAP) submitted by concerned agency concerning finding raised during ATM inspection/audit which has not been implemented.
19. Recommend to department chief for action over the official/employee who obstruct or doesn't provide necessary co-operation during the performance of assigned duties of division.
20. Recommend to department chief for reward and punishment to subordinates according to regulation.
21. Execute other works assigned by Director of Air Navigation Services Safety Standards Department.

## 4.5 SAR/ Technical Research and Safety Data Division

### 4.5.1 Duties and Responsibilities

1. Formulate implement and amend standards/requirements/manuals related to SAR as required.
2. Carry out required safety regulation and inspection activities for safety oversight audit of SAR service provided by ANSP.
3. Submit recommendation regarding SAR System and changes thereof to Department Chief for ensuring safe and lawful operation of SAR system.
4. Carry out ANS safety awareness programme and SAR related seminars/workshops
5. Collect, Analyze and implement ANS related occurrences by establishing voluntary and mandatory reporting system.
6. Make necessary arrangement for incorporating Annexes, Documents, Manuals, Requirements related to SAR in CAAN legal framework in a timely manner.
7. Make necessary arrangement for filing differences to ICAO.
8. Make necessary recommendation to department chief for taking action to those responsible for violating existing rules and regulation related to SAR.
9. Advice department chief on matters related to SAR.
10. Prepare and submit annual SAR Safety Oversight Audit and surveillance plan/programme schedule to department chief.
11. Prepare and submit training programme related to SAR to department chief for approval
12. Identify and demand of manpower needed for discharge of various divisional responsibilities of SAR technical research and safety data Division.
13. Recommend to department chief as required for representation in domestic and foreign workshop and seminar related in SAR .

## 4.6 Deputy Director, SAR/ Technical Research and Safety Data Division

### 4.6.1 Duties and Responsibilities

1. Carry out/cause to carry out duties assigned to the division effectively.
2. Monitor and evaluate implementation aspects of duties assigned to division and carry out/cause to carry out reforms as necessary.
3. Advice to department chief on matters within the scope of responsibilities of the division.
4. Carry out and cause to carry out ANS safety awareness programme and SAR safety related seminars/workshops.
5. Submit annual audit/inspection schedule for the safety oversight related to SARservice provider to the department chief for the approval.
6. Act as a SAR inspector if qualified for the safety oversight audit/inspection.
7. Prepare and submit periodic as well as annual progress report to the department chief.
8. Carry out duties in such a way to set example by yourself among the subordinates in accordance to the rule of code of conduct in the employee rule.
9. Make necessary arrangement for proper utilization and protection of physical facilities and office equipment required by the division as ensure their availability.
10. Implement and cause to implement the approval annual programme of the division in the economy, efficient and effective way.
11. Implement and cause to implement the ICAO SARPs documents, guidance materials aswell as resolution adopted by international convention meeting and seminars as required.
12. Make suitable arrangements for the study, training, workshop, seminar to the employee engaged in various responsibilities under the division necessary for maintaining their skill and ability.
13. Keep and cause to keep the records related to the division up to date.
14. Identify and demand of manpower needed for an effective discharge of various divisional responsibilities.
15. Represent CAAN as required domestic and foreign workshop and seminars related to regulation of the SAR.
16. Recommend to department chief regarding necessary arrangement for improvement of Corrective Action Plan (CAP) submitted by concerned agency concerning finding raised during SAR inspection/audit which has not been implemented.
17. Recommend departmental action over the official/employees who obstruct or does not provide necessary cooperation during the performance of assigned duties.
18. Recommend subordinate employees for reward and punishment according to regulation.

19. Execute other works assigned by Director of Air Navigation Services Safety Standards Department.

## 4.7 CNS Standard Division

### 4.7.1 Duties and Responsibilities

1. Formulate, implement and amend Standard/Requirements/manuals/ related to CNS as required.
2. Carry out required safety regulation and inspection activities for safety oversight audit of CNS services provided by CAAN.
3. Submit status of CNS system and changes thereof to Department Chief for ensuring safe and lawful operation of CNS system.
4. Establish and implement voluntary and mandatory reporting system for effective reporting of safety related occurrence in CNS.
5. Carry out ANS safety awareness programme and CNS related seminars/workshops
6. Cause to implement SMS in CNS services.
7. Collect occurrence/ outages related to CNS incidents and submit to department Chief.
8. Investigate safety related occurrence/outages related to CNS.
9. Make arrangement for incorporating annexes, documents, manuals, requirements related to CNS in CAAN legal framework in timely manner.
10. Issue safety directives to concern agencies and officials for regulation of significant safety concerns related to CNS.
11. Submit amendment of maintenance manual and program of CNS service provider to department chief for approval.
12. Carryout regulatory functions related to personnel licensing, rating and training of the persons engaged in CNS.
13. Make necessary arrangements for filing of differences to ICAO if ICAO SARPs concerning CNS cannot be exactly complaint.
14. Make necessary recommendation to department chief for action to those responsible for violating existing law related to CNS.
15. Perform necessary monitoring on site surveillance of CNS equipment to ensure the standardization of its installation and operation.
16. Review technical specification of CNS equipment to be installed by CAAN and submit it to department chief for approval.
17. Provide advice and suggestion to department chief regarding CNS related matter.
18. Prepare and submit Annual CNS Safety Oversight Surveillance Plan/Program Schedule to department chief.

19. Prepare and submit CNS related training program to department chief.
20. Identify and demand necessary manpower for effective discharge of various divisional responsibilities.
21. Recommend to department chief as required for representation in domestic and foreign workshop and seminar related to CNS.

## 4.8 Deputy Director of CNS Standards Division

### 4.8.1 Duties and Responsibilities

1. Carry out/cause to carry out duties assigned to the division effectively.
2. Monitor and evaluate implementation aspects of duties assigned to division and carry out/cause to carry out reforms as necessary.
3. Advice to department chief on matters within the scope of responsibilities of the division.
4. Submit annual audit/inspection schedule of the safety oversight related to CNS service provider to the department chief for the approval.
5. Carry out and cause to carry out ANS safety awareness programme and CNS related seminars/workshops
6. Act as a CNS inspector if qualified for the safety oversight audit/inspection.
7. Carry out on site monitoring and necessary surveillance of CNS equipment to ensure the standardization of its installation and operation.
8. Review technical specification of CNS equipment to be installed by CAAN and submit it to department chief for approval.
9. Review and submit maintenance programme and manual and changes thereof related to CNS equipment installed, or going to install at different airport to department chief for approval.
10. Prepare and submit periodic as well as annual progress report to the department chief.
11. Carry out duties in such a way to set example by yourself among the subordinates in accordance to the rule of code of conduct in the employee rule.
12. Make necessary arrangement for proper utilization and protection of physical facilities and office equipment required by the division as ensure their availability.
13. Implement and cause to implement the approval annual programme of the division in the economy, efficient and effective way.
14. Implement and cause to implement the ICAO SARPs documents, guidance materials as well as resolution adopted by international convention meeting and seminars as required.
15. Make suitable arrangements for the study, training, workshop, seminar to the employee engaged in various responsibilities under the division necessary for maintaining their skill and ability.

16. In the time of inspection if any unsafe activities related to CNS is identified, provide immediate order and direction for improvement and may stop such activities if necessary.
17. Keep and cause to keep the records related to the division up to date.
18. Identify and demand of manpower needed for an effective discharge of various divisional responsibilities.
19. Represent CAAN as required domestic and foreign workshop and seminars related to regulation of the CNS.
20. Submit Annual Audit/Inspection schedule including ATS SMS for the safety oversight related to ANS service provider to the department chief for the approval.
21. Forbid or prevent for discharging duties to license/rating holder if found violating the rules during monitoring ANSP and submit recommendation for necessary action.
22. Discuss violation of prevailing regulations regarding ANS related occurrences/ accident and submit recommendation to department chief for necessary action.
23. Recommend departmental action over the official/employee who obstruct or does not provide necessary cooperation during the performance of assigned duties.
24. Recommend subordinate employees for reward and punishment according to regulation.
25. Execute other works assigned by Director of Air Navigation Services Safety Standards Department.

## 4.9 ANS Licensing and Rating Division

### 4.9.1 Duties and Responsibilities

1. Carry out ANS Licensing and Rating related functions.
2. Formulate and implement and amend standard/requirements/manuals related to ANS Licensing and Rating.
3. Recommend Department Chief to issue Approval certificate for ATS ATO.
4. Carry out necessary regulation and inspection for the safety oversight of services and facilities provided by ATO.
5. Carry out ATC/ATSEP licensing/rating related seminars/workshops.
6. Submit recommendation regarding ANS licensing Rating system and changes thereof to Department chief to ensuring safe and lawful operation of ANS Licensing and Rating system and submit to department chief regarding amendment to changes of system.
7. Collect and submit occurrences related to ANS to department chief.
8. Make necessary arrangement for incorporating annexes, documents, manuals, requirements related to ANS Licensing and Rating in CAAN legal framework in a timely manner.

9. Issue safety direction to the concerned agency and officials for resolution of significant safety concern (SSC) related to ANS Licensing and Rating.
10. Carryout regulatory function related to Licensing, Rating and training of the personnel engaged in ANS.
11. Recommend Department Chief for TPM of ATS ATO
12. Make necessary arrangement for filing of difference to ICAO.
13. Make necessary recommendation to department chief for taking action to those responsible for violating existing law related to ANS Licensing and Rating.
14. Advice department chief on matters related to ANS Licensing and Rating.
15. Prepare and submit annual ATO Safety Oversight Surveillance Plan/Programme schedule to department chief.
16. Prepare and submit ANS Licensing and Rating related training program to department chief.
17. Identify and demand necessary manpower for effective discharge of various divisional responsibility.
18. Recommend to department chief as required for representation in domestic and foreign workshop and seminar related to ANS Licensing and Rating.

## 4.10 Chief ANS Licensing and Rating Division

### 4.10.1 Duties and Responsibilities

1. Carry out duties assigned to the division effectively
2. Monitor and evaluate implementation accept of duties assigned to division and carry out / cause to carry out reforms as necessary.
3. Advice to department chief on matters within the scope of responsibilities of the division.
4. Prepare and submit periodic as well as annual progress report to the department chief.
5. Carry out and cause to carry out ATC/ATSEP licensing/rating related seminars/workshops.
6. Make necessary arrangement for proper utilization and protection of physical facilities and office equipment required by the division as ensure their availability.
7. Implement and cause to implement the ICAO SARPs documents, guidance materials as well as resolution adopted by international convention meeting and seminars as required.
8. Make suitable arrangements for the study, training, workshop, seminar to the employee engaged in various responsibilities under the division necessary for maintaining their skill and ability.

9. During monitoring of the activities of ATS personnel if found violation of terms and conditions related to licensing and rating, the division chief may forbid from exercising the privilege of License/Rating and may recommend for necessary action to department chief.
10. Discuss violation of prevailing regulations regarding ANS related occurrences/ accident and submit recommendation to department chief for necessary action.
11. Keep and cause to keep records related to the division up to date.
12. Identify and demand of manpower needed for an effective discharge of divisional responsibilities.
13. Represent CAAN as required on domestic and foreign workshop and seminar related to regulation of ANS.
14. Carry out duties in such a way to set example by yourself among the subordinates in accordance to the rule of code of conduct in the employee rule.
15. Recommend to department chief for action over the official or employee who obstruct or doesn't provide necessary co-operation during the performance of assigned duties of division.
16. Recommend for reward and punishment to subordinates according to regulation.
17. Execute other works assigned by Director of Air Navigation Services Safety Standards Department.

## 4.11 ATS Inspector

### 4.11.1 Duties and responsibilities

1. Formulate and implement ATS Safety Audit and Surveillance Programme.
2. Conduct onsite monitoring and necessary surveillance to ensure the standards of the ATS service provider at the airport.
3. Implement surveillance programme including the oversight of SMS on behalf of the Department in accordance with the approved programme and submit report to the Department chief through Divisional chief.
4. To ensure safety of flight, issue immediate directives to the service provider if there are any issue that need immediate attention.
5. Conduct ANS safety awareness programmes and ATS related seminars/workshops.
6. Review the ATS operational manual and other document and their amendment and submit the department chief through the divisional chief for approval.

7. Inspect when needed license and rating and other documents of employee working in ATS area and if found against the regulation and if serious restrict holder of license from discharging duties and submit report to Department Chief recommending for necessary action through divisional chief.
8. Communicate with concerned units to amend ATS related documents to incorporate changes in ICAO SARPs and advice the Head of the Department Chief through divisional chief.
9. Participate in any in house and abroad workshops and seminars related to ATS matters.
10. Collect information of ATS related occurrence and submit it to the department chief through divisional chief.
11. Investigate the ATS related incident and occurrences and submit the report.
12. Participate actively in performing duties under departmental/divisional chief.
13. Develop and amend ANS Regulatory Policy and Procedure Manual necessary for inspection.
14. Develop training plan and programme for inspector.
15. Other duties as assigned/delegated by the Department Chief/Division Chief for the execution of the departmental works.

### 4.11.2 Authorities

1. ATS Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.
2. During the inspection if it is deemed that the equipment or service is unsafe in view of safety, the Inspector may stop or forbid such operation of the equipment or privilege obtained by means of license/certificate.
3. In the time of inspection if any unsafe activities related to ATM is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.11.3 Qualification

#### A. Entry Level Qualification

1. Possess Basic ATS course from Approved Training Organization.
2. Hold or have held an ATC license/rating with aerodrome, approach and area control rating and 10 years' experience in Air Traffic Control.
3. No action has been taken for violation against ATC Licensing provision within last 3 years.

### B. Minimum Qualification

1. The inspector shall have successfully completed ANS/ATS safety oversight audit/inspection course from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in ATS procedures/practices, personnel licensing/training.
3. Possess training in Audit Technique Course, SMS and USOAP.

## 4.12 CNS Inspector

### 4.12.1 Duties and responsibilities

1. Formulate and implement CNS safety Audit and Surveillance Programme in order to cooperate Divisional Chief.
2. Conduct onsite monitoring and necessary surveillance to ensure the standards of installation/operation/maintenance of the CNS equipment.
3. Conduct monitoring and surveillance programme including the oversight of CNS in accordance with the approved programme and submit report to the Department chief through Divisional chief.
4. Conduct ANS safety awareness programmes and CNS related seminars/workshops.
5. To ensure safety of flight issue immediate directives to the service provider if there are any issue that need immediate attention.
6. Inspect when needed license and rating and other documents of employee working in CNS areas and if found against the regulation and if serious restrict holder of license from discharging duties and submit report to Department Chief recommending for necessary action.
7. Review technical specification of CNS equipment to be installed by CAAN and submit it to department chief through divisional chief for approval.
8. Review maintenance programme and manual and changes thereof related to CNS equipment installed or going to install at different airport and submit to department chief through divisional chief for approval.
9. Communicate with concerned units to amend Aeronautical telecommunication related documents to incorporate changes in ICAO SARPs and advice the Head of the Department through divisional chief.
10. Participate in any in house and abroad workshops and seminars related to CNS matters.
11. Collect information of CNS related occurrence and submit the departmental chief through divisional chief.
12. Investigate of CNS related incident and occurrences and submit the report.
13. Participate actively in performing duties under departmental/divisional chief.

14. Develop and amend ANS Regulatory Policy and Procedure Manual necessary for inspection.
15. Develop training programme for inspector.
16. Other duties as assigned/delegated by the Department Chief/Division Chief for the execution of the departmental works.

### 4.12.2 Authorities

1. CNS Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.
2. During the inspection if it is deemed that the equipment or service is unsafe in view of safety, the Inspector may stop or forbid such operation of the equipment or privilege obtained by means of license/certificate.
3. In the time of inspection if any unsafe activities related to CNS Licensing and Rating is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.12.3 Qualification

#### A. Entry Level Qualification

1. Possess basic/advance training of communication, navigation and surveillance course
2. Hold or have held an ATSEP license/rating related to CNS equipment and have minimum of 10 years' of technical work experience in aeronautical telecommunication field.
3. No action has been taken for violation against ATSEP Licensing provision within last 3 years.

#### B. Minimum Qualification

1. The inspector shall have successfully completed ANS/CNS safety oversight audit/inspection course from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in CNS procedures/practices, personnel licensing/training.
3. Possess training in Audit Technique Course, SMS and USOAP.

## 4.13 PANS/OPS Inspector

### 4.13.1 Duties and responsibilities

1. Formulate and implement PANS-OPS safety Audit and Surveillance Programme.

2. Conduct monitoring and necessary surveillance to ensure the standards and implementation of the PANS-OPS service.
3. Conduct monitoring and surveillance programme in accordance with the approved programme and submit report to the Department chief through Divisional chief.
4. Conduct ANS safety awareness programmes and PANS-OPS related seminars/workshops.
5. To ensure safety of flight, issue immediate directives to the service provider if there are any issue that need immediate attention.
6. Review the Instrument flight Procedure related operational manual and other document with their amendment submitted by the ANSP and submit to the department chief through the divisional chief for approval.
7. Communicate with concerned units to amend IFP Design related ICAO PANS/OPS and advice the Department chief through divisional chief.
8. Participate in any in house and abroad workshops and seminars related to PANS/OPS matters.
9. Collect information of PANS/OPS related occurrence and submit the departmental chief through divisional chief.
10. Investigate of ATS related incident and occurrences and submit the report.
11. Participate actively in performing duties under departmental/divisional chief.
12. Develop and amend ANS Regulatory Policy and Procedure Manual necessary for inspection.
13. Develop training programme for inspector.
14. Other duties as assigned/delegated by the Department chief/division chief for the execution of the departmental works.

***Note:*** ***PANS-OPS inspector can be assigned with following additional responsibilities of Cartography/Maps and Charts if his qualification meets to perform the following function.***

1. Formulate and implement Maps & Chart safety Audit and Surveillance Programme.
2. Conduct monitoring and necessary surveillance to ensure the standards and implementation of the Cartographic service.
3. Review the Maps & Charts related documentations including the amendment submitted by the ANSP and submit to the department chief for approval.
4. Communicate with concerned units to amend Maps & Charts when necessearchy and advice it to the Department chief.
5. Collect information of Maps & Charts related occurrences and submit it to the departmental chief.

### 4.13.2 Authorities

1. PANS/OPS Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.
2. In the time of inspection if any unsafe activities related to PANS/OPS/Maps and Chart is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.13.3 Qualification

#### A. Entry level Qualification

1. Possess basic /advance training including PANS/OPS and Maps and Charts.
2. Possess 10 years' experience in ATS operation or in Flight Operation.

#### B. Minimum Qualification

1. The inspector shall have successfully completed ANS/ATS safety oversight audit/inspection from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in flight procedure designing.
3. Possess training in Audit Technique Course, SMS and USOAP.

**Note.** ***PANS-OPS inspector with additional responsibility of Cartography/Maps and Charts shall have the training on GIS and basic cartographic design and/or Map/Charts Projection.***

## 4.14 AIS Inspector

### 4.14.1 Duties and responsibilities

1. Formulate, implement and amend AIS safety Audit and Surveillance Programme.
2. Conduct onsite monitoring and necessary surveillance to ensure the standards of the AIS service provider.
3. Conduct monitoring and surveillance programme in accordance with the approved programme.
4. Conduct ANS safety awareness programmes and AIS related seminars/workshops.
5. Review the AIS operational manual and other document with their amendment .
6. Participate in any in house and abroad workshops, meetings and seminars related to AIS matters.

7. Communicate with concerned units to amend AIS related documents to incorporate changes in ICAO SARPs.
8. Collect information of AIS related occurrence.
9. Participate in the investigation of AIS related incidents and occurrences.
10. Participate actively in performing duties under departmental/divisional chief.
11. Develop and amend ANS Regulatory Policy and Procedure Manual
12. Develop training programme for AIS inspector.
13. To ensure flight safety of flight, issue immediate directives to the service provider if there are any issue that need immediate attention regarding AIS.
14. Other duties as assigned/delegated by the Department chief/division chief for the execution of the departmental works.

***Note: AIS inspector can be assigned with the following additional responsibilities of Cartography/Maps and Charts if his/her qualification meets to perform the following function.***

1. Formulate and implement Maps & Chart safety Audit and Surveillance Programme.
2. Conduct monitoring and necessary surveillance to ensure the standards and implementation of the Cartographic service.
3. Review the Maps & Charts related documentations including the amendment submitted by the ANSP and submit to the department chief for approval.
4. Communicate with concerned units to amend Maps & Charts when necessary and advice it to the Department chief.
5. Collect information of Maps & Charts related occurrences and submit it to the departmental chief.

## 4.14.2 Authorities

1. AIS Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.

2. During the inspection if it is deemed that the service is unsafe in view of safety, the Inspector may stop or forbid such operation of the service.

3. In the time of inspection if any unsafe activities related to AIS is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.14.3 Qualification

#### A. Entry Level Qualification

1. Possess training in basic/advanced AIS.
2. Possess at least 10 years' experience in ATS/AIS operation.

#### B. Minimum Qualification

1. The inspector shall have successfully completed ANS/AIS safety oversight audit/inspection course from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in AIS procedures/practices.
3. Possess knowledge of QMS in AIS.
4. Possess training in Audit Technique Course, SMS and USOAP.

   **Note.** ***AIS inspector with additional responsibility of Cartography/Maps and Charts shall have the training on GIS and basic cartographic design and/or Map/Charts Projection.***

## 4.15 SAR Inspector

### 4.15.1 Duties and responsibilities

1. Formulate, implement and amend SAR safety Audit and Surveillance programme.
2. Conduct onsite monitoring and necessary surveillance to ensure the standards of the SAR services.
3. Conduct monitoring and surveillance programme in accordance with the approved programme and submit report to the Department chief through Divisional chief.
4. To ensure safety of flight, issue immediate directives to the service provider if there are any issue that need immediate attention.
5. Conduct ANS safety awareness programmes and SAR related seminars/workshops.
6. Review the SAR operational manual and other document with their amendment and submit the department chief through the divisional chief for approval.
7. Participate in any in house and abroad workshops and seminars related to SAR matters.
8. Communicate with concerned units to amend SAR related documents to incorporate changes in ICAO SARPs and advice the Head of the Department through divisional chief.
9. Collect information of ANS related occurrence and submit the departmental chief through divisional chief.
10. Participate in the investigation of ANS related accident/incident and occurrences and submit the report.

11. Participate actively in performing duties under departmental/divisional chief.
12. Develop and amend ANS Regulatory Policy and Procedure Manualfor inspection.
13. Develop training programme for SAR inspector.
14. Other authorities as assigned delegated by the Department chief for the execution of the departmental works.

### 4.15.2 Authorities

1. SAR Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.
2. During the inspection if it is deemed that the equipment or service is unsafe in view of safety, the Inspector may stop or forbid such operation of the equipment.
3. In the time of inspection if any unsafe activities related to SAR is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.15.3 Qualification

#### A. Entry Qualification

1. Possess basic/advance training of Search and Rescue Administrative Course.
2. Possess at least 10 years' experience in ATS Operation.

#### B. Minimum Qualification

1. The Inspector shall have successfully completed ANS/SAR safety oversight audit/inspection course from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in SAR procedures/practices.
3. Possess training in Audit Technique Course, SMS and USOAP.

## 4.16 Met Inspector

### 4.16.1 Duties and responsibilities

1. Formulate and implement Met Safety Audit and Surveillance Programme .
2. Conduct onsite monitoring and necessary surveillance to ensure the standards of the Met service provider at the airport.
3. To ensure safety of flight, issue immediate directives to the service provider if there are any issue that need immediate attention.

4. Review the Met operational manual and other document and their amendment and submit the department chief for approval.
5. Communicate with concerned units to amend Met related documents to incorporate changes in ICAO SARPs and advice the Department Chief.
6. Collect information of Met related occurrence and submit it to the department chief.
7. Investigate the Met related incident and occurrences and submit the report.
8. Develop and amend ANS Regulatory Policy and Procedure Manual as necessary.
9. Develop training plan and programme for inspector.
10. Other duties as assigned/delegated by the Department Chief for the execution of the departmental works.

### 4.16.2 Authorities

4. Met Inspector has the authority to enter into necessary places for inspection, enquire related person and agencies, take explanation in written and verbal, collect evidences/proof etc.
5. During the inspection if it is deemed that the equipment or service is unsafe in view of safety, the Inspector may stop or forbid such operation of the equipment or privilege obtained by means of license/certificate.
6. In the time of inspection if any unsafe activities related to Met is identified, provide immediate order and direction for improvement and may stop such activities if necessary.

### 4.16.3 Qualification

#### A. Entry Level Qualification

1. Possess basic /advance training including MET.
2. Possess 10 years' job experience in providing Aeronautical MET services provisions. Possess master's degree in meteorology
3. Having adequate knowledge of relevant ICAO Annexes including ICAO Annex-3, WMO manuals, Nepal Government rules, regulation and directives related to aviation services
4. Knowledge of ICAO Standards and recommended practices

#### B. Minimum Qualification

1. The inspector shall have successfully completed ANS/MET safety oversight audit/inspection from an approved institution.
2. Possess adequate knowledge of aviation rules and regulations and experience in aeronautical meteorological services and operations.

3. Possess training in Audit Technique Course, SMS and USOAP.
4. Knowledge of ICAO Safety Audit Program.

## 4.17 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 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 occurrence to the Director of ANS Safety Standard Department immediately.
5. To maintain the currency, the inspector must conduct at least one audit in a year.
6. The format of credential of inspector is mentioned in Appendix 29.

## 4.18 Minimum Competencies for ANS Inspectors

1 **Ethics and values:** ANS Inspectors shall demonstrate integrity, transparency, openness, respect and fairness and shall consider the consequences when making a decision or taking action. They shall act consistently in accordance with fundamental values of the civil aviation authority.

2 **Communication**: ANS Inspectors shall effectively convey, receive and understand information in oral, written and non-verbal modes.

3 **Problem solving and decision making**: ANS Inspectors shall solve issues of varied levels of complexity, ambiguity and risk, shall make timely decisions that take into account relevant facts, tasks, goals, constraints, risks and conflicting points of view.

4 **Initiative**: ANS inspectors shall identify and address issues independently, proactively and persistently to achieve objectives.

5 **Technical Expertise**: ANS inspectors shall apply and improve knowledge and skills to perform safety oversight duties in a specific aviation discipline.

6 **System Thinking**: ANS inspectors shall understand and determine how the various components of management systems interact and affect the overall system safety performance.

7 **Risk Management**: ANS inspectors shall demonstrate an effective approach to the oversight of a stakeholder considering its business model, risk profile and its availability of resources.

8 **Leadership and Teamwork**: ANS inspectors shall demonstrate an effective approach to the oversight of a stakeholder considering its business model, risk profile and its availability of resources.

9 **Critical Thinking**: ANS inspectors shall analyze information in order to consistently achieve desired outcomes.

# PART 2. LICENSING, CERTIFICATION, AUTHORIZATION OR ACCEPTANCE PROCEDURE

# CHAPTER 1CERTIFICATION AND APPROVAL OF ANSP

## 1.1 General

1.1.1. This chapter is supposedto provide the certification procedures forthe regulatory personnel of ANSSSD under which ANSPs are certified as per their compliance to ICAO SARPs, National regulations and requirements during the establishment of the ANSP organization and delivery of air navigation services by them.However, as there is no provision of certification of ANSP, regulatory procedure for certifying the ANSP has not been developed so far.

1.1.2. Different units of CAAN rendering the Air Navigation Services are required to deliver their services as per the Civil Aviation Requirements and other applicable national regulations even if they are not certified.

## 1.2 Certification procedure

1.2.1. Procedure for certifying the ANSP will be developed when required.

# CHAPTER 2 CERTIFICATION AND APPROVAL OF ATS-ATO

## 2.1. General

2.1.1. Organization currently engaged in the delivery of Basic ATS courses and other aviation related courses in Nepal is Civil Aviation Academy (CAA) which is under the umbrella of Civil Aviation Authority of Nepal (CAAN).

2.1.2. CAAN has certified CAA as Approved Training Organization (ATO) for Air Traffic Services related courses. CAA is the only ATS-ATOin Nepal.

## 2.2. Objective

The objective of Certification of ATS-ATO is to ensure that the ATO is qualified and competent in the management and delivery of ATS-ATO courses efficiently and effectively in accordance with the requirements set out in the ATO Certification manual and any other relevant requirements issued by the Authority.

## 2.3. Scope

During the certification procedure, following disciplines of ATS-ATO are assessed and evaluated.

a. Organization Structure and ATO Staffing
b. Instructor Qualification
c. Training and Procedure Manual (TPM)
d. Quality Assurance (QA)
e. Facilities and Equipment

## 2.4. Certification Procedure

2.4.1 ANSSSD is responsible for certifying the ATS-ATO and instructors involving in ATS-ATO.

2.4.2 Detail certification procedure is to be followed as mentioned in ATO Certification Manual Part 1- ATS.

# CHAPTER 3 LICENSING, CERTIFICATION AND RATING OF ANS PERSONNEL

## 3.1 General

3.1.1 Organization currently engaged in the delivery of Air NavigationServices in Nepal is CAAN itself.

3.1.2 Air Traffic Controllers (ATCs), Air Traffic Safety Electronic Personnel (ATSEP) and other relevant personnel on behalf of CAAN are providing such services.

3.1.3 As per Rule 31 of Civil Aviation Regulation 2058 (2002), no person shall provide or cause to provide air traffic control and acceptance/certification, installation, repair and maintenance of communication and navigation aids without obtaining the license, certificate and rating So, as per the regulation, each ATC/ATSEP must acquire license, certificate and rating before providing such services.

3.1.4 ANSSSD is responsible for licensing, certification and rating the ATCs and ATSEPs. ANS Licensing and Rating Division under ANSSSD will perform all the licensing, certification and rating related activities on behalf of ANSSSD.

## 3.3 Objective

The objective of licensing is to ensure that the ANS personnel fulfill all the requirements set out by national regulations and requirements so as to enhance the safety of civil aviation as envisioned in those documents.

## 3.3 Scope

Scope of activities include the licensing, certification and rating of the following personnel:

- ATCO
- ATSEP
- Student ATCO

## 3.4 Licensing Procedure

6.4.1 Detail procedure for Licensing certification and rating of ATCO and Student ATCO is to be followed as mentioned in Manual of Standards for Licensing/Rating of ATC Personnel, 2015.

6.4.2 Detail procedure for Licensing, rating of ATSEP is to be followed as mentioned in PELR for Air Traffic SafetyElectronic Personnel, 2015.

# PART 3. INSPECTION, AUDIT OR SURVEILLANCE PROCEDURE

# CHAPTER 1 SAFETY OVERSIGHT AUDIT/INSPECTION OF ANSP

## 1.1. General

1.1.1 Organization currently engaged in the delivery of Air Navigation Services (ATS, CNS, AIS, PANS OPS, SAR) is CAAN itself.

1.1.2 ATC, CNS, AIS, SAR and Flight Procedure Design personnel on behalf of CAAN are providing such services in Nepal.

1.1.3 Under Rule 84 of Civil Aviation Regulation 2058 (2002), by the authority of Director General, ANS Inspectors maintain continuous safety oversight and conduct audits/inspections over the Air Navigation Services rendered by ANSP.

1.1.4 This chapter includes the safety oversight procedure over the activities of ANSP personnel as well.

## 1.2. Objective

1.2.1 The objectives of the safety oversight inspection are as follows:

a. Ascertain compliance with the Civil Aviation Requirements (CARs), ICAO Standards and Recommended Practices and ANSP's Operation Manual and SMS procedures,

b. Ensure adherence with prescribed standards and procedures in the provision of air traffic services,

c. Determine the effectiveness of safety planning in CNS/ATM operations, and, highlight significant findings (where appropriate),

d. To identify areas for improvement in ANS system.

## 1.3. Scope

1.3.1 In accordance with ICAO and ANSSSD provisions in terms of ANS Safety Oversight, the scope of safety oversight inspections may include ATS operations, Aeronautical Information Service (AIS), PANS-OPS/ Maps and Charts, Search and Rescue Operations (SAR), CNS, MET and any other aspects of the ANS systems and services including the personnel.

1.3.2 The scope of the Safety Oversight Inspection will mainly cover the four broad components;

a. Personnel, Licensing & Training

b. Equipment / Materials / Environment

c. Procedures

d. Documentation

## 1.4. AUDITING/INSPECTION PRINCIPLES

The following internationally accepted auditing principles shall be followed

### 1.4.1 Transparency and disclosure

1.4.1.1 Audit/ inspection conducted under the auditing process shall be fully transparent and open for examination by the concerned.

1.4.1.2 There shall be full disclosure of final audit/inspection reports.

1.4.1.3 The reports shall provide sufficient information for service provider to understand the Non-compliance, non-adherence, observations and/or deficiencies.

### 1.4.2 Timeliness

1.4.2.1 Results of the audit/inspection will be provided and submitted on a timely basis in accordance with a predetermined schedule for the preparation and submission of audit/inspection reports.

1.4.2.2 Service provider shall submit their comments, action plan and all documentation required for the audit/inspection process within the prescribed time.

### 1.4.3 All-inclusiveness

1.4.3.1 The scope of the safety oversight audit/inspection 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

### 1.4.4 Systematic with consistency and objectivity

1.4.4.1 Safety oversight audit/inspection should be conducted in a systematic, consistent and objective manner.

1.4.4.2 Standardization and uniformity in the scope, depth and quality of audit/inspection should be assured through an initial and refresher training of all inspectors.

### 1.4.5 Fairness

1.4.5.1 Audit/inspection is to be conducted in a manner such that service providers are given every opportunity to monitor, comment on and respond to the audit/inspection process and to do so with in the established time frame.

### 1.4.6 Quality

1.4.6.1 Safety oversight audit/inspection will be conducted by appropriately trained and qualified inspectors and in accordance with widely recognized auditing principles and practices.

## 1.5. ANNUAL ON-SITE AUDIT/INSPECTION PROGRAMME

1.5.1 Audit/Inspection shall be conducted at least once in a year at international airport and at other domestic airports at least once in every two year. During the audit period, related departments/divisions of CAAN shall also be audited/inspected.

1.5.2 The inspection programme shall be published annually and shall be made available to all service providers.

1.5.3 Random inspection will be carried out in different airports as and when required.

1.5.4 In case of pandemic/ communicable diseases or other circumstances in which onsite inspection/audit cannot be done, the audit / inspection will be done by VTC.

1.5.5 Sample of ANS Surveillance Program is mentioned in Appendix 31.

## 1.6. AUDIT/INSPECTION PLAN

1.6.1 Developing Audit/Inspection plan is the part of Pre-audit/inspection phase.

1.6.2 Audit/inspection team leader shall develop a specific safety oversight audit/inspection plan which include but not limited to the following information and forwarded to the service provider.

1.6.3 Schedule dates for entry and exit meeting.

1.6.4 Dates of the on-site safety oversight audit/inspection.

1.6.5 Identification of the key personnel of the service provider.

1.6.6 Scope of the on-site safety oversight audit/inspection to be conducted and areas to be covered.

1.6.7 Identification of documents necessary to conduct the safety oversight audit/inspection.

1.6.8 Travel and administration plans as well as the travel schedule of team members.

1.6.9 Team members' assignment and responsibilities.

## 1.7. AUDIT/INSPECTION CHECKLIST

1.7.1 On-site safety oversight audit/inspection will be conducted on the basis of checklists given in Appendices 1-8 of this manual. Audit/inspection using a standardized checklist ensure transparency, quality and reliability in the conduct of audit/inspection as well as fairness

their implementation.

1.7.2 Checklist given in this manual provide a comprehensive checklist covering all area of the safety oversight program subject to audit/inspection. 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.

1.7.3 In exceptional cases, an observation may be made that may not have been addressed by the checklist, in these cases the inspector making the observation will inform the team leader and advise the service provider of the reason for it. Observation derived under such conditions shall be record on audit/inspection finding and recommendation.

## 1.8. AUDIT/INSPECTION TEAM

1.8.1 An audit/inspection team normally consists of a minimum of three team members but this number may be changed as and when required depending upon the scope, size, function and complexity of the task.

1.8.2 Audit/inspection team will consist of a Team Leader and specialist inspectors for the disciplines included in the scope of the audit/inspection. The Team Leader may also serve as one of the specialist inspector.

1.8.3 Team shall be composed with team leader one month prior to audit inspection.

1.8.4 Prior to the commencement of an audit/inspection, the service provider to be audited/inspected will be advised of the team's composition.

## 1.9. AUDIT/INSPECTION TEAM LEADER

1.9.1 ANSSS Department chief shall appoint an audit/inspection Team Leader for each audit/inspection.

1.9.2 ANSSS Department chief shall take into consideration qualification, experience and leadership quality when appointing an audit/inspection Team Leader.

1.9.3 The Team Leader has the following responsibility for audit/inspection process:

a. preparing the specific safety oversight audit/inspection program according to plan

b. coordination with service provider in matters related to conduct of audit/inspection

c. holding an audit/inspection preparation briefing for team members prior to the conduct

of audit/inspection

d. conducting entry and exit meeting with concerned officials of service provider

e. provide leadership and guidance to the team members at all times during on-site audit/inspection

f. submission of the audit/inspection report to Director General through Director (ANSSSD) and Deputy Director General (Aviation Safety And Security Regulation Directorate)

g. dissemination of final audit/inspection report to the service provider.

*Note. In case of safety oversight audit ofTIA, Deputy Director General of Aviation Safety and Security Regulation Directorate or his/her designated representative shall be team leader.*

## 1.10. AUDIT/INSPECTION TEAM MEMBERS

1.10.1 Audit/inspection team members are responsible to the team leader. The team member shall be selected from the inspectors of ANSSSD.

1.10.2 In addition to the specific task assigned by the authority and the team leader, the audit/inspection team member's responsibilities shall include:

a. carrying out assigned responsibilities effectively and efficiently

b documenting all findings and observations

c preparing list of findings and recommendations of an audit/inspection in a timely manner

d assessing the effectiveness of the corrective action plan submitted by the audited/inspected service provider

e submitting all audit/inspection related documents to ANSSSD through team leader cooperating with and assisting the team leader at all times during the preparation, conduct and completion of the audit/inspection process.

## 1.11. SAFETY OVERSIGHT AUDIT/INSPECTION PROCESS

1.11.1 PRE-AUDIT/INSPECTION PHASE

1.11.1.1 The audit/inspection team members' briefing shall be conducted one day prior to the entry meeting to be held on-site with all team members.

1.11.1.2 The objective of the audit/inspection team members' briefing are:

a. to give the team members an overview and understanding of the audit/inspection mission that lies ahead

b. to assign responsibilities to each team member before, during and if necessary after the audit/inspection
c. to be prepared for the entry and exit meeting with the officials of the service provider
d. use of safety oversight compliance checklist prescribe in this manual and preparation and use of the additional checklist if required

1.11.1.3 In addition to the initial briefing daily team members' briefing session to be scheduled by the team leader as required which provides for the:

a. early identification of findings and recommendations
b. update of compliance checklists
c. identification of difficulties encountered in daily activities
d. announcement of changes in the work program (if any) fostering of team coordination and support
e. Notify to the service provider through letter advising audit/inspection schedule, three month prior to audit/inspection.

1.11.1.4 Review and analysis of documentation that are relevant to the service provider. Use prescribe checklist, this activity shall be commenced one month prior to the audit/inspection.

1.11.1.5 Review the service providers' files and records to include previous inspection/audits including Caps, incident reports,

1.11.1.6 Identify areas that require further review during On- Sight- audit/inspection.

1.11.1.7 Specific checklist shall be selected at least 15 days prior to the commencement of audit/inspection.

1.11.1.8 Notify to the service provider through the composition of audit/inspection team and schedule. complete work program shall be dispatched at least 15 days prior to audit/inspection

1.11.2 ON-SITE AUDIT/INSPECTION ACTIVITIES

1.11.2.1 The on-site audit/inspection will be systematic and objective.

1.11.2.2 The on-site audit/inspection will be conducted in line with agreed work program.

1.11.2.3 Entry meeting is the part of On-site audit/inspection phase.

1.11.2.4 Entry meeting will be convened by team leader and may also be addressed by the service provider's officials on the first day of the on-site audit/inspection. The purpose of the meeting is to brief the officials of service provider on audit/inspection process, its scope, introduction of members

1.11.2.5 The service provider shall assist the safety oversight audit/inspection team by providing:

a. working space, preferably an office dedicated to the team during audit/inspection period
b. access to a photocopier, telephone and internet
c. access to relevant personnel for interviews

1.11.2.6 Daily team briefing and debriefing will be conducted within the audit team.

1.11.2.7 Visits to different units, organization and facilities of service providers may be undertaken to verify their capacities to oversee and supervise safety related activities.

1.11.2.8 By checking records, not only those of service provider's authorities but also of the actual operations and by looking into how their personnel conducts its business in aspects related to safety, the audit/inspection team will be able to assess whether the service providers are capable of undertaking their safety responsibilities effectively. The inspectors should neither take nor purpose any action which could interfere with the functions of service provider.

1.11.2.9 All audit/inspection findings will 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.

1.11.2.10 Evidence shall be collected through interview, reviewing relevant materials and observing activities and conditions in the aviation system. Finding shall be recorded with a clear indication of how and why they were made, Absence of evidence will normally be reflected as finding. Each finding should have a corresponding recommendation requiring the service provider to propose an action for the resolution of safety concern addressed by the finding.

1.11.2.11 After the on-site audit/inspection activities are completed, the audit/inspection team will review all findings and recommendations to ensure that they reflect objectivity and address at least one of the eight critical elements. The audit/inspection team will ensure that the findings and recommendations are documented in a clear concise manner and are supported by evidences. Audit/inspection findings may also be discussed during the daily team briefing session.

1.11.2.12 Exit Meeting is the last activity conducted during the On-site audit/inspection phase.

1.11.2.13 At the end of the audit/inspection, the team leader will convene an exit meeting with the officials of service provider, as appropriate to brief them on audit/inspection team's findings and recommendations.

1.11.2.14 The meeting should ensure that the officials of service provider clearly understand the situation as audited/inspected and are able to start work on a corrective action plan, should it

be deemed necessary.

1.11.2.15 The meeting should emphasize the level one findings to be addressed within fifteen days of the audit completion.

1.11.2.16 Officials of the service provider should be invited to make comments and express any disagreement with the findings presented. The team leader shall be reported about the reason for disagreement by the service provider

1.11.2.17 No information related to the audit/inspection of the service provider will be provided to the media.

1.11.3 POST AUDIT/INSPECTION PHASE

1.11.3.1 ANSSS Department shall dispatch safety oversight audit/inspection report within 30 days of Audit/inspection.

1.11.3.2 Service provider shall submit corrective action plan within 30 days upon receipt of safety oversight audit/inspection report.

## 1.12. AUDIT/INSPECTION FINDINGS AND RECOMMENDATIONS

1.12.1 All audit/inspection findings and recommendations will be related to one or more of the Rules, Regulations, Requirements, Standards, Procedures and good safety practices.

1.12.2 The audit/inspection findings and recommendations form when initially completed, shall contains:

a. Reference to relevant Rules, Regulations, Requirements, Manuals, Standards and Procedures
b. Question
c. Answer
d. Findings
e. Level of compliance, satisfactory or unsatisfactory
f. Corrective action required to be taken by the service provider to remove deficiency
g. Proposed and/or agreed timeline as appropriate

## 1.13. AUDIT/INSPECTION REPORT

1.13.1 Inspection report including all findings and recommendations, if any, shall be submitted to the DGCA through the Aviation Safety and Security Regulation Directorate within one month of conduct of audit/inspection.

1.13.2 Upon the approval of the report by the DGCA, ANSSSD shall issue letters to all ANSPs

asking Corrective Action Plans (CAPs) addressing the findings.

1.13.3 ANSSSD will check the CAPs submitted by the ANSPs whether all the findings are properly addressed or not within fifteen days of its receipt. If findings are not addressed properly, ANSSSD shall again write to the ANSPs to submit another CAP.

1.13.4 CAP will only be accepted if it is realistic and time frame based.

1.13.5 Finding will be closed if the CAP is fully addressed, the evidence is to be sent to ANSSSD.

1.13.6 ANSSSD shall inform to ANSP about the closing of finding if satisfied with the evidence presented by ANSP.

## 1.14. CORRECTIVE ACTION PLAN (CAP)

1.14.1 Based on the inspection findings and recommendations, the audited party (ANSP) shall establish a corrective action plan (CAP) which defines immediate short-term remedial actions, if applicable, and/or long-term corrective actions planned.

1.14.2 CAP, except for significant safety concern that require immediate action by the audited/inspected party, should normally be forwarded to ANSSSD within one month upon receipt of the audit/inspection report, CAP regarding the SSC shall be forwarded within 15 days.

1.14.3 Further, the audited/inspected party should nominate reasonable action due date(s) by which corrective action(s) is/are to be completed. Reason(s) should be given when the above action due date cannot be projected.

1.14.4 The sample of tracking form for corrective action plan and follow up is mentioned in Appendix 30.

## 1.15. FOLLOW UP PROCEDURE

### 1.15.1 ANSSSD Actions

i. Follow up on the progress of a corrective action plan may be made at any time by ANS inspector.

ii. Where the ANS inspector deems that corrective action can be verified based on the documentation provided without undertaking an on-site follow-up inspection/audit finding, administrative follow-up may be undertaken through a desk-top audit involving a review of the submitted documents.

iii. Where the ANS inspector deems that follow-up of corrective action require onsite visit, a follow-up audit/inspection will be carried out to verify that non-conformances have been rectified and that corrective actions are effective.

iv. Progress will be monitored using a tracking form for Corrective Action Plan & Follow up as mentioned in Appendix 30 until the ANSP completes implementation of the corrective action plans.

v. Follow-up of long-term corrective actions will also be done through routine audits/inspections.

vi. **Personnel assigned responsibilities for follow-up of audits/inspections corrective action plans will**:

a) monitor the ANSP entity to ensure that the corrective action plan timelines are being observed and that corrective actions required by a specific date have been completed;

b) monitor the progress of the corrective action plan by maintaining the follow-up section of the corrective action form, the corrective action tracking form or applicable functional database and ensuring that the appropriate follow-up (administrative or on-site) has been conducted;

c) ensure that all completed corrective action forms and corrective action tracking forms, together with any supporting documentation are placed in the Inspection/audit file; and

d) Submit Tracking Form for Corrective Action Plan and Follow Up as mentioned in Appendix 30 to the ANSSSD Chief.

### 1.15.2 Follow-up Audit Process

i. A follow-up audit or inspection may be conducted to validate the satisfactory implementation of the ANSP corrective action plan.

ii. This may be conducted between three and six months after the auditor inspection, or as decided, based on the information available to ANSSSD on the implementation of the corrective actions.

iii. The primary purpose of a follow-up audit (or inspection) is to validate the effective implementation of the corrective action plan submitted by the ANSP following the audit or inspection or, in the absence of a corrective action plan, the status of correction of findings noted during the follow-up audit or inspection.

iv. The audit or inspection follow-up procedures to be followed are similar to those applied during a regular safety audit or inspection.

### 1.15.3 Preparation of ANSP Specific Audit Follow-up Schedule and Plan

i. The follow-up audits are planned at the same time as the initial audits.

ii. The team members assigned to a follow-up audit may or may not have been members of the original audit team.

iii. Follow-up audits are generally limited to ascertaining whether safety issues identified during the initial audit have been satisfactorily resolved, hence the preparation for the follow-up audit will be different. The audit team will develop an audit follow-up checklist based on the actions defined in the corrective action plan or from findings noted during the initial audit.

### 1.15.4 On-site follow-up Audit

i. The on-site audit will be conducted in the same way as a regular audit.

ii. The Tracking Form for Corrective Action Plan and Follow Up as mentioned in Appendix 30 will be completed to record the status of the corrective actions.

iii. If the follow-up audit identifies significant safety concerns in relation to the ANSP compliance with the applicable ANS safety regulations which are outside of the scope of the follow-up audit, it will recorded as “observations” requiring corrective action by the audited ANSP. These observations will be recorded in the Audit/inspection Report.

iv. The observations will be included in a separate section of the follow-up report, and the audited ANSP will be encouraged to submit an additional corrective action plan for these findings.

### 1.15.5 Closure of audit findings

i. An audit or inspection finding will be closed once it is confirmed that the corresponding corrective action plan has been fully implemented. Completion date will be entered in the Audit/inspection Finding Notice. The ANSSSD Chief will indicate in the tracking spreadsheet, the closure of the finding and the date closed.

### 1.15.6 Follow-up Report

i. The ANSSSD Chief will submit the follow-up report to the ANSP. The ANSP should then submit any feedback and comments.

ii. ANSSSD will disseminate the follow-up report in the same way as for the initial audit.

iii. In the exceptional case of persistent non-compliance, the ANSSSD Chief will report this through the Deputy Director General ASSRD, to the Director General CAAN in the same way as for the initial audit.

(Note: Level 1 finding is that finding that is directly related with safety issues and should be resolved within one month.

Level 2 finding is that finding that should be addressed as soon as possible.)

## 1.16. SAFETY EVENT ANALYSIS

ANSSSD shall carry out safety event analysis as and when required in accordance with CAAN Safety Investigation Procedure Manual, 2021.

## 1.17. The mechanism for the review and elimination of deficiencies identified within the framework of the Planning and Implementation Regional Groups (PIRGs)

The mechanism for the review and elimination of deficiencies identified within the framework of the Planning and Implementation Regional Groups (PIRGs) is mentioned as below.

1. ANS Safety Standards Department will assign its inspectors to check APANPIRG deficiency list related to Air Navigation Services in the ICAO Secure Portal.
2. Inspectors will be responsible to explore the APANPIRG deficiencies in their own area of surveillance.
3. The matters will be discussed within the department and possible solution(s) will be identified within the department.
4. The concerned representative of the department will bring such solution(s) to the concerned sub-group under NANPIG created within the Civil Aviation Authority of Nepal (CAAN) for discussion and resolution.

5. Concerned stakeholders and expert group will be invited in the sub-group discussion as per the need.
6. The concerned sub-group shall bring identified solution(s) to higher body Nepal Air Navigation Planning and implementation Group (NANPIG).
7. The solution(s) will be intensively reviewed in the NANPIG meeting. NANPIG will then finally indorse the resolution(s).
8. Concerned member department of NANPIG will take lead to implement such resolution(s). Initiation shall be done with immediate effect but not later than a week of indorsement depending on the nature and complexity of resolution(s).
9. Concerned sub-group will meet and review progress every last Friday of the month. If Friday is holiday, then the meeting will be done on working day just before Friday.
10. Sub-group will report the progress to the meeting of NANPIG which will be held every first Sunday after the sub-group meeting.
11. NANPIG will review the progress and direct the sub-group if needed for speedy resolution.
12. Once resolution implemented and deficiency eliminated, NANPIG or its concerned sub-group will present working paper or information paper in the APANPIRG and its sub-group meeting(s), and urge on behalf of Nepal to remove such deficiency.
13. ANSSSD shall maintain method for tracking of all deficiencies identified by NANPIG until the closure of deficiencies. Refer to Appendix 32, Tracking table for APANPIRG deficiencies.

# CHAPTER 2 AUDIT/INSPECTION OF ATS-ATO

## 2.1. General

CAA under CAAN is engaged in the delivery of Basic ATS courses and other aviation related courses which is the only certified ATS-ATO in Nepal.

## 2.2. Objective

The objective of Audit/Inspection is to ensure that the ATO is maintaining its qualification and competencies in the management and delivery of ATS-ATO courses efficiently and effectively complying the regulatory requirements set out in the ATO Certification Manual and other relevant requirements issued by the Authority.

## 2.3. Scope

The scope of audit/inspection includes the following areas of ATS-ATO.

a) Organization Structure and ATO Staffing
b) Instructor Qualification
c) Training and Procedure Manual (TPM)
d) Quality Assurance (QA)
e) Facilities and Equipment

## 2.4. Audit/Inspection Procedure

2.4.1 ANSSSD is responsible for doing surveillance over the performance of ATS-ATO. ANS Licensing and Rating Division under ANSSSD will perform all the oversight activities on behalf of ANSSSD.

2.4.2 Detail oversight procedure is to be followed as mentioned in ATO Certification Manual Part 1- ATS.

# APPENDICES

APPENDIX 1- ATS Inspection Checklist

## Civil Aviation Authority of Nepal

## General Information

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| **Person undertaking inspection** | |
| **Organization being inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

ATS Inspection Checklist

## A. Personnel, Licensing and Training

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *MATS NEPAL Chapter 14 Para 14.2.1.(b)* | Has Air Traffic Services Provider developed an organizational structure? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *MATS NEPAL Chapter 14 Para 14.2.1.(d)* | Has Air Traffic Services Provider developed policies and procedures for determining the number of staff required to ensure the provision of an adequate ATS system?<br>If yes, does the organizational structure adequately possess manpower to effectively accomplish functions and responsibilities of ATS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *CAAN employee service, facility and condition Regulation 2056, Rule 2.6* | Has the Air Traffic Services Provider developed Job description for ATS personnel? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *Civil Aviation Regulation Rule 31* | Are all ATS positions manned with properly rated controller? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 5. | *Civil Aviation Regulation Rule 31* | Is there a system established to ensure proficiency of licensed ATCOs? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *Civil Aviation Regulation Rule 31* | Is there a provision for competency check of ATCO's job? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 7. | *MATS NEPAL Chapter 13* | Is there a regular training program for ATCOs including refresher training, training in new equipment/ procedures? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 8. | *MATS NEPAL Chapter 13* | Is there a training program for ATCOs on handling of aircraft emergencies and operational under conditions with failed and degraded facilities and systems? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 9. | *Air Traffic Service Planning Manual part iv section 1,C2* | Has the service provider developed policies and procedures for recruitment and retention of qualified and experienced ATS staffs? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 10 | *Air Traffic Service Planning Manual part iv section 1,C2* | Has the service provider developed policies and procedures for recruitment and retention of qualified and experienced ATS staffs? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 11 | *CAR 11*<br>Para *2.35* | Has Air Traffic Services Provider developed procedure to maintain the training records of its ATS personnel? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 12 | *MATS NEPAL Chapter 16 Para 16.8.4.2* | Are the controllers trained on the equipment relevant to the control position? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

ATS Inspection Checklist

## B. Equipment / Materials / Environment

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *Air Traffic Service Planning Manual Section 2 chapter 1* Para 1.2 | How is the physical environment of the Air Traffic Services Provider's operational unit?<br>1.1 Noise<br>1.2 Temperature / Humidity<br>1.3 Ventilation<br>1.4 Lighting<br>1.5 Tidiness<br>1.6 Display of ATS information | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *Air Traffic Service Planning Manual Section 2 chapter 1* Para 1.2 | Are the equipment, used for Air Traffic Service purposes, user-friendly and properly installed? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *MATS NEPAL Chapter 16*<br>*Para 16.8* | What are the equipment used in the Air Traffic Services Provider operational unit?<br>*Tick applicable only*<br>10.1 Radar<br>10.2 Radio (VHF)<br>10.3 Radio (HF)<br>10.4 Stand-by Radio<br>10.5 Portable/Hand held Radio<br>10.6 Walkie talkie<br>10.7 Headset<br>10.8 Handset<br>10.9 ATIS<br>10.10 VHF Communication Recorder<br>10.11 AMHS<br>10.12 Binoculars<br>10.15 RVR<br>10.16 Anemometer<br>10.17 Others<br>What is the status of those available equipment?<br>Is there any daily checklist developed to record the status of above-mentioned equipment? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 4. | *Air Traffic Service Planning Manual Section 2 Para 2.3* | Besides equipment used for ATS purposes, what kind of other administrative support and equipment are available for ATCOs?<br>6.1 Photocopiers<br>6.2 Computer<br>6.3 Laptop/notebook<br>6.4 Facsimile<br>6.5 Printing facilities<br>6.6 Internet/intranet | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 5. | *Air Traffic Service Planning Manual Section 2 Para 2.3* | Are there adequate R & R facilities for ATCOs on shift duties?<br>5.1 Rest area<br>5.2 Canteen<br>5.3 Sporting facilities<br>5.4 Washroom<br>5.5 Others | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *MATS NEPAL Chapter 16*<br>*Para 16.8* | Are all the primary, secondary, emergency and back up communication facilities functioning in the Air Traffic Services Provider's operational unit? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 7. | *MATS NEPAL Chapter 16*<br>*Para 16.8* | Are the CNS equipment adequate and serviceable to achieve the responsibilities and functions of the Air Traffic Services Provider's operational unit? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 8. | *CAR 11*<br>*Para 7.3*<br>*MATS NEPAL Chapter 2*<br>Para 2.5.2,d),3) | Is there a monitoring mechanism for timely and appropriate detection and warning of system failures and degradations of<br>CNS and other safety significant systems provided to ATS units? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 9. | *CAR 11*<br>*Para 7.3* | Has the ATS Provider established procedures and implemented system to ensure that ATS units are currently informed of the operational status of following?<br>a) non-visual navigation aids and those visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility<br>b) visual and non-visual aids essential for surface movement? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 10. | *MATS NEPAL Chapter 2*<br>Para 2.5.2,d),6) | Is there a provision of adequate back up facilities and/or procedures in the event of CNS and other safety significant system failure or degradation? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 11. | *MATS NEPAL Chapter 16*<br>*Para 16.8* | Is there provision of notifying the ATSEP regarding unserviceability of CNS and other safety significant system by ATC? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

ATS Inspection Checklist

## C. Procedures, Operational conditions and Supervision

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
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| 1. | *MATS NEPAL Chapter 16*<br>*Para 16.12.2* | Has the Air Traffic Services Provider disseminate all safety-critical information, such as NOTAM, directives, circulars, maps and chart and ATS related publications to all ATS unit for safe ATS operational environment? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *MATS NEPAL Chapter 14*<br>*Para 14.2.1.(v)* | Is there a periodic review of operation manual by the Air Traffic Services Provider for adequacy, currency and update as necessary? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *MATS NEPAL Chapter 16*<br>*Para 16.12.2* | Is there a written procedure for hand-over and take-over of watches? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *CAR 11*<br>Para *2.32* | Has the Air Traffic Services Provider developed and promulgated contingency plan for implementation in the event of disrupt or potential disruption of ATS or related supporting services?<br>Verify that contingency plans have been:<br>a) developed with the assistance of ICAO (as necessary);<br>b) coordinated with ATS authorities responsible for the provision of services in adjacent portions of airspace; and<br>c) coordinated with airspace users. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 5. | *CAR 11*<br>*Para 2.17, 2.18, 2.21* | Has the Air Traffic Services Provider developed and promulgated LOA between the following:<br>a) The operators<br>b) Military authority<br>c) Meteorological authority,<br>d) Aeronautical information service<br>e) Adjacent ATS units and other related units? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *CAR-11,*<br>*Para 7.1* | Has the Air Traffic Services Provider developed and implemented procedures to ensure that the ATS units are supplied with up-to-date information on existing and forecast meteorological conditions as necessary for the performance of their respective functions; with meteorological information in accordance with Annex- 3, Appendix 9,1? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 7. | *CAR-11, Para 7.1* | Has the Air Traffic Services Provider specified meteorological information to be provided to –<br>• Flight information centres and area control centres;<br>• Units providing approach control service;<br>• Aerodrome control towers;<br>• Communication stations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 8. | *CAR-11, Para 7.1* | Does the Air Traffic Services Provider ensure MET information that are provided to ATS units to be supplied –<br>(i) in such a form as to require a minimum of interpretation on the part of air traffic services personnel; and<br>(ii) with a frequency which satisfies the requirements of the air traffic services units concerned | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 9. | *CAR-11, Para 7.1* | Does the Air Traffic Services Provider ensure MET information is promptly supplied to flight information centres, area control centres, approach control units, aerodrome control towers, and communication stations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 10 | *MATS NEPAL Chapter 16*<br><br>Para 16.3.5 | Has the Air Traffic Services Provider maintained and retained the bird hit data properly? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 11 | *MATS NEPAL Chapter 16*<br><br>*Para 16.7.3* | Has the Air Traffic Services Provider established and implemented a system to ensure the automatic recording and retention of ATS data including<br>(a) recording facilities for air-ground communication channels, when direct pilot-controller two-way radiotelephony or datalink communications are used for the provision of air traffic control service —30 days;<br>(b) a system to ensure ATS data relating to air-ground communication channels are retained for a period of at least thirty days;<br>(c) a system for recording and retention of data required for investigative purposes<br>(d) direct-speech or data link between air traffic services units—30 days;<br>(e) surveillance data from primary and secondary radar equipment -30 days;<br>(f) automated flight data processing including on-screen display of aircraft tracks and label blocks—30 days. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 12. | *MATS Nepal*<br>*Chapter5*<br>*Para 5.3* | Does the Air Traffic Services Provider ensure that a process has been established and implemented to verify that a/c are approved for operation in RVSM airspace?<br>If yes, has they developed the procedure to forward information to the Regional Monitoring Agency (RMA) on a regular basis? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 13. | *MATS Nepal*<br>*Chapter5*<br>*Para 5.3* | Has the Air Traffic Services Provider established and implemented procedures for monitoring of operations in RVSM airspace and ensure that the continued application of the RVSM vertical separation minimum meets the safety objectives? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 14. | *MATS Nepal*<br>*Chapter5*<br>*Para 5.3* | Has the Air Traffic Services Provider developed programme for monitoring the height-keeping performance of aircraft operating in the RVSM airspaces? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 15. | *MATS Nepal*<br>*Chapter5*<br>*Para 5.3* | Has the Air Traffic Services Provider ensure the scope of the programme for monitoring the height-keeping performance of aircraft is adequate to conduct analyses of aircraft group performance and evaluation of the stability of altimetry system error? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 16. | *MATS Nepal*<br>*Chapter5*<br>*Para 5.3* | Has the Air Traffic Services Provider ensure the collection of information on large height deviations and exchange such information with the Regional Monitoring Agency (RMA)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 17. | *MATS Nepal*<br>*Chapter 4*<br>*Para 4.5.7.5* | Does the Air Traffic Services Provider ensure that the requirements ensured in CAR-11 for read-back of safety related and other relevant information of air traffic control clearance and instructions are met? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 18. | *MATS Nepal*<br>*Chapter15* | Has the Air Traffic Services Provider established and implemented procedure to render assistance to an aircraft in the event of the following emergencies:<br>a) Unlawful interference.<br>b) Aircraft bomb threat.<br>c) Emergency descent. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 19. | *MATS Nepal*<br>*Chapter15* | Has the Air Traffic Services Provider established and implemented procedure to assist and safeguard strayed or unidentified aircraft and in case of interception? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 20. | *MATS Nepal*<br>*Chapter15* | Has ATS provider established and implemented procedure for air-ground radio communications failure?<br>a. In visual meteorology condition<br>b In instrument meteorology condition | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 21. | *MATS Nepal*<br>*Chapter15* | Has the Air Traffic Services Provider established and implemented ATC contingency procedure for ;<br>a. Radio communication contingencies?<br>b. Emergency separation?<br>c. if applicable, for<br>i) short-term conflict alert (STCA);<br>ii) minimum safe altitude warning (MSAW);<br>iii) aircraft equipped with ACAS; and<br>iv) autonomous runway incursion warning system (ARIWS). | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 22. | *MATS NEPAL*<br>*Chapter 3*<br>*Para 3.1* | 1. Has the ATS Provider developed procedures for assessing and declaring ATC capacity?<br>2. Do the procedures include:<br>a. Factors to be considered when assessing the required ATS system capacity.<br>b. Procedures for regulating ATC capacity and traffic volume<br>c. Procedure for enhancing ATC system capacity<br>d. Procedure for flexible use of airspace.<br>3. Has the Air Traffic Services Provider determined and declared the ATS system capacity?<br>Check to confirm that the declared capacities include:<br>b. Capacity for the controlled airspaces and aerodromes<br>c. The determined number of ATS personnel required.<br>If not, are there any procedures for regulating traffic volumes whenever necessary? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 23. | *MATS NEPAL Chapter 16*<br><br>*Para 16.13.3* | Are there proper arrangements for supervision of ATCO's job?<br>If yes, is there regular briefing *and* interaction between ATCO and their supervisor? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 24. | *CAR 11 3.4* | Has the Air Traffic Services Provider ensure that other separation minima which are not covered by current ICAO provisions, MATS Nepal and Regional Supplementary Procedures are established as necessary following consultation with operators for routes or portions of routes contained within the VNSM FIR. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>**Not Applicable**√ | |
| 25. | *MATS NEPAL Chapter 16*<br><br>*Para 16.3.3* | Is there a system, or established procedure to report and record the aircraft accidents and incidents that are reported through ATS Channels? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 26. | *MATS NEPAL Chapter 16*<br><br>*Para 16.3* | Has the Air Traffic Services Provider established the procedure for the reporting of aircraft proximity incidents and their investigation to promote safety of aircraft? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 27. | *MATS NEPAL Chapter 16*<br><br>*Para 16.6* | Has the Air Traffic Services Provider established the procedures for notification of suspected communicable diseases or other Public Health Risk on board an aircraft? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 28. | *MATS NEPAL Chapter 14*<br><br>*Para 14.2.1.(f)* | Has the Air Traffic Services Provider declared operation hours? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 29. | *CAR 11 3.4*<br><br>*MATS NEPAL Chapter5,6,7,8,* | Has the Air Traffic Services Provider ensure that separation minima for application within a given portion of airspace are applied in accordance with MATS Nepal and Regional Supplementary Procedures as applicable under the prevailing circumstances?<br><br>Verify the separation minima selected for application within specified airspaces and at aerodromes.<br><br>a. Vertical Separation<br>b. Horizontal Separation<br>i. Lateral Separation<br>ii. Longitudinal Separation<br>c. Composite Separation | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 30. | *CAR 11 3.4* | Has the Air Traffic Services Provider ensure that other separation minima which are not covered by current ICAO provisions, MATS Nepal and Regional Supplementary Procedures are established as necessary following consultation with operators for routes or portions of routes contained within the VNSM FIR. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>**Not Applicable**√ | |
| 31. | *CAR 11*<br>*Chapter 2*<br>*Para 2.7.3* | Has the service provider ensure that the prescribed navigation specification are appropriate to the level of communications, navigation and air traffic services provided in the airspace by Air Traffic Services Provider? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 32. | *CAR 11*<br>*Chapter 2*<br>*Para 2.7.1* | Has the ATS provider ensure that in designating a navigation specification, limitations may apply as a result of navigation infrastructure constraints or specific navigation functionality requirements? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 33. | *MATS Nepal*<br>*Chapter8*<br>*Para 8.6.1.1* | Has the Air Traffic Services Provider developed the procedures to adjust the situation display(s) of surveillance system and to carry out adequate checks on its accuracy in accordance with the technical instructions prescribed by the appropriate authority for the equipment concerned? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 34. | *CAR 11*<br>*Chapter 2*<br>*Para 2.1 & 2.5* | Has the Air Traffic Services Provider arranged for the establishment and provision of ATS in accordance with the provisions of CAR 11 as following?<br>a) Aerodrome control service<br>b) Approach control service<br>c) Area control service | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 35. | *CAR 11*<br>*Chapter 2*<br>*Para 2.1 & 2.5* | Has the Air Traffic Services Provider arranged for the designation of the the portions of the airspace and controlled aerodromes where air traffic services is provided in accordance with the provisions of CAR 11 as following?<br>a) Flight information regions<br>b) Control areas and control zones<br>c) Controlled aerodromes | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 36. | *CAR 11*<br>*Chapter 2*<br>*Para 2.28* | Has the Air Traffic Services provider complies with the Fatigue Management Regulations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 37. | *CAR 11, 2.28* | Has the Air Traffic Services provider developed and implemented a process to allow variations from fatigue prescriptive limitation regulations?<br><br>-duty roster<br><br>-permission from DGCA<br><br>-Risk Assessment | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 38. | *CAR 11*<br><br>*Chapter 3*<br><br>*Para 3.7.5* | Has the ATS provider developed ATFM procedures for implementation when air traffic demand exceeds or is expected to exceed its declared ATC capacity?<br><br>Check if the procedures include phased implementation<br><br>Has the Air Traffic Services provider implemented its procedures for air traffic flow management (ATFM)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 39. | *MATS NEPAL*<br><br>*Chapter 7.6.3.2.1*<br><br>*Para* | Does the Air Traffic Services provider ensure that procedures are established and implemented to control the movement of persons and vehicles on the manoeuvring area of the aerodrome? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 40. | *CAR 11*<br><br>*Para 7.2* | Has the ATS provider developed procedures to ensure provision for providing information on aerodrome condition to the control tower and the unit providing approach control services including procedures for reporting of temporary hazards at the aerodrome? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 41. | *MATS Nepal, Para 7.4.1.5* | Has Air Traffic Service Provider developed procedure for the prevention of runway incursion?<br><br>Does the runway incursion prevention programme includes but not limited to:<br><br>a) establishment of the runway safety team comprising of the various stakeholders including ATS;<br>b) objectives of the programme;<br>c) aerodrome charts showing identified hot spots and suitable strategies to be implemented to remove the associated hazards;<br>d) a plan containing action items for mitigating runway safety deficiencies relating to –<br>(i) changes to the physical features of, or facilities at, the aerodrome;<br>(ii) air traffic control procedures;<br>(iii) airfield access requirements; | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| | | (iv) pilot and vehicle operator awareness; and<br>(v) production of hot spot maps<br><br>e) designation of persons responsible for tasks associated with action items;<br>f) procedures for periodic assessment of the effectiveness of implemented and/or completed action items; and<br>g) education and awareness material to be used for reducing the risk of runway incursions (e.g., newsletters, posters, stickers and other educational information) | | |
| 42. | *CAR 11 Chapter 6* | Has service provider developed and implemented communication requirement based on CAR 11 provision?<br><br>A. AIR-GROUND<br>a) Flight Information Service (FIS),<br>b) area,approach and aerodrome control services,<br>B. GROUND – GROUND<br>a) Direct speech circuits within FIR region<br>b) Direct speech circuits between ATS units;<br>c) Direct speech circuits between ATS units and<br>i. MET offices<br>ii. Military units<br>iii. AIS,<br>iv. Rescue coordination centres (RCCs),<br>v. apron management services units,<br>vi. adjacent area control centres (ACCs)/Flight Information Regions (FIRs), etc | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

ATS Inspection Checklist

**D. Documentation**

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAR 11*<br>*Chapter 2*<br>*Para 2. 36* | Is there a technical library? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *MATS NEPAL*<br>*Chapter 16*<br><br>Para 16.7.1.2(C) | Are the updated documents and other technical documents readily available to the ATCOs?<br>Tick applicable only:<br>2.1 ICAO Annexes & Doc<br>2.1 CARs<br>2.2 AIP Nepal<br>2.3 MATS Nepal<br>2.4 ANS Regulatory Policy and Procedure Manual<br>2.5 ATSOM<br>2.6 Others (specify) | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *MATS NEPAL*<br>*Chapter 16*<br><br>*Para 16.7.4* | Has the Air Traffic Services Provider properly filed and updated the logbooks? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *MATS NEPAL*<br>*Chapter 16*<br><br>*Para 16.8.2.4* | Are the updated and relevant charts/maps available to Air Traffic Services Provides operational units? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

ATS Inspection Checklist

## E. Safety Management System

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| COMPONENT 1- SAFETY POLICY AND OBJECTIVES | | | | |
| ELEMENT 1.1-MANAGEMENT COMMITMENT | | | | |
| 1. | *ICAO Doc 9859 Chapter 8 8.4.7.16.a.7* | Has ATS Provider developed an organizational structure? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *CAAN employee's facility, Service and condition regulation 2056, Rule 2.6* | Has ATS Provider developed Job description for ATS Provider? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1* | Has the ATS Provider developed safety policy in accordance with international and national requirements? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(a)* | Does the safety policy reflect organizational commitment regarding safety? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 5. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(b)* | Does the safety policy include a clear statement about the provision of the necessary resources for the implementation of the safety policy? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(c)* | Does the safety policy include safety reporting procedures? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 7. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(d)* | Does the safety policy clearly indicate which types of behaviour are unacceptable related to the service provider's aviation activities and the circumstances under which disciplinary action would not apply? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 8. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(e)* | Has the safety policy been signed by the accountable executive of the organization? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 9. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(f)* | Has the safety policy been communicated with visible | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| | | endorsement to all ATS providers and stakeholders? | Not Applicable | |
| 10. | *CAR 19, Appendix 2, 1, 1.1, 1.1.1(g)* | Is the safety policy periodically reviewed to ensure it remains relevant and appropriate to the ATS service provider? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| ELEMENT 1.2-SAFETY ACCOUNTABILITY AND RESPONSIBILITIES | | | | |
| 11. | *CAR 19, Appendix 2, 1, 1.2, (a)* | Has the ATS provider identified the accountable executive who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the organization, for the implementation and maintenance of the SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 12. | *CAR 19, Appendix 2, 1, 1.2, (b)* | Has the ATS provider clearly defined lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 13. | *CAR 19, Appendix 2, 1, 1.2, (c)* | Has the ATS provider identified the accountabilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 14. | *CAR 19, Appendix 2, 1, 1.2, (d)* | Has the ATS provider documented and communicate safety responsibilities, accountabilities and authorities throughout the organization? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 15. | *CAR 19, Appendix 2, 1, 1.2, (e)* | Has the ATS provider defined the levels of management with authority to make decisions regarding safety risk tolerability? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| ELEMENT 1.3-APPOINTMENT OF KEY SAFETY PERSONNEL | | | | |
| 16. | *CAR 19, Appendix 2, 1, 1.3* | Has ATS Provider appointed any personnel as Safety Manager responsible for SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| ELEMENT 1.4-COORDINATION OF EMERGENCY RESPONSE PLANNING | | | | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| 17. | *CAR 19, Appendix 2, 1, 1.4* | Has the ATS provider developed the emergency response plan properly coordinated with the emergency response plans of those organizations that the ATS provider must interface with during the provision of air traffic services? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| ELEMENT 1.5-SMS DOCUMENTATION | | | | |
| 18. | *CAR 19, Appendix 2, 1, 1.5.1(a)* | Does the SMS documentation describe safety policy and objectives? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 19. | *CAR 19, Appendix 2, 1, 1.5.1(b)* | Does the SMS documentation describe SMS requirements | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 20. | *CAR 19, Appendix 2, 1, 1.5.1(c)* | Does the SMS documentation describe SMS processes and procedures? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 21. | *CAR 19, Appendix 2, 1, 1.5.1(d)* | Does the SMS documentation describe accountabilities, responsibilities and authorities for SMS processes and procedures? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 22. | *CAR 19, Appendix 2, 1, 1.5.2* | Has the ATS provider developed and implemented an SMS manual as part of its SMS documentation? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| COMPONENT 2: SAFETY RISK MANAGEMENT | | | | |
| ELEMENT2.1-HAZARD IDENTIFICATION | | | | |
| 23. | *CAR 19, Appendix 2, 2,2.1, 2.1.1* | Has the ATS provider developed and implemented a formal process to identify hazards that may contribute to aviation safety related occurrences? | | |
| 24. | *CAR 19, Appendix 2, 2,2.1, 2.1.2* | Is the hazard identification based on a combination of reactive and proactive safety data collection methods? | | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| 25. | *CAR 19, Appendix 2, 2, 2.1,2.1.1* | Has ATS Provider developed any procedures for hazard identification and risk mitigation (HIRM)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 26. | *ICAO Doc 9859, Chapter 2* | Has ATS Provider developed and maintained hazard identification log book? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| | | ELEMENT2.2-SAFETY RISK ASSESSMENT AND MITIGATION | | |
| 27. | *CAR 19, Appendix 2, 2,2.2* | Has the ATS provider developed and implemented a process that ensures analysis, assessment and control of the safety risks associated with identified hazards? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 28. | *CAR 19, Appendix 2, 2, 2.2, CAR 11, 2.19.3.1* | Has the ATS Provider developed and implemented procedures for the conduct of safety risk assessments?<br>Do the procedures include procedures for:<br>a) safety risk assessments, with respect to safety-related changes to the ATS system and activities potentially hazardous to civil aircraft?<br>b) ensuring that the units conducting or identifying activities potentially hazardous to civil aircraft contribute to the safety risk assessment?<br>(check examples of safety risk assessment conducted.) | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 29. | *CAR 11, 2.29* | Does the ATS provider ensure that: a)any significant safety-related change to the ATS system, including the implementation of a reduced separation minimum or a new procedure, are only effected after a safety risk assessment has demonstrated that an acceptable level of safety will be met and users have been consulted?<br>b) adequate provision is made for post-implementation monitoring | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| | | to verify that the defined level of safety continues to be met? | | |
| 30. | *MATS Nepal Chapter 2 Para 2.5.1 2* | Has the ATS provider developed procedures to conduct safety reviews?<br>Does the ATS Provider conduct safety reviews (including review of standard phraseology and readback requirement) on a regular and systematic basis? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 31. | *MATS Nepal Chapter2 Para 2.5.1* | Are there qualified personnel available with ATS Provider to do safety risk assessment (or SRM) and safety review? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 32. | *MATS Nepal 2.4.2* | Does the ATS provider systematically review safety-related reports (including air traffic incident reports)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 33. | *CAR 19, Chap 5* | Does the ATS provider have a formal safety data collection and processing system (SDCPS) of effectively collecting information about hazards in operations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| COMPONENT 3: SAFETY ASSURANCE | | | | |
| ELEMENT3.1-SAFETY PERFORMANCE MONITORING AND MEASUREMENT | | | | |
| 34. | *CAR 19, Appendix 2,3,3.1,3.1.11* | Has the ATS provider developed and implemented the means to verify the safety performance of the organization and to validate the effectiveness of safety risk controls? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 35. | *ICAO Doc 9859,9.4.4.6* | Is the reporting system developed by ATS provider simple, accessible? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 36. | *CAR 19 Chapter5* | Has the ATS Provider established and implemented a system to ensure the recording and retention of ANS occurrence data? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 37. | *CAR 19, Appendix 3,Note2* | Does the voluntary reporting system allow for the submission of information related to observed hazards or inadvertent errors | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| | | without an associated legal or administrative requirement to do so? | | |
| 38. | *CAR 19, Appendix 3,Note3* | Does the voluntary reporting system require that reported information should be used solely to support the enhancement of safety and not to apportion blame? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 39. | *CAR 19, Appendix 3* | Is the voluntary reporting system non-punitive and afford protection to Reporters? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 40. | *CAR 19, Appendix 3* | Does the voluntary reporting system promote an effective reporting culture and proactive identification of potential safety deficiencies? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 41. | *CAR 19, Appendix 3* | Is the voluntary reporting system confidential? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 42. | *CAR 19, Appendix 2, 3,3.1* | Is the safety performance monitoring and measurement also done through safety studies, safety reviews, safety surveys, safety audits, and internal investigations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 43. | *CAR 19, Chap 5* | Does the ATS provider SDCPS include a combination of reactive, proactive and predictive methods of safety data collection? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 44. | *CAR 19 Chapter3 Para 3.1.2* | Has ATS Provider verified their safety performance in reference to their own safety performance indicator (SPI) and safety performance target (SPT)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| | | ELEMENT3.2-THE MANAGEMENT OF CHANGE | | |
| 45. | *CAR 19, Appendix 2,3,3.2* | Has the ATS provider developed and implemented a formal process to identify changes which may affect the level of safety risk associated with its services and to identify and manage the safety | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| | | risks that may arise from those changes? | | |
| 46. | *CAR 19, Appendix 2,3,3.2* | Does the ATS provider involve stakeholders in the management of change process? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 47. | *CAR 19, Appendix 2,3,3.2* | Are management of change plan documented and outcomes recorded? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| | | ELEMENT3.3-CONTINUOUS IMPROVEMENT OF THE SMS | | |
| 48. | *CAR 19, Appendix 2,3,3.3* | Does the accountable manger have the necessary authority to make decisions related to the improvement and effectiveness of the SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 49. | *CAR 19, Appendix 2,3,3.3* | Does the ATS provider monitor and assess the effectiveness of its SMS processes to enable continuous improvement of the overall performance of the SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| | | COMPONENT 4: SAFETY PROMOTION | | |
| | | ELEMENT4.1-TRAINING AND EDUCATION | | |
| 50. | *CAR 19, Appendix 2,4,4.1* | Has the ATS provider developed and implemented a safety training programme that ensures that personnel are trained and competent to perform their SMS duties? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 51. | *CAR 19, Appendix 2,4,4.2* | Is the scope of the safety training programme appropriate to each individual's involvement in the SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| | | ELEMENT4.2-SAFETY COMMUNICATION | | |
| 52. | *CAR 19, Appendix 2,4,4.3* | Has the ATS provider established and implement processes and procedures that facilitate effective communication throughout all levels of the organization? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

**SMS Inspection Checklist**

| S.N. | Reference | Inspection Checklists/Questioners | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| 53. | *CAR 19, Appendix 2,4,4.3* | Does the formal process for safety communication –<br>a) ensure that personnel are aware of the SMS to a degree commensurate with their positions?<br>b) convey safety-critical information?<br>c) explain why particular safety actions are taken? and<br>d) explain why safety procedures are introduced or changed?<br>e) raise awareness of corrective actions?<br>f) provide information regarding new or amended safety procedures? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 54. | *ICAO Doc 9859 Chap 9* | Has the ATS provider developed the process for feedback to the reporter of occurrence report? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

# APPENDIX 2- **PANS-OPS Inspection Checklist**

## Civil Aviation Authority of Nepal

**General information**

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|---|---|
| **Person undertaking inspection** | |
| **Organization being audited** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

## PANS OPS Surveillance Checklist

| S.N. | Reference | Audit Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *MOS-IFPD 4.1.2, 4.2* | What mechanism has the service provider developed for the construction or modification of visual and instrument flight procedures as per the provision of MOS-IFPD/PANS OPS (Doc 8168 Vol. II) /RNP AR Manual (Doc 9905)?<br><br>a. How are the needs for construction or modification of flight procedure design identified?<br>b. Has the service provider developed the operations manual as a guidance for initiation and design of flight procedures?<br>c. If yes, are such guidance materials updated? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *MOS-IFPD 4.2* | How does service provider demonstrate compliance with the provisions set out in MOS IFPD, PANS OPS and RNP AR Manual for the design of terminal and en-route flight procedures?<br><br>a. Does the OM, if developed, concur with the design criteria set out in MOS IFPD/PANS OPS Vol. II and other relevant ICAO documents?<br>b. If yes, do the design documents reveal that the parameters used in the design are in concurrence with the OM?<br>c. If OM not developed, what is the alternate means to demonstrate compliance with the regulatory requirements? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *CAAN employee regulation, 2.6* | Has the service provider developed job description for its PANS OPS staffs? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *MOS-IFPD 5.3* | Does the IFPD service provider ensure that appropriate minimum qualification requirements for flight procedures designers are met? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

## PANS OPS Surveillance Checklist

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| 5. | *MOS-IFPD 4.1* | How does service provider demonstrate that they have sufficient number of qualified staff to carry out work in the field of PANS-OPS?<br><br>a. How many qualified designers are available with the service provider for the design of flight procedures?<br>b. What methodology has the service provider established to determine the staffing need to carry out the work in PANS-OPS field?<br>c. Have all the factors taken into consideration for the staffing need identification? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *MOS-IFPD 4.3* | What are types of facilities and tools used for designing instrument flight procedures?<br><br>a. If automation tool is used, is that tool formally validated?<br>b. Are the designers trained on such tools? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 7. | *MOS-IFPD 5.2, 5.8* | Has the service provider developed and implemented the training programme for PANS-OPS Technical Staffs effectively?<br><br>a. If yes, has the service provider planned for the Initial, OJT, Advance and Refresher Training concerning with the flight procedure design and related activities? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 8. | *MOS-IFPD 4.4.3* | How does the service provider maintain training records of PANS-OPS technical staff?<br><br>a. What is the status of such records, complete, incomplete, etc.?<br>b. Are there any personnel allocated responsibility of maintaining such records? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

## PANS OPS Surveillance Checklist

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|---|---|---|---|---|
| 9. | *CAR-19, 8.2* | Has the service provider developed a mechanism/system for timely elimination of safety issues including regulatory audit/inspection deficiencies?<br><br>a. Is there any procedure that mentions about the elimination of such issues?<br>b. Have they developed and implemented robust corrective action plan? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 10. | *MOS-IFPD 26.1* | Does the Service provider periodically review the instrument procedures to ensure that they continue to comply with changing criteria and meet user requirements?<br><br>a. If yes, what is the basis for such review?<br>b. If yes, what actions they have performed for the review, maintenance and revalidation of the procedure? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 11. | *MOS-IFPD 20* | Has the Service provider published operating minima (e.g. Visibility, Obstacle Clearance Altitude/Height (OCA/OCH), Minimum Descent Altitude/Height (MDA/H), Decision Altitude/ Height (DA/H)) for instrument approaches at aerodromes?<br><br>a. If yes, Are the published minima logical and in compliance to the provisions of MOS IFPD/ PANS OPS, Doc. 8168 Vol. 2 and other applicable document? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 12. | *MOS-IFPD 4.4* | Does the Service provider retain all procedure design documentation, so as to allow any data anomalies or errors found during the production, maintenance or operational use of the procedure to be corrected?<br><br>a. If yes, in what form such documents are retained?<br>b. Are the documents complete? (Procedure drawing, protection area, obstacle analysis, ground and/or flight validation reports, etc.)<br>c. Has this function been assigned to the dedicated personnel? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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| 13. | *MOS-IFPD 14.5.4, 27.3* | Does the service provider ensure that the obstacle information and MOCA are appropriately identified and published, where applicable in the charts?<br><br>a. If yes, are the obstacles published with appropriate legend and format in the designed charts in accordance with CAR 4/Annex 4? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 14. | *MOS-IFPD 11.6* | Does the service provider ensure that, besides the MOC, the additional allowance be used in the determination of MOCA of a flight segment?<br><br>a. Are the additional margins for vegetation growth, charting accuracy and mountainous terrain applied during the design of the flight procedures as per the applicable standards? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 15. | *CAR-11, 2.28*<br><br>*MOS-IFPD, 25.1* | Has the service provider carried out a safety assessment in respect of proposals for new flight procedure designs or any significant changes in a revised procedure?<br><br>a. If yes, has service provider documented such assessment activities?<br>i. If yes, are all the relevant stakeholders participated in the safety assessment tasks?<br>b. If not, what is the alternate means of ensuring the compliance of the relevant provisions of MOS IFPD/ PANS OPS, Doc. 8168 Vol. 2 and other relevant documents? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory√<br>Not Applicable | |

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| 16. | *Doc.9906 Part A, 7.2*<br><br>*MOS IFPD 5.6* | Does service provider ensure that the data used for the design of IFPD meet the quality requirements?<br><br>a. If yes, are the data survey and supplier agencies qualified?<br>b. Are the surveyed data verified or validated?<br>c. Are the verified and validated data for the IFPD are approved by appropriate authority? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 17. | *MOS-IFPD 5.6* | Does the PANS OPS service provider ensure that the quality of the procedure design products is assured through a quality assurance process?<br><br>a. If yes, what is the mechanism of assuring the quality of the designed product?<br>b. Has the service provider developed the checklist for the design of quality product? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 18. | *MOS-IFPD 7.1* | Does the PANS OPS service provider ensure the stakeholders' participation as a part of a quality assurance process?<br><br>If yes, are the stakeholders consulted during the design process? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 19. | *MOS-IFPD 22.2* | Has the service provider ensured that ground validation of instrument flight procedures, including obstacle checks, are carried out as part of a quality assurance process?<br><br>What is the mechanism for such ground validation? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 20. | *MOS-IFPD 22.3* | Does the service provider ensure that flight validations of instrument flight procedures, including obstacle checks, are carried out as part of a quality assurance process?<br><br>a. If yes, when does such flight inspections are made mandatory? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 21. | *CAR-11, 2.7.2* | Has the service provider developed PBN procedures within the Kathmandu FIR?<br>a. Has the service provider developed the PBN Implementation plan?`<br>b. Is the service provider updating the plan? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 22. | *CAR-11, 2.7.1* | Has the service provider ensure that navigation specification specified for applying | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory | |

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| | | performance based navigation are prescribed by Civil Aviation Authority of Nepal? | Not Applicable | |
| 23. | *CAR-11, 2.7.1* | Has the service providers ensure that the navigation specification(s) for designated areas, tracks or ATS routes are prescribed on the basis of regional air navigation agreements? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 24. | *Doc 8168, Part III, Sec. 2, Ch. 5, Para 5.3*<br><br>*Part III, Sec. 5, Ch. 1, Para 1.3.4, 1.4.3* | Has the service provider published coding tables to supplement the published PBN terminal procedures?<br>a. If yes, have they appropriately filled coding tables with appropriate path terminators?<br>b. Are PBN requirement boxes appropriately mentioned in the charts where needed? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 25. | *MOS-IFPD 21.1, Doc 8168 Vol.2, 1.4.2 Cir. 353, 1.3* | Does the service provider ensure that the published instrument APCH procedures are appropriately named or identified as per applicable documents? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 26. | *CAR-11, 2.13.4, 2.13.5, 2.15.3* | Does the service provider ensure that the published Significant Points, ATS routes, SIDs and STARs are appropriately named or identified as per applicable documents? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 27. | *CAR-11, App. 2, 3* | Does the service provider ensure that the significant point at a position not marked by the site of a radio navigation aid, and is used for ATC purposes be designated by unique 5LNC?<br><br>If yes, how the uniqueness of the 5LNC published in AIP Nepal are assured? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 28. | *MOS-IFPD 4.3* | Whether following updated documents relevant to the unit are available?<br><br>– MOS IFPD<br>– Doc 9635<br>– Quality Assurance Manual for Flight Procedure Design, Doc 9906<br>– Doc 8168 Vol. 2<br>– PBN Manual, Doc 9613<br>– Relevant ICAO Annexes and CARs<br>– AIP Nepal (AMDT/SUPP), relevant NOTAMs, etc.<br>– ANS Regulatory Policy and Procedure Manual<br>– JD of the procedure designers | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

# APPENDIX 3- **Maps and Charts Inspection Checklist**

## Civil Aviation Authority of Nepal

**General information**

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|---|---|
| **Person undertaking inspection** | |
| **Organization being audited** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

| S.N. | Reference | Inspection Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAR-4, Req. 1.2.1* | Does the service provider demonstrate that the published aeronautical Maps and Charts are in conformance with applicable specifications and requirements?<br>a. If yes, how does service provider demonstrate compliance with the applicable requirements?<br>b. How are the needs for construction or maintenance of maps and charts identified? (Stakeholder's feedback, department review, etc.) | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAR-15, 3.6.5* | Has the service provider developed a procedure for the construction of Maps & Charts in accordance with the applicable requirements?<br>a. If yes, do the chart construction documents reveal that the specifications used in the construction are in concurrence such procedure?<br>b. Is that procedure updated to meet the latest provisions of the applicable requirements? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAR-4, Req. 1.3.2* | Does the service provider make available the applicable charts to the users? (by producing itself or by an agency) (view the list of charts provided to confirm they include the following as applicable.<br>i. Aerodrome obstacle chart-ICAO Type A(Operating Limitations)<br>ii. Aerodrome obstacle chart-ICAO Type B<br>iii. Aerodrome Terrain And obstacle chart-ICAO (Electronic)<br>iv. Precision Approach Terrain Chart- ICAO<br>v. Enroute Chart- ICAO<br>vi. Area Chart- ICAO<br>vii. Standard Departure Chart- Instrument (SID)- ICAO<br>viii. Standard Departure Chart- Instrument (STAR)- ICAO<br>ix. Instrument Approach Chart -ICAO<br>x. Visual Approach Chart -ICAO<br>xi. Aerodrome/Heliport Chart- ICAO<br>xii. Aerodrome Ground Movement Chart-ICAO<br>xiii. Aircraft Parking/ Docking Chart- ICAO<br>xiv. World Aeronautical Chart- ICAO 1: 1000000<br>xv. Aeronautical Chart- ICAO 1: 500000 | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

| | | | | |
|---|---|---|---|---|
| | | xvi. Aeronautical Navigation Chart- ICAO Small Scale<br>xvii. Plotting Chart- ICAO<br>xviii. Electronic Aeronautical Chart Display- ICAO<br>xix. ATC Surveillance Minimum Altitude Chart- ICAO<br><br>What mechanism has been developed to make available of such charts to the users?( review the charts published in AIP) | | |

Maps and Charts Inspection Checklist

Maps and Charts Inspection Checklist

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| 4. | *CAR-4, Req. 1.3.3* | Has the service provider taken all reasonable measures for the adequacy and accuracy of the information that it provides and aeronautical charts made available?<br>a. If yes, are they maintained up to date by the revision service? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *CAR-15 Req 3.3.2* | Has the service provider taken measures for availability of the applicable charts to the users and those charts went through a validation and verification process? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *CAAN employee regulation, 2.6* | Has the service provider developed job description for its cartographic personnel? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *CAR-4, Req. 2.19.1* | Does the service provider have sufficient number of qualified staffs to carry out Maps and Charts related tasks?<br><br>a. If yes, what procedure or methodology the service provider has developed or adopted for determining the number of staffs required for the provision of cartographic service? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 8. | *CAR-4, Req. 2.19.2* | Does the service provider have proper facilities for construction of Maps and Charts? (e.g. Map Construction Room, charting tools, computers, Software, charts, etc.)<br><br>a. If yes, what are the types and status of facilities and tools used for the construction of Maps & Charts?<br><br>b. If not, what is the alternative mechanism developed and documented for the construction of Maps & Charts? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 9. | *CAR-4, Req. 2.17.1* | Has the service provider introduced a properly organized quality management system in each function stage to meet the established aeronautical data quality requirements? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

Maps and Charts Inspection Checklist

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| 10. | *CAR-4, Req. 2.20* | Has the service provider developed and implemented the training programme for the cartographic (maps and charts) staffs?<br><br>a. If yes, what mechanism has the service provider developed to update its technical staff as per the latest versions of the applicable regulations and requirements? (Provisions for initial/basic, OJT, refresher, advance trainings, etc.) | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 11. | *CAR-4, Req. 2.20* | Does the service provider maintain training records or files for cartographic (maps and charts) staffs?<br>a. If yes, what mechanism has been developed to maintain such records? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 12. | *CAR-4, Req.2.1.1, 2.1.3* | Do the published charts provide information relevant to the function of the chart and facilitate their optimum use?<br><br>**a.** If yes, is the presentation of information comprehensive, accurate, unambiguous and readable under all normal operating conditions? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 13. | *CAR-4, Req. 2.1.5* | Are the information published in the charts in a form that enables the users (eg. Pilots) to acquire such information in a reasonable time consistent with workload and operating conditions? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

Maps and Charts Inspection Checklist

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| 14. | *CAR-4, Req. 2.4.1* | Are the symbols used in the charts conform to those shown in CAR 4, Appendix 2 – ICAO Chart Symbols and ICAO Annex 4, Appendix 2, except that there is no appropriate ICAO symbol to represent the aeronautical feature?<br>**a.** If not, has the service provider ensured that the symbols used do not cause confusion with any existing ICAO chart symbols or impair the legibility of the chart? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 15. | *CAR-4, Req. 2.2* | Is the title in the chart mentioned in accordance with the requirement contained in CAR-4 satisfying the function of the chart? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 16. | *CAR-4, Req. 2.17.1* | Does the service provider have mechanism to retain all the maps and charts construction documentation so that any information or data anomalies or errors found during the production, maintenance or operational use of the charts can be corrected?<br>a. If yes, in what form such documents are retained?<br>b. Are the documents complete? (Information acquisition, Chart construction, Verification and other information related to the construction of charts) | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 17. | *CAR-4, Req. 2.3.4* | Has the service provider mentioned the name and address of the map/chart producing agency in the published Charts? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

Maps and Charts Inspection Checklist

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| 18. | *Doc 9734, Part A, 3.8* | Has the service provider developed mechanism/system for timely elimination of identified safety issues and regulatory audit/inspection deficiencies?<br>a. If yes, has it developed and implemented appropriate corrective action plan? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 19. | *CAR-4, Req. 1.4.1.3* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes<br>- ICAO Chart Manual, Doc 8697 and other relevant ICAO Docs<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>- Job description of the cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

# APPENDIX 4- **AIS Inspection Checklist for AIM Department**

**Civil Aviation Authority of Nepal**
(AIM Department Head Office)

**General Information**

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|---|---|
| **Person undertaking inspection** | |
| **Organization being audited** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

| | | | | |
|---|---|---|---|---|
| 1. | *DOC 8126 Para 3.3.3* | Does AIS provider has minimum number of staff available to carry out AIS functions effectively?<br><br>Has AIS Provider developed policies and procedures for determining the need of staff required to ensure the provision of an adequate AIS system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAR 15 Para 2.1* | Has the AIS Provider arranged for the establishment and provision of AIS in accordance with CAR 15 provisions?<br><br>Has AIS Provider developed an organizational structure? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAAN employee facility, service and condition Regulation 2056, Rule 2.6* | Has the AIS Provider developed job description for its AIS Personnel? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *CAR 15 Para 3.3.2* | Has AIS provider established verification and validation procedures which ensure that upon receipt of aeronautical data and aeronautical information that meet required quality specification? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *CAR 15 Para 3.4.1* | Has AIS provider used digital data error detection techniques during the transmission and/or storage of aeronautical data and digital data sets? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *CAR 15 Para3.5.1* | Has AIS provider applied automation in order to ensure timely efficiency and cost effectiveness of aeronautical information services? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *CAR 15 Para 3.8.1* | Has AIS provider developed training plan and programme to maintain knowledge, skill and abilities of personnel assigned to perform specific functions of QMS and other AIS related works? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | . |
| 8. | *CAR-15 Para 2.6* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes<br>- ICAO Chart Manual, Doc 8697 and other relevant ICAO Docs | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

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| | | - AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>- Job description of the cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | | |

**AIS Inspection Checklists**

AIM Department Head Office

## AIS Inspection Checklists

AIM Department Head Office

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| 9. | *CAR 15*<br>*Para 3.6.4* | Are AIS personnel appropriately trained to maintain the competency to perform assigned AIS related specific functions? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 10. | *CAR 15*<br>*Para 3.6.4* | Does the AIS provider maintain training records for the AIS personnel, so that the qualifications of personnel can be assured whenever needed? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 11. | *CAR 15*<br>*Para 3.6.4* | Has the AIS Provider established mechanism for Initial and Periodic assessments of personnel to demonstrate that the required level of competencies are maintained to perform the assigned task and functions? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 12. | *CAR 15*<br>*Para 2.2.1* | Has any mechanism been developed by AIS provider to ensure that aeronautical data and aeronautical information necessary for the safety, regularity and sufficiency of air navigation are made available in a form suitable for the operational requirement of the ATM community those involved in flight operations and ATS? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 13. | *CAR 15*<br>*Para 3.6*<br>*MOS AIS*<br>*Para 3.1*<br>*CAR 4*<br>*Para 2.17* | Has the AIS Provider implemented and maintained quality management system in AIS?<br><br>Has QMS manual describe about requirements to measure, monitor and analyse processes to achieve a continuous improvement on the AIS?<br><br>Has AIS Provider reviewed user's feedback?<br><br>Has AIS Provider ensured that the implemented QMS encompasses the following processes: collection, processing (including verification and validation) and quality control? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 14. | *CAR 15*<br>*Para 3.6.1* | Has the AIS Provider implemented and maintained quality management system to ensure aeronautical data and aeronautical information suitable for the operational requirement of the following ATM community:<br>a) Those involve in the flight operation, including flight crews, flight planning.<br>b) The ATS unit responsible for FIS and services responsible for PIB? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

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| 15. | *CAR 15*<br>*Para 3.6.5* | Has AIS provider included the necessary policies, processes and procedures to ensure and verify that aeronautical data is traceable throughout the AI data chain in Quality management system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 16. | *CAR 15*<br>*Para 3.6.6* | Has AISP established QMS to provide users with the necessary assurance and confidence that distributed aeronautical data and aeronautical information satisfy the aeronautical data quality requirements? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 17. | *CAR 15*<br>*Para 3.1* | Has the AIS Provider established the information management resources and processes to ensure the timely collection, processing, storing, integration, exchange and delivery of quality assured aeronautical data and aeronautical information within the ATM system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 18. | *Doc 8126*<br>*Para 3.5.8* | Has the AIM Department maintained a record of AIP AMDT, Supplement and AIC as mentioned in para 3.5.8 of Doc 8126? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 19. | *CAR 15*<br>*Para 6.2.1 and Para 6.3* | Has AIS provider used the Aeronautical Information Regulation and Control (AIRAC) system to notify the establishment, withdrawal and premeditated significant changes of circumstances?<br><br>a) Does AIRAC AIP Amendment contain an effective date?<br>b) Does AIRAC AIP Supplement page show a publication date and an effective date? and<br>c) Does AIS Provider originate Trigger NOTAM when an AIP Amendment or AIP Supplement is published? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

## AIS Inspection Checklists

AIM Department Head Office

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| 20. | *CAR 15*<br>*Para 2.1.5* | Has the AIS Provider established formal arrangement between originators of aeronautical data and the aeronautical information and aeronautical information service relation to the timely and complete provision of aeronautical information data and aeronautical information?<br><br>Has AIS Provider developed aeronautical data catalogue ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 21. | *DOC 10066*<br>*Para 6.1.4.4* | Has the information contained in the permanent NOTAM included in the AIP amendment within three month from the issuing of such NOTAM? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 22. | *DOC 10066*<br>*Para 6.1.4.5* | Has the information contained in the temporary NOTAM of long duration included in the AIP supplement within three month from the issuing of such NOTAM? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 23. | *Doc 8126*<br>*Para 3.3.4.* | Are the equipment available in AIM Department head office, sufficient in good condition and fulfilling the requirement? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 24. | *MOS AIS*<br>*Para 4.1.1* | Has the data originators collected and transmitted to the aeronautical information service (AIS ) in accordance with the accuracy requirements and integrity classification specified in Appendix 1 ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 25. | *CAR 15*<br>*Para 2.6* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes<br>- ICAO Chart Manual, Doc 8697, Doc 8126, Doc 10066 and other relevant ICAO Docs<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>-MOS AIS<br>- AIS OM<br>- Job description of the AIS personnel and cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

# APPENDIX 5- AIS Inspection Checklist for International NOTAM Office

**Civil Aviation Authority of Nepal**
**(AIM Department International NOTAM Office)**

**General Information**

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|---|---|
| **Person undertaking inspection** | |
| **Organization being Inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

## AIS Inspection Checklist

(International NOTAM office)

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *DOC 8126 Para 3.3.3* | Is minimum number of staff available in the NOTAM Office to carry out NOF related functions effectively?<br>Has AIS Provider developed policies and procedures for determining the need of staff required to ensure the provision of an adequate AIS system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAAN employee service,facility and condition Regulation 2056, Rule 2.6* | Has the International NOTAM office (NOF) developed job descriptions for their AIS technical staff? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAR 15 Para 3.3.2* | Has the AIS provider established verification and validation procedures which ensure that upon receipt of aeronautical data and aeronautical information, quality requirements are met? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *CAR 15 Para 6.3.2.1* | Has the NOF originated 'Trigger' NOTAM when an AIP amendment or an AIP supplement is published in accordance with AIRAC procedures? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *CAR 15 Para 6.2.4* | Has the NIL notification been issued not later than one cycle before the AIRAC effective date concerned when information has not been submitted by the AIRAC date? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *DOC 8126 APPENDIX B (chapter 6 NOTAM selection criteria)* | Has the NOF maintained NOTAM code on the second letter properly? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *MOS- AIS Para 5.2.5.1.9* | Does each NOTAM deal with only one subject and one condition of the subject? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 8. | *MOS- AIS Para 5.2.5.1.12* | Does a NOTAM containing permanent information or temporary information of long duration, carry appropriate AIP or AIP supplement references? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

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| 9. | *MOS- AIS*<br>*Para 5.5.3* | HAS the NOF established the system of automated preflight information to make aeronautical data and aeronautical information available to operations including flight crew members for self-briefing? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 10. | *MOS- AIS*<br>*Para 6.1.4.3* | Has the NOF given at least seven days advance notice of the activation of established danger, restricted or prohibited areas and of activities requiring temporary airspace restriction other than for emergency operations? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 11. | *CAR 15*<br>*Para 5.6.1* | Has the NOF made arrangement for any aerodrome used for international air operations to receive information concerning the state and operation of air navigation facilities or service noted by aircrews? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 12. | *CAR 15*<br>*Para 5.6.3* | Has then NOF made arrangement for any aerodrome used for international air operations to receive information concerning the presence of wildlife hazard observed by aircrews? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 13. | *Doc 8126*<br>*Para 3.3.4.* | Are the equipment available in International NOTAM office ( NOF ), sufficient in good condition and fulfilling the requirement of NOF? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 14. | *CAR 15*<br>*Para 3.6.4* | Does the NOF maintain training records for the AIS personnel, so that the qualifications of personnel can be assured whenever needed? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 15. | CAR 15<br>*Para 2.3.2* | Has formal arrangement established between those parties providing aeronautical data and aeronautical information and their users in relation to the provision of the AIS service? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 16. | *CAR 15*<br>*Para 2.6* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes<br>- ICAO Chart Manual, Doc 8697, Doc 8126, Doc 10066 and other relevant ICAO Docs<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>-MOS AIS<br>- AIS OM | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

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|---|---|---|---|---|
| | | - Job description of the AIS personnel and cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | | |

**AIS Inspection Checklist**

(International NOTAM office)

# APPENDIX 6- **CNS Inspection Checklist CNS Facilities**

## Civil Aviation Authority of Nepal

**General Information**

| | |
|---|---|
| **Person undertaking inspection** | |
| **Organization being inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

CNS Inspection Checklists

A. Documentation

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAAN employee service ,facility and condition Regulation 2056 para 2.1* | Does the organization structure available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAAN employee service, facility and condition Regulation 2056, Rule 2.6* | Does the job description made available to CNS technical person (ATSEP)? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *Civil Aviation Regulation 2058 Rule 75* | Does the list of equipment and systems maintained? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *Doc 8071 Para 1.9* | Does the list of tools and test equipment maintained? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *Doc 8071 Para 1.9* | Are records of calibration of navigation and surveillance facilities available at the site? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *Doc 8071 Para 1.9* | Does the test equipment used for maintenance work of CNS facilities are Calibrated and calibration record are available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *Doc 8071 Para 2.2* | Does maintenance manual of the equipment/system in operation are properly maintained and updated? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 8. | *CAR 10 Para 2.2*<br>*Doc 8071 Para 2.2* | Does maintenance schedule of the equipment/system available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 9. | *CAR 10 Para 2.2*<br><br>*Doc 8071 para 2.2* | Does maintenance record of CNS equipment and or system available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 10. | *CAR 10 Para 2.2* | Does CNS equipment/system status check sheet available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | . |

CNS Inspection Checklists

B. Environment

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/Comments |
|---|---|---|---|---|
| 1. | *CAR 10 Para 2.5* | Does the duty room assigned and made available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAR 10 Para 2.5* | Does the CNS equipment are install in separate radio control room? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAR 10 Para 2.5* | Does the workshop facilities available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *CAR 10 Para 2.5* | Are the lighting and air-condition facilities in radio control room and workshop appropriate? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *CAR 10 Para 2.5* | Are the tools and test equipment adequate to perform the job? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *CAR 10 Para 2.5* | Does the facility of storage and access to spare parts satisfactory? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | . |
| 7. | *CAR 10 Para 2.5* | Does the storage and access to maintenance and serviceability records available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 8. | *CAR 10 Para 2.5* | Does the facility to keep the relevantdocument and Annexes adequate? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 9. | *CAR 10 Para 2.5* | Does the storage and access to removable archival media available? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

CNS Inspection Checklists

C. Manning

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAAN employee service,facility and condition Regulation 2056 para 2.1* | Does the CNS Technical manpower available as per the organization structure? If No, how the CNS facilities are maintained? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *ICAO Doc 10057 para 1.3* | Does the technical manpower trained to perform the duty? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *Civil Aviation Regulation 2058 Rule 31* | Does the technical manpower have ATSEP License with rating? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *Doc 10057 para 1.3,* | Does the technical manpower has got refresher training? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

## CNS Inspection Checklists

### D. Procedure

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1 | *CAR 10* | Does the CNS provider arranged the provision of CNS systems and facilities in accordance with CAR 10 provisions including:<br>a. Radio Navigation Aid<br>b. Communication Procedures including those with PANS status<br>c. Communication System<br>d. Surveillance and collision avoidance systems<br>e. Aeronautical radio frequency spectrum utilization<br>f. Communication systems and procedures relating to remotely piloted aircraft systems C2 Link | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2 | *MOS CNS 3.1 (h)* | Is there any lay - down procedures of duty hand over and takeover? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3 | *MOS CNS 2.2.3(e)* | Is there any procedure for logging equipment abnormality? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4 | *MOS CNS 11.2* | Is there any procedure of coordination with ATS operation about the logging of equipment abnormality? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5 | *MOS CNS 11.4* | Is there any procedure developed to coordinate and supervise the contractor's work related to CNS facilities? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6 | *MOS CNS 2.2.3 (m) and 2.2.4(c)* | Is there any procedure for calibration of CNS equipment / facility and test equipment which are used for maintenance of CNS facilities? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7 | *MOS CNS 2.2.4 (a, b, c)* | Is there any contingency procedure developed for the smooth operation of safety critical CNS facilities? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 8 | *ICAO DOC 9734 Para 1.2* | Are there documented procedures for preventive maintenance? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

| | | | | |
|---|---|---|---|---|
| 9 | *CAR 10* | Whether following updated documents relevant to the unit are available?<br>- CAR 10<br>- ICAO Annex 10 Vol I, II, III, IV, V,VI and other relevant ICAO Annexes<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>- Job description of the CNS personnel<br>- Training records of staffs<br>- Relevant NOTAMS | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

CNS Inspection Checklists

E. Supervision

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *MOS CNS 4.5* | Is there any supervision process established? Who does the supervision of day to day operation /maintenance work? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *MOS CNS 2.2.5* | Is there any reporting procedure available at the time of breakdown of facility? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *MOS CNS 11.4* | Does the specialist support / made available to the operational duty team for corrective maintenance during breakdown of equipment / system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

CNS Inspection Checklists

F. Equipment/System

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *MOS CNS 4.1* | Is there adequate spare parts? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *MOS CNS 2.2.3 (l)* | Is there any policy developed for the retention of spare parts for the safety critical equipment/system? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *MOS CNS 4.5* | Does the arrangement made for the safeguard of radio installations? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *MOS CNS 4.5* | Does the arrangement made for the protection of radio facility (site) for electrical and or other interference / obstacle? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

# APPENDIX 7- **Inspection Checklist for SAR Division, CAAN Head Office**

## Civil Aviation Authority of Nepal

**General Information**

| | |
|---|---|
| **Person undertaking inspection** | |
| **Organization being inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |
| **Units Visited** | |

SAR Inspection Checklists

CAAN Head Office

| S.N. | Reference | Audit Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAR 12 3.1.2* | Does the state coordinate its SAR organization with those of neighboring states? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *CAR 12 3.1.7* | Does the state authorize its RCCs to provide, when requested assistance to other RCCs, including assistance in the form of aircraft, person or equipment? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAR 12 3.2.5* | Has the state designated a SAR point of contact for the receipt of COSOAS-SARSAT distress data? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *IAMSAR Vol I,5.2.11* | Is SAR plan developed to describe how SAR services will be provided, organized and supported ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *IAMSAR Vol I,5.2.19* | Is SAR manual developed to provide guidance on implementing the plans ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *CAR 12 4.4* | Does appropriate SAR exercises are conducted? Does appropriate SAR Exercises (tabletop) are conducted? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *CAR 12 4.4* | Do records of SAR exercises maintained and deficiencies identified are attended? | Satisfactory<br>Not satisfactory<br>Not applicable<br>Not inspected | |
| 8. | *CAAN employee service,facility and condition Regulation 2056,Rule 2.6* | Has job descriptions developed for the staff of ATS/SAR division? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 9. | *CAR 12 4.4* | Has the training programme developed for the staff of ATS/SAR division? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

# APPENDIX 8- **Inspection Checklist for SAR TIA RCC**

## Civil Aviation Authority of Nepal

**General Information**

| | |
|---|---|
| **Person undertaking inspection** | |
| **Organization being inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |

## SAR Inspection Checklists

RCC TIA

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *CAR 12 2.1.1* | Does RCC provide service to ensure the assistance is rendered to persons in distress on a 24 hours basis ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 2. | *Annex 12 3.2.5* | Are there any means available to receive COSPAS-SARSAT Distress data? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 3. | *CAR 12 2.4.1* | Has the RCC been provided with rapid and reliable means of communications with :<br>a)ATS units<br>b) SAR units<br>c) Designated met office<br>d) Alerting post<br>e) COSPAS-SARSAT MCC | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 4. | *CAR 12 2.5.1* | Has the RCC been provided with information regarding elements of public and private services suitably located and equipped to assist in SAR operations? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 5. | *CAR 12 4.1.1* | Has RCC readily available at all times upto date information concerning the following in respect of its SRR?<br>a) SAR units and alerting post<br>b) ATS units<br>c) means of communication that may be used in SAR<br>d) address and telephone numbers of all operators or their designated representatives engaged in operation in the region<br>e) any other public and private resources including medical and transportation facilities that are likely to be useful in SAR | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 6. | *CAR 12 4.1.2 a* | Are the frequencies, location, call sign and hours of watch of all radio stations likely to be employed in SAR operations available in RCC? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 7. | *CAR 12 Para 2.6* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

| | | | | |
|---|---|---|---|---|
| | | - ICAO Chart Manual, Doc 8697, Doc 8126, Doc 10066 and other relevant ICAO Docs<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>-MOS AIS<br>- AIS OM<br>- Job description of the AIS personnel and cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | | |

| S.N. | Reference | Inspection Checklist/Questioner | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 8. | *CAR 12 4.2.1* | Has the RCC prepared detailed plan of operation for the conduct SAR within its Search and Rescue Region and suitable for equipped ? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 9. | *CAR 12 4.2.5* | Has the SAR plan of operation been integrated with airport emergency plan to provide rescue services in the vicinity of an aerodrome? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 10. | *CAR 12 2.1.1.2* | Has rescue coordination centre (RCC) employ sufficient workforce skilled in coordination and operational functions? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 11. | *GM Doc 9734 Part A, C3* | Has rescue coordination centre (RCC) develop written job descriptions for each of their technical staff? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 12. | *CAR 12 4.4* | Has rescue coordination centre (RCC) establish a training programme for their staff? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 13. | *CAR 12 2.3.4* | Has rescue coordination centre (RCC), is staffed 24 hours a day by trained and qualified personnel proficient in the use of the English language? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 14. | *CAR 10 Vol.II, 5.2.1.2 CAR12 2.3.3 CAR 12 2.3.4* | Has rescue coordination centre (RCC) develop written job descriptions for each of their technical staff? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 15. | *CAR 12 4.4* | Has rescue coordination centre (RCC) maintain training records for their technical staff? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 16. | *CAR 12 4.4 GM Doc.9731 (IAMSAR Manual) Vol. I, C3, 3.3* | Are SAR personnel are regularly trained and that appropriate SAR exercises are arranged? | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |
| 17. | *CAR 15 Para 2.6* | Whether following updated documents relevant to the unit are available?<br>- CAR 4, CAR 15 and other relevant CARs<br>- ICAO Annex 4, Annex 15 and other relevant ICAO Annexes | Satisfactory<br>Partially Satisfactory<br>Not Satisfactory<br>Not Applicable | |

| | | | | |
|---|---|---|---|---|
| | | - ICAO Chart Manual, Doc 8697, Doc 8126, Doc 10066 and other relevant ICAO Docs<br>- AIP Nepal<br>-ANS Regulatory Policy and Procedure Manual<br>-MOS AIS<br>- AIS OM<br>- Job description of the AIS personnel and cartographic (Maps and Charts) staffs<br>- Training records of such staffs<br>- Updated charts relevant to the aerodrome, en-route and whole FIR<br>- Relevant NOTAMS | | |
| 18. | | Does search and rescue services shall use search and rescue units and other available facilities to assist any aircraft or its occupants that are or appear to be in a state of emergency | | |

**SAR Inspection Checklists**

RCC TIA

# APPENDIX 9- ANSSSD Training Plan

**Year (xxxx-xxxx)**

| S. No. | Type of Training | Training Area | Training Objective | Training Details | Training Year, Duration, Priority | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Year xxxx/xxxx | | Year xxxx/xxxx | | Year xxxx/xxxx | |
| | | | | | Duration | Priority | Duration | Priority | Duration | Priority |
| 1 | Basic/Initial Training | Safety Oversight Audit/ Inspection Training | At the end of the course the inspector will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques. | 1. Introduction of safety oversight audit and Audit process<br>2. Audit Phases and associated activities<br>3. Auditor/Auditee roles and relationships<br>4. Audit Finding<br>5. Audit Report Writing<br>6. Corrective Action Plan<br>7. Audit follow ups and resolution of audit findings<br>8. Human Factor Issues<br>9 Other relevant topics | | | | | | |

| S. No. | Type of Training | Training Area | Training Objective | Training Details | Training Year, Duration, Priority | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Year xxxx/xxxx | | Year xxxx/xxxx | | Year xxxx/xxxx | |
| | | | | | Duration | Priority | Duration | Priority | Duration | Priority |
| 2 | On-the-Job Training | Job Specific Familiarization Training | To develop inspector's confidence in conducting real audits/inspection independently. | 1. Meetings with Head of Department and Division Heads<br>2. Office/work familiarization<br>a. Aviation Safety And Security Regulation Directorate<br>b. Concerned safety department<br>c. Administrative process.<br>d. Ongoing activities of Department/Division<br>3. Familiarization/ study of JD<br>4. Review of the concerned documents:<br>5. Audit process including report writing.<br>6. Performing the audit task as an observer<br>7. Performing the real audit task in supervision of qualified inspector as an OJT inspector<br>8. Other relevant topics | | | | | | |

| S. No. | Type of Training | Training Area | Training Objective | Training Details | Training Year, Duration, Priority | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Year xxxx/xxxx | | Year xxxx/xxxx | | Year xxxx/xxxx | |
| | | | | | Duration | Priority | Duration | Priority | Duration | Priority |
| 3 | a. Currency training | Safety Oversight Refresher Course | To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices. | | | | | | | |
| | b. Recurrent Training | 1) ANS inspectors course SMS / SSP related trainingsHuman Factors training | To enable the inspector to keep pace with changing demands for safety oversight | | | | | | | |

| S. No. | Type of Training | Training Area | Training Objective | Training Details | Training Year, Duration, Priority | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Year xxxx/xxxx | | Year xxxx/xxxx | | Year xxxx/xxxx | |
| | | | | | Duration | Priority | Duration | Duration | Duration | Duration |
| 4 | Advanced/ Specialized Training including relevant seminars and workshops. | Based on inspector training need analysis | | | | | | | | |

# APPENDIX 10- **Training Programme for CNS regulatory staff (Inspector) working under ANS Safety Standard Department**

**Purpose:** The CNS training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training and specialized/ advanced training.

## 1. Indoctrination training:

### 1.1 Programme: CAAN/Safety Directorate Indoctrination

**a) Introduction**

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

**b) Objective**

At the end of the division indoctrination, the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

**c) Content/Outline**

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Minimum qualification for entry as an ANS inspector

**g) Duration**

One week

**1.2 Programme: Department Indoctrination**

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination, the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial training (1 week)**

**2.1 Programme: Safety Audit procedure and/or technique**

**a) Introduction**

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable them to develop auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

**b) Objective**

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

**c) Content/Outline**

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
- ➢ Fundamental principles of auditing
- ➢ Objective-based auditing and reporting methods
- ➢ Audit visit planning
- ➢ Development of auditors working documents, check lists etc.
- ➢ Audit entry / exit meetings
- ➢ Investigative auditing skills and techniques
- ❖ Audit Reporting:
- ➢ Factual reporting of audit findings
- ➢ Regulatory audit reports and records
- ➢ Auditor competency and development issues
- ❖ Post Audit follow-up:
- ➢ Regulatory process for and associated timescales of corrective actions
- ➢ Effective corrective action, audit follow up and close out mechanisms
- ➢ Peer review, oversight harmonisation and international oversight programmes

**d) Assessment Method**

Examination and 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed inspectors

**g) Duration**

One week

**2.2 Programme: Safety Oversight Inspection training**

**a) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**c) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance
- Post-Audit-Activities
- Enforcement of Regulations and Standards
- Management of Documents
- Overview-of-USOAP-CMA

**d) Assessment Method**

Open book examination and a presentation with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Must have completed section and division Indoctrination Course

**g) Duration**

Two weeks

### 2.3 Programme: SSP/SMS Course

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

**SSP**

- Hazards, consequences and risks
- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP

- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

**SMS**

- Basic safety concepts
- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**a) Assessment Method**

Presentations and group work for SSP and examination for SMS with 70% pass mark

**b) Certification**

Certificate issued upon completion of the course

**c) Prerequisite**

The course is intended for staff with responsibility regarding the implementation of safety programmes and oversight of safety management systems.

**d) Duration**

Eight days

**3. On the Job Training (1 week)**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job-training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- ❖ Pre-inspection/audit file and documents review
- ❖ On-site OJT inspection/audit process observation;

a. At least two observations on preparation for and conduct of periodic inspection/audit – **Level 1**.

b. Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.

- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists.

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) Course

**g) Duration**

Six months

**4. Currency and Recurrency training:**

**4.1 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

- Attend at least once a year after receiving a CNS inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognized aviation organization or institution.
- Attachment to the relevant CNS provider service on a regular basis as may be determined.

**a) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**b) Certification**

Certificate/letter of successful completion

**c) Prerequisite**

A credentialed ANS inspector

**d) Duration**

Duration will be as specified for the relevant programme or as determined by the Authority

**4.2.1 Recurrent training (1 week)**

**a) Introduction**

The CNS operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

CNS inspectors will undergo re-current training in the following courses:

1) Safety oversight course
2) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

**d) Assessment method**

As specified for the relevant programme

**e) Certification**

Certificate upon successful completion

**f) Prerequisite**

An ANS inspector credential

**g) Duration**

As specified for the relevant programme

**5. Specialized/Advanced training (1 week)**

**5.1 Programme: ATC Automation System**.

**a) Introduction**

Able to know about features, function, services and applications of ATC automation systems like Avibit based e-strip & Infomax service to ensure safety Air Traffic services and make capable of auditing these types of ATS services for safe Air Traffic Management.

**b) Objective**

To enable the inspector to:

- ❖ Be conversant about the evolution of ATC Automation System as applied to aviation
- ❖ Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- ❖ Be knowledgeable about specific requirements for aviation and how to merge them in an integrated System
- ❖ Apply principles of automation to your organization
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures
- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ ATC automation , e-strip and infomax definitions and applications
- ❖ ICAO Annexes and SARPs citing the need for automation.
- ❖ Quality in service
- ❖ Current aviation requirements and their implementation from an airline perspective taking into account the European/FAA requirements .
- ❖ Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

### 5.2 Programme: Air Traffic Services Inter-Facility Data Communication (AIDC)

**a) Introduction**

Able to know about features, function, services and applications of AIDC and technical aspect of ATN network connectivity with different ATS units.

b) **Objective**

To enable the inspector to:

- Be conversant about the evolution of AIDC System as applied to aviation
- Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- Be knowledgeable about specific requirements for aviation and how to merge them in an integrated System
- Apply AIDC to your organization
- Process the Enforcement Investigation Report according to the Authority's procedures
- Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ATN ,AIDC definitions and applications
- ICAO Annexes and SARPs citing the need for automation.
- Quality in service
- Current aviation requirements and their implementation from an airline perspective taking into account the European/FAA requirements .
- Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

**5.3 Programme: Automatic Dependent Surveillance-Broadcast (ADSB)**

**a) Introduction:**

Able to know about features, function, services and applications of ADSB with technical GNSS based positional broadcasting and sharing of the surveillance data between different units.

**b) Objectives:**

To enable the inspector to:

- Be conversant about the evolution of ADSB System as applied to aviation
- Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- Be knowledgeable about specific requirements for aviation and how to merge them in an integrated ATM System
- Sharing of the surveillance data ensuring QMS .
- Apply ADSB to your organization
- Process the Enforcement Investigation Report according to the Authority's procedures
- Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- GNSS, ADSB definitions and applications
- ICAO Annexes and SARPs citing the need for automation.
- Quality in service
- Current aviation requirements and their implementation from an airline perspective taking into account the European/FAA requirements.
- Model for quality management with SRM and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

### 5.4 Programme: Airport Information System

**a) Introduction:**

Able to know about features, function, services and applications of Airport Information System with understanding of the ATM solution by integrating the CNS system , ACDM and ATFM with AODB.

**b) Objectives :**

To enable the inspector to:

- Be conversant about the evolution of Airport Information System as applied to aviation
- Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- Be knowledgeable about specific requirements for aviation and how to merge them in an integrated AODB System
- Apply Airport Information System to your organization
- Process the Enforcement Investigation Report according to the Authority's procedures
- Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content and outline**

- ATM Solution, ATFM ,ACDM, AODB definitions and applications
- ICAO Annexes and SARPs citing the need for automation.
- Quality in service
- Current aviation requirements and their implementation from an airline perspective taking into account the European/FAA requirements.
- Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

**5.5 Programme: Cyber Security**

**a) Introduction:**

Able to oversight over the protection and security of the information and installation of the software/hardware to protect the security britches .

**b) Objectives:**

To enable the inspector to:

- Be conversant about the evolution of Information Security System as applied to aviation
- Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- Be knowledgeable about specific requirements for aviation and how to merge them in an integrated Cyber security to the Airport Information System
- Apply Airport Information Cyber security System to your organization
- Process the Enforcement Investigation Report according to the Authority's procedures
- Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content and outline**

- Cyber threat , Cyber attack, network security , firewall its types and implementation
- ICAO Annexes and SARPs citing the need for automation.
- Quality in service
- Current aviation requirements and their implementation from an airline perspective taking into account the European/FAA requirements .
- Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

### 5.6 Programme: Aviation Quality Management System

**a) Introduction:**

Ensuring that an organization is meeting requirements and continuously improving its processes. The purpose of this course is to equip the inspector to apply Aviation Quality Management System with the necessary skills to ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction about the latest requiements regarding quality of the ICAO, FAA, and International Organization for Standardization (ISO), European Avaition Safety Agency (EASA)

**b) Objectives:**

To enable the inspector to:

- Be conversant about the evolution of quality and quality assurance as applied to aviation
- Understand the quality requirements of key regulatory bodies and national authorities such as ICAO, ISO, EASA, and FAA
- Be knowledgeable about specific quality requirements for aviation and how to merge them in an integrated Quality Management System
- Apply quality management principles to your organization
- Create a quality culture and know how to assure and audit for quality
- Process the Enforcement Investigation Report according to the Authority's procedures
- Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content and outline**

- Quality definitions and applications
- Link between quality and safety in aviation
- ICAO Annexes and SARPs citing the need for quality and safety assurance
- Quality as a management responsibility

- ❖ Definition, elements and objectives of a QMS
- ❖ ISO 9000 series of standards, in particular, the ISO 9001:2015 model for a QMS
- ❖ Current aviation quality requirements and their implementation from an airline perspective taking into account the European Regulation on Air Operations EC 965/2012 and AS EN 9100: 2009
- ❖ EASA, FAA and IATA requirements
- ❖ Integration of other management standards and requirements to a quality management system
- ❖ Quality and service relationships
- ❖ Auditing for quality
- ❖ Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

**5.7 Programme: Multi-source Surveillance Data Processing system (MSDPS)**

**a) Introduction:**

Able to know about existing features, function, services and applications of NEC MSDPS to ensure safety Air Traffic services.

**b) Objectives:**

To enable the inspector to:

- ❖ Be conversant about the evolution of MSDPS System as applied to aviation
- ❖ Understand the requirements of key regulatory bodies and national authorities such as ICAO, EASA, and FAA
- ❖ Be knowledgeable about specific requirements for aviation and how to merge them in an integrated ATM System
- ❖ Sharing of the surveillance data ensuring QMS .
- ❖ Apply MSDPS to your organization
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures

- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content and outline**

- ❖ GNSS, ADSB, MSDPS, ASR,SSR definitions and applications
- ❖ ICAO Annexes and SARPs citing the need for automation.
- ❖ Quality in service
- ❖ Current aviation requirements and their implementation taking into account the European/FAA requirements.
- ❖ Model for quality management with SRM and customer service for CAAs and ANSPs

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

# APPENDIX 11- **Training Programme for ATS regulatory staff (Inspector)working under ANS Safety Standard Department**

**Purpose:**

The ATS training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training, specialised training and advanced training.

## 1. Indoctrination training:

### 1.1 Programme: CAAN/Safety Directorate Indoctrination

**a) Introduction**

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

**b) Objective**

At the end of the Division indoctrination the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

**c) Content/Outline**

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

**d) Assessment Method**

Classroom discussion and interaction

**h) Certification**

Certificate of completion

**i) Entry Prerequisite**

Minimum qualification for entry as an ANS inspector

**j) Duration**

One week

**1.2 Programme: Department Indoctrination**

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial (1 week) training**

## 2.1. Programme: Safety Audit procedure and/or technique

### a) Introduction

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable them to develop auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

### b) Objective

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

### c) Content/Outline

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
  - ➢ Fundamental principles of auditing
  - ➢ Objective-based auditing and reporting methods
  - ➢ Audit visit planning
  - ➢ Development of auditors working documents, check lists etc.
  - ➢ Audit entry / exit meetings
  - ➢ Investigative auditing skills and techniques
- ❖ Audit Reporting:
  - ➢ Factual reporting of audit findings
  - ➢ Regulatory audit reports and records
  - ➢ Auditor competency and development issues
- ❖ Post Audit follow-up:
  - ➢ Regulatory process for and associated timescales of corrective actions

- Effective corrective action, audit follow up and close out mechanisms
- Peer review, oversight harmonisation and international oversight programmes

**d) Assessment Method**

Examination and 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed inspectors

**g) Duration**

One week

## 2.2. Programme: Safety Oversight Inspection training

**a) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**c) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance

- ❖ Post-Audit-Activities
- ❖ Enforcement of Regulations and Standards
- ❖ Management of Documents
- ❖ Overview-of-USOAP-CMA

**d) Assessment Method**

Open book examination and a presentation with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Must have completed section and division Indoctrination Course

**g) Duration**

Two weeks

## 2.3. Programme: SSP/SMS Course

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

<u>SSP</u>

- ➢ Hazards, consequences and risks

- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP
- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

SMS

- Basic safety concepts
- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**d) Assessment Method**

Presentations and group work for SSP and examination for SMS with 70% pass mark

**e) Certification**

Certificate issued upon completion of the course

**f) Prerequisite**

The course is intended for staff with responsibility regarding the implementation of safety programmes and oversight of safety management systems.

**g) Duration**

Eight days

**3. On the Job Training (1 week):**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- ❖ Pre-inspection/audit file and documents review
- ❖ On-site OJT inspection/audit process observation;

a. At least two observations on preparation for and conduct of periodic inspection/audit – **Level 1**.

b. Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.

- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) Course

**g) Duration**

Six months

**4. Currency and Recurrency training:**

**4.1 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

- Attend at least once a year after receiving an ATS inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognised aviation organisation or institution.
- Attachment to the relevant ATS provider service on a regular basis as may be determined.

**d) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**e) Certification**

Certificate/letter of successful completion

**f) Prerequisite**

A credentialed ANS inspector

**g) Duration**

Duration will be as specified for the relevant programme or as determined by the Authority

**4.2 Recurrent training (1 week)**

**a) Introduction**

The ATS operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new

demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

ATS inspectors will undergo re-current training in the following courses:

3) Safety oversight course
4) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

**d) Assessment method**

As specified for the relevant programme

**e) Certification**

Certificate upon successful completion

**f) Prerequisite**

An ANS inspector credential

**g) Duration**

As specified for the relevant programme

**5. Specialized/Advanced training (1 week):**

**1.1. Programme: ATM Safety investigation and analysis course.**

**a) Introduction**

Ensuring compliance and enforcement of rules and regulations is a major component of aviation safety oversight. Inspectors should ensure that the air navigation services standards are complied with and identified deficiencies are addressed. The purpose of this course is to equip the inspector with the necessary skills to enforce and ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction on the policies, regulations, documentation and procedures involved in carrying out compliance and enforcement responsibilities.

**b) Objective**

To enable the inspector to:

- ❖ Conduct an investigation to determine whether a violation of applicable regulations has occurred
- ❖ Interview possible witnesses to obtain information relevant to the investigation

- ❖ Determine which, if any, regulations may have been violated
- ❖ Write an effective and accurate Enforcement Investigation Report, including the recommendation of an appropriate penalty and the support for that penalty
- ❖ Process the Investigation Report according to the Authority's procedures
- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ Enforcement Responsibility, Authority, Limitations and Protection
- ❖ Interpretation of Regulations
- ❖ Evidence
- ❖ Organizing an Investigation
- ❖ Enforcement Policy and Administrative Actions
- ❖ Interviewing
- ❖ Preparation of the Investigation Report
- ❖ Sanction Selection and Legal Procedures
- ❖ Processing Reports
- ❖ Testifying in an Administrative Hearing or Trial

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

**1.2. Programme: Aviation Quality Management System**.

Able to understand the four main components of quality management and Develop an effective quality management system

**a) Introduction**

Ensuring that an organization is meeting requirements and continuously improving its processes. The purpose of this course is to equip the inspector to apply Aviation Quality Management System with the necessary skills to ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction about the latest requiements regarding quality of the ICAO,

FAA, International Organization for Standardization(ISO), European Avaition Safety Agency(EASA)

**b) Objective**

To enable the inspector to:

- ❖ Be conversant about the evolution of quality and quality assurance as applied to aviation
- ❖ Understand the quality requirements of key regulatory bodies and national authorities such as ICAO, ISO, EASA, and FAA
- ❖ Be knowledgeable about specific quality requirements for aviation and how to merge them in an integrated Quality Management System
- ❖ Apply quality management principles to your organization
- ❖ Create a quality culture and know how to assure and audit for quality
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures
- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ Quality definitions and applications
- ❖ Link between quality and safety in aviation
- ❖ ICAO Annexes and SARPs citing the need for quality and safety assurance
- ❖ Quality as a management responsibility
- ❖ Definition, elements and objectives of a QMS
- ❖ ISO 9000 series of standards, in particular, the ISO 9001:2015 model for a QMS
- ❖ Current aviation quality requirements and their implementation from an airline perspective taking into account the European Regulation on Air Operations EC 965/2012 and AS EN 9100: 2009
- ❖ EASA, FAA and IATA requirements
- ❖ Integration of other management standards and requirements to a quality management system
- ❖ Quality and service relationships
- ❖ Auditing for quality
- ❖ Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ATS inspectors

**g) Duration**

**5 days**

**1.3. Programme: Safety Oversight Inspector**

**a) Introduction**

The role of a manager within the oversight entity requires that the manager integrates management principles with safety oversight requirements. Safety Oversight Managers should therefore have an understanding of the fundamental principles underlying the effective and efficient management of safety oversight activities of an aviation regulatory body. The course covers all areas of safety oversight and safety management and is designed to equip managers of aviation safety with the necessary competencies to carry out their safety oversight responsibilities.

**b) Objective**

At the end of the training the manager will be able to carry out their safety oversight responsibilities using approved management principles.

**c) Content/Outline**

- Obligations under the Chicago Convention
- ICAO standards and recommended practices (SARPs)
- ICAO organization structure
- Expanded ICAO Universal Safety Oversight Audit Programme processes and audit results
- The establishment and management of Safety Oversight System
- ICAO safety audit oversight manuals
- Management of aircraft operators
- Selection and recruitment of technical staff for civil aviation
- Development of staff training and competence policy
- The regulatory framework
- Inspectors' handbooks
- National aviation regulatory authority organization structure and roles – powers and enforcement
- Quality systems and safety management
- ICAO aircraft incident/ accident investigation audits
- Management of aerodrome safety
- Air traffic services safety management and audits
- Safety management system
- Designation and delegation policy

- ❖ Operations and management of personnel licensing
- ❖ Management of cabin safety operations
- ❖ Legal principles underlying safety oversight functions
- ❖ Bilateral agreements and transfer of responsibility
- ❖ Success factors – managing global and corporate strategies
- ❖ Best practices in resource management
- ❖ Strategic business planning for managers
- ❖ Management of the regulator and industry interface
- ❖ Management of aircraft incident/accident investigation
- ❖ Management of dangerous goods
- ❖ Understanding and managing human factors in a regulatory/operational aviation environment

**d) Assessment Method**

Group work assessments and individual presentations with a pass mark of 70%

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Senior level civil aviation inspectors

**g) Duration**

Three weeks

**1.4. Programme: Civil Aviation Management**

**a) Introduction**

The role of the CAA involves regulating the civil aviation industry in the State and the provision of air navigation services. To regulate the industry, it is important to understand how the various sub-sectors within the industry integrate with each other. These sub-sectors include among others airports, airlines, air navigation services, aircraft maintenance organizations, aeronautical meteorology and general aviation. How the CAA inspectors understand the management requirements of each sub-sector will determine the effectiveness of the CAA oversight role. This course will provide an in-depth understanding of how the various components of the civil aviation industry function and integrate.

**b) Objective**

At the end of the course, the manager will be able to demonstrate an understanding of how the various components of the civil aviation industry function and integrate and to effectively carry out their safety oversight management responsibilities.

**c) Content/Outline**

- ❖ Compulsory (7) days
- ➢ Fundamentals of airport management
- ➢ Airport infrastructure management
- ➢ Safety and risk management
- ➢ Best practices in aviation management
- ➢ Air transport/airline issues
- ➢ International air law

- ❖ Elective (4 Weeks)

- ➢ Airport System and planning; or
- ➢ Airport Design and Construction; or
- ➢ Airport operations and Transportation Development

- ❖ Group 2 Electives (select two)

- ➢ Integrated Safety Management System; (2 weeks)
- ➢ Safety Oversight Managers; (2 weeks 3 days)
- ➢ International Air Law: Concepts and Applications (1 week)
- ➢ Airport Certification (1 week)

**d) Assessment Method**

Open book examination with 70% pass mark

**e) Certification**

Certificate in Civil Aviation Management upon successful completion

**f) Entry Prerequisite**

Senior inspectors with experience in aviation management

**g) Duration**

5 weeks

**1.5.** Other emerging courses (based on the training institution program) including ICAO seminars and workshops.

# APPENDIX 12- **Training Programme for SAR regulatory staff (Inspector)working under ANS Safety Standard Department.**

**Purpose:** The SAR training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training and specialized/ advanced training.

## 1. Indoctrination training:

## 1.1 Programme: CAAN/Safety Directorate Indoctrination

### a) Introduction

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

### b) Objective

At the end of the division indoctrination, the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

### c) Content/Outline

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

### d) Assessment Method

Classroom discussion and interaction

### e) Certification

Certificate of completion

### f) Entry Prerequisite

Minimum qualification for entry as an ANS inspector

### g) Duration

One week

**1.2 Programme: Department Indoctrination**

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination, the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial training (1 week)**

**2.1 Programme: Safety Audit procedure and/or technique**

**a) Introduction**

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable them to develop auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

**b) Objective**

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

**c) Content/Outline**

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
  - o Fundamental principles of auditing
  - o Objective-based auditing and reporting methods
  - o Audit visit planning
  - o Development of auditors working documents, check lists etc.
  - o Audit entry / exit meetings
  - o Investigative auditing skills and techniques

- ❖ Audit Reporting:
  - o Factual reporting of audit findings
  - o Regulatory audit reports and records
  - o Auditor competency and development issues

- ❖ Post Audit follow-up:
  - o Regulatory process for and associated timescales of corrective actions
  - o Effective corrective action, audit follow up and close out mechanisms
  - o Peer review, oversight harmonisation and international oversight programmes

**d) Assessment Method**

Examination and 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed inspectors

**g) Duration**

One week

**2.2 Programme: Safety Oversight Inspection training**

**a) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**c) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance
- Post-Audit-Activities
- Enforcement of Regulations and Standards
- Management of Documents
- Overview-of-USOAP-CMA

**d) Assessment Method**

Open book examination and a presentation with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Must have completed section and division Indoctrination Course

**g) Duration**

Two weeks

**2.3 Programme: SSP/SMS Course**

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

**SSP**

- Hazards, consequences and risks
- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP
- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance

- Safety promotion

**SMS**

- Basic safety concepts
- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**d) Assessment Method**

Presentations and group work for SSP and examination for SMS with 70% pass mark

**e) Certification**

Certificate issued upon completion of the course

**f) Prerequisite**

The course is intended for staff with responsibility regarding the implementation of safety programmes and oversight of safety management systems.

**g) Duration**

Eight days

**3. On the Job Training (1 week)**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job-training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- Pre-inspection/audit file and documents review
- On-site OJT inspection/audit process observation;

- ❖ At least two observations on preparation for and conduct of periodic inspection/audit – **Level 1**.
- ❖ Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.
- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists.

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) Course

**g) Duration**

Six months

**4. Currency and Recurrency training:**

**4.1 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

Attend at least once a year after receiving a SAR inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognized aviation organization or institution.

Attachment to the relevant SAR provider service on a regular basis as may be determined.

**d) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**e) Certification**

Certificate/letter of successful completion

**f) Prerequisite**

A credentialed ANS inspector

**g) Duration**

Duration will be as specified for the relevant programme or as determined by the Authority

### 4.2.2 Recurrent training (1 week)

**a) Introduction**

The SAR operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

SAR inspectors will undergo re-current training in the following courses:

1) Safety oversight course
2) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

**d) Assessment method**

As specified for the relevant programme

**e) Certification**

Certificate upon successful completion

**f) Prerequisite**

An ANS inspector credential

**g) Duration**

As specified for the relevant programme

## 5. Specialized/Advanced training

### 5.1 Programme: ICAO 057: Search and Rescue.

**a) Introduction**

Able to know about features, function, services and applications of search and rescue.

**b) Objective**

To provide the trainees with SAR coordination concepts and procedures to enable them to be designated for roles in SAR operation.

**c) Content/Outline**

- SAR organization
- SAR meteorology
- Alerting service
- Search procedure
- Supply and equipment
- Communication and procedure
- RCC administration
- Rescue of survivors
- SAR training
- SAR admin
- Plotting exercise
- Simulator training

**d) Assessment Method**

Exercise and simulated investigation including actual preparation of an Investigation Report with a pass mark of 70%.

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Three weeks

# APPENDIX 13- **Training Programme for AIS regulatory staff (Inspector) working under ANS Safety Standard Department**

**Purpose:** The AIS training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training, specialised training and advanced training.

## 1. Indoctrination training:

### 1.1 Programme: CAAN/Safety Directorate Indoctrination

**a) Introduction**

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

**b) Objective**

At the end of the Division indoctrination the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

**c) Content/Outline**

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Minimum qualification for entry as an ANS inspector

**g) Duration**

One week

### 1.2 Programme: Department Indoctrination

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial training Programme:**

**2.1. Safety Audit procedure and/or technique (1 week)**

**a) Introduction**

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable them to develop auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

**b) Objective**

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

**c) Content/Outline**

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
  - ➢ Fundamental principles of auditing
  - ➢ Objective-based auditing and reporting methods
  - ➢ Audit visit planning
  - ➢ Development of auditors working documents, check lists etc.
  - ➢ Audit entry / exit meetings
  - ➢ Investigative auditing skills and techniques

- ❖ Audit Reporting:
  - ➢ Factual reporting of audit findings
  - ➢ Regulatory audit reports and records
  - ➢ Auditor competency and development issues

- ❖ Post Audit follow-up:
  - ➢ Regulatory process for and associated timescales of corrective actions
  - ➢ Effective corrective action, audit follow up and close out mechanisms
  - ➢ Peer review, oversight harmonisation and international oversight programmes

2.2. **Safety Oversight Inspection training (1 week)**

**a) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**c) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance
- Post-Audit-Activities
- Enforcement of Regulations and Standards
- Management of Documents
- Overview-of-USOAP-CMA

**2.3. SSP/SMS Course (1 week)**

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

SSP

- Hazards, consequences and risks
- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP
- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

SMS

- Basic safety concepts
- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**3. On the Job Training : 3 month**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- Pre-inspection/audit file and documents review
- On-site OJT inspection/audit process observation;

- ❖ At least two observations on preparation for and conduct of periodic inspection/audit – Level 1.
- ❖ Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.
- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) or AIS Inspector Course

**4. Currency and Recurrency training:**

**4.1 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

Attend at least once a year after receiving an AIS inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognised aviation organisation or institution.

Attachment to the relevant AIS provider service on a regular basis as may be determined.

**4.2 Recurrent training (1 week)**

**a) Introduction**

The AIS operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

AIS inspectors will undergo re-current training in the following courses:

1) Safety oversight course
2) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

**5. Specialized/Advanced training**

**5.1 Aviation Quality Management System**. ( 2 weeks )

Able to understand the four main components of quality management and Develop an effective quality management system

**a) Introduction**

Ensuring that an organization is meeting requirements and continuously improving its processes. The purpose of this course is to equip the inspector to apply Aviation Quality Management System with the necessary skills to ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction about the latest requiements regarding quality of the ICAO, FAA, International Organization for Standardization(ISO), European Avaition Safety Agency(EASA)

**b) Objective**

To enable the inspector to:

- ❖ Be conversant about the evolution of quality and quality assurance as applied to aviation
- ❖ Understand the quality requirements of key regulatory bodies and national authorities such as ICAO, ISO, EASA, and FAA
- ❖ Be knowledgeable about specific quality requirements for aviation and how to merge them in an integrated Quality Management System
- ❖ Apply quality management principles to your organization
- ❖ Create a quality culture and know how to assure and audit for quality
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures
- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ Quality definitions and applications
- ❖ Link between quality and safety in aviation
- ❖ ICAO Annexes and SARPs citing the need for quality and safety assurance
- ❖ Quality as a management responsibility
- ❖ Definition, elements and objectives of a QMS
- ❖ ISO 9000 series of standards, in particular, the ISO 9001:2015 model for a QMS
- ❖ Current aviation quality requirements and their implementation from an airline perspective taking into account the European Regulation on Air Operations EC 965/2012 and AS EN 9100: 2009
- ❖ EASA, FAA and IATA requirements
- ❖ Integration of other management standards and requirements to a quality management system
- ❖ Quality and service relationships
- ❖ Auditing for quality
- ❖ Model for quality management and customer service for CAAs and ANSPs

## 5.2 Civil Aviation Management (2 weeks )

**a) Introduction**

The role of the CAA involves regulating the civil aviation industry in the State and the provision of air navigation services. To regulate the industry, it is important to understand how the various sub-sectors within the industry integrate with each other. These sub-sectors include among others airports, airlines, air navigation services, aircraft maintenance organizations, aeronautical meteorology and general aviation. How the CAA inspectors understand the management requirements of each sub-sector will determine the effectiveness of the CAA oversight role. This course will provide an in-depth understanding of how the various components of the civil aviation industry function and integrate.

b) **Objective**

At the end of the course, the manager will be able to demonstrate an understanding of how the various components of the civil aviation industry function and integrate and to effectively carry out their safety oversight management responsibilities.

**c) Content/Outline**

- ➢ Fundamentals of airport management
- ➢ Airport infrastructure management
- ➢ Safety and risk management
- ➢ Best practices in aviation management
- ➢ Air transport/airline issues
- ➢ International air law
- ➢ Airport System and planning; or

- Airport Design and Construction; or
- Airport operations and Transportation Development

## 5.3 Integrated Safety Management System; (2 weeks)

**a) Introduction:**

A Safety Management System (SMS) within any aviation organization provides a systematic approach to managing safety. For an SMS to be effective, there must be the necessary organizational structures, accountabilities, responsibilities, policies and procedures. An effective SMS should enable an organization to identify hazards, assess risks and can be the mechanism to continuously improve safety performance.

**b) Objectives:**

To enhance the value of an organisation having a SMS in place and the possible legal implications of not having one. The importance of a positive safety culture. The need for meaningful hazard identification and risk assessment to increase safety levels.

**c) Content/Outline**

- Elements of a Safety Management System.
- Management commitment.
- Policies and objectives.
- Organisational structure.
- Role of the Safety Officer.
- Setting up a Safety Committee.
- Hazard and risk management.
- Hazard identification.

## 5.4 Safety Oversight Managers (2 weeks 3 days)

## a) Introduction :

This course provides an understanding of the fundamental principles contributing to the effective and efficient management of safety oversight activities of a State's aviation regulatory body.

**b) Objectives :**

- Understand the role and responsibilities of a safety oversight manager
- Understand the ICAO Standards and Recommended Practices (SARPs) and other national civil aviation regulations relating to safety oversight
- Update your organisation's safety oversight system

**c) Content and outline**

- Obligations under the Chicago Convention

- ICAO SARPs
- ICAO Organisation Structure
- Expanded ICAO Universal Safety Oversight Audit Programme Processes and Audit Results
- Establishment and Management of the Safety Oversight System
- ICAO Safety Audit Oversight Manuals
- Management of Aircraft Operators
- Selection and Recruitment of Technical Staff for Civil Aviation
- Development of Staff Training and Competence Policy
- Regulatory Framework
- Inspectors' Handbooks
- National Aviation Regulatory Authority Organisation Structure and Roles: Powers and Enforcement
- Quality Systems and Safety Management.

**5.5** Other emerging courses (based on the training institution program) including ICAO seminars and workshops.

# APPENDIX 14- **Training Programme for PANS-OPS/Maps & Chart regulatory staff (Inspector) working under ANS Safety Standard Department**

**Purpose:**

The PANS-OPS/Maps & Chart training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training, specialised training and advanced training.

## 1. Indoctrination training:

### 1.1 Programme: CAAN/Safety Directorate Indoctrination

**a) Introduction**

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

**b) Objective**

At the end of the Division indoctrination the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

**c) Content/Outline**

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

**d) Assessment Method**

Classroom discussion and interaction

**k) Certification**

Certificate of completion

**l) Entry Prerequisite**

Minimum qualification for entry as an ANS inspector

**m) Duration**

One week

### 1.2 Programme: Department Indoctrination

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial (1 week) training**

### 2.1. Programme: Safety Audit procedure and/or technique

**a) Introduction**

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable

them to develop auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

**b) Objective**

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

**c) Content/Outline**

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
- ➢ Fundamental principles of auditing
- ➢ Objective-based auditing and reporting methods
- ➢ Audit visit planning
- ➢ Development of auditors working documents, check lists etc.
- ➢ Audit entry / exit meetings
- ➢ Investigative auditing skills and techniques

- ❖ Audit Reporting:
- ➢ Factual reporting of audit findings
- ➢ Regulatory audit reports and records
- ➢ Auditor competency and development issues

- ❖ Post Audit follow-up:
- ➢ Regulatory process for and associated timescales of corrective actions
- ➢ Effective corrective action, audit follow up and close out mechanisms
- ➢ Peer review, oversight harmonisation and international oversight programmes

**d) Assessment Method**

Examination and 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed inspectors

**g) Duration**

One week

## 2.2. Programme: Safety Oversight Inspection training

**a) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**b) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**c) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance
- Post-Audit-Activities
- Enforcement of Regulations and Standards
- Management of Documents
- Overview-of-USOAP-CMA

**d) Assessment Method**

Open book examination and a presentation with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Must have completed section and division Indoctrination Course

**g) Duration**

Two weeks

## 2.3. Programme: SSP/SMS Course

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

SSP

- Hazards, consequences and risks
- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP
- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

SMS

- Basic safety concepts

- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**d) Assessment Method**

Presentations and group work for SSP and examination for SMS with 70% pass mark

**e) Certification**

Certificate issued upon completion of the course

**f) Prerequisite**

The course is intended for staff with responsibility regarding the implementation of safety programmes and oversight of safety management systems.

**g) Duration**

Eight days

**3. On the Job Training (1 week):**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- Pre-inspection/audit file and documents review
- On-site OJT inspection/audit process observation;

a. At least two observations on preparation for and conduct of periodic inspection/audit – **Level 1**.

b. Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.

- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) Course

**g) Duration**

Six months

**4. Currency and Recurrency training:**

**4.1 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

- Attend at least once a year after receiving an ATS inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognised aviation organisation or institution.
- Attachment to the relevant PANS-OPS/Maps & Chart provider service on a regular basis as may be determined.

**d) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**e) Certification**

Certificate/letter of successful completion

**f) Prerequisite**

A credentialed ANS inspector

**g) Duration**

Duration will be as specified for the relevant programme or as determined by the Authority

**4.2 Recurrent training (1 week)**

**a) Introduction**

The PANS-OPS/Maps & Chart operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.

ATS inspectors will undergo re-current training in the following courses:

1) Safety oversight course
2) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

**d) Assessment method**

As specified for the relevant programme

**e) Certification**

Certificate upon successful completion

**f) Prerequisite**

An ANS inspector credential

**g) Duration**

As specified for the relevant programme

**5. Specialized/Advanced training (1 week):**

**5.1. Programme: PBN Airspace Design Course**

**a) Introduction**

The knowledge on the evolution of Navigation system, concept of area navigation in identifying the main components required to perform area navigation, understanding RNAV and RNP along with basic information related to application of PBN to improve operational efficiency and airspace capacity is very vital for PANS-OPS inspectors to perform safety oversight function in the area of PANS-OPS. The purpose of this course is to provide knowledge regarding PBN procedures construction and operations, factors used for determining route spacing, flight procedure validation, ATS routes and waypoint implementation, airspace concept
and its requirement, CDO and CCO concept and their application. This course consists of classroom activities and group discussion and exercise related to airspace planning and deisgn.

**b) Objective**

To enable the inspector to:

- To provide theoretical background in the design of airspace, particularly in lower airspace and terminal areas;
- Through the practical workshop, make the participants efficient on the different steps of the design of a new TMA on a real case.

**c) Content/Outline**

- Airspace Organization Strategy
- Quality assurance & Safety assessment
- Terminal Airspace Traffic Management (AMAN, DMAN, CDM, CCO, CDO)
- Environment and Sustainable Development
- Trajectory and Procedure Design
- Free Route conference
- Air Traffic Flow and Capacity
- Airspace Management and Flexible Use of Airspace

**d) Assessment Method**

Classroom discussion, interaction and group exercise

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

Two weeks

**5.2. RNP-AR procedure design**.

**a) Introduction**

The knowledge on the evolution of Navigation system, concept of area navigation in identifying the main components required to perform area navigation, understanding RNAV and RNP along with basic information related to application of PBN to improve operational efficiency and airspace capacity is very vital for PANS-OPS inspectors to perform safety oversight function in the area of PANS-OPS. This course extends wide knowledge beyond traditional procedure design guidance in its provision of criteria addressing relevant aspects of operational requirements that must be considered in the implementation of such special flight operations e.g. visual segment assessment, engine loss, extraction, tailored climb gradient and balked landing to the PANS-OPS inspectors. This course consists of classroom activities and group discussion and exercises related to RNP-AR design procedures.

**b) Objective**

To enable the inspector to:

- ❖ To provide theoretical background in the design of airspace, particularly in lower airspace and terminal areas;
- ❖ Through the practical workshop, make the participants efficient on the different steps of the design of a new TMA on a real case.

**c) Content/Outline**

- ❖ General Criteria
- ❖ Initial Approach Segment
- ❖ Intermediate Approach Segment
- ❖ Final Approach Segment
- ❖ VEB MOC
- ❖ Missed Approach and OCH computation
- ❖ Publication and Coding
- ❖ Publication and Charting

**d) Assessment Method**

Observation and/or open book assessment with 80% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ANS inspectors

**g) Duration**

5 days

**5.3. Programme: Aviation Quality Management System**.

Able to understand the four main components of quality management and Develop an effective quality management system

**a) Introduction**

Ensuring that an organization is meeting requirements and continuously improving its processes. The purpose of this course is to equip the inspector to apply Aviation Quality Management System with the necessary skills to ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction about the latest requiements regarding quality of the ICAO, FAA, International Organization for Standardization(ISO), European Aviation Safety Agency(EASA)

**b) Objective**

To enable the inspector to:

- ❖ Be conversant about the evolution of quality and quality assurance as applied to aviation
- ❖ Understand the quality requirements of key regulatory bodies and national authorities such as ICAO, ISO, EASA, and FAA
- ❖ Be knowledgeable about specific quality requirements for aviation and how to merge them in an integrated Quality Management System
- ❖ Apply quality management principles to your organization
- ❖ Create a quality culture and know how to assure and audit for quality
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures
- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ Quality definitions and applications
- ❖ Link between quality and safety in aviation
- ❖ ICAO Annexes and SARPs citing the need for quality and safety assurance
- ❖ Quality as a management responsibility
- ❖ Definition, elements and objectives of a QMS
- ❖ ISO 9000 series of standards, in particular, the ISO 9001:2015 model for a QMS
- ❖ Current aviation quality requirements and their implementation from an airline perspective taking into account the European Regulation on Air Operations EC 965/2012 and AS EN 9100: 2009
- ❖ EASA, FAA and IATA requirements
- ❖ Integration of other management standards and requirements to a quality management system
- ❖ Quality and service relationships
- ❖ Auditing for quality
- ❖ Model for quality management and customer service for CAAs and ANSPs

**d) Assessment Method**

Observation and/or open book assessment with 70% pass mark

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Credentialed ATS inspectors

**g) Duration**

**5 days**

**5.4. Programme: Safety Oversight Inspector**

**a) Introduction**

The role of a manager within the oversight entity requires that the manager integrates management principles with safety oversight requirements. Safety Oversight Managers should therefore have an understanding of the fundamental principles underlying the effective and efficient management of safety oversight activities of an aviation regulatory body. The course covers all areas of safety oversight and safety management and is designed to equip managers of aviation safety with the necessary competencies to carry out their safety oversight responsibilities.

**b) Objective**

At the end of the training the manager will be able to carry out their safety oversight responsibilities using approved management principles.

**c) Content/Outline**

- Obligations under the Chicago Convention
- ICAO standards and recommended practices (SARPs)
- ICAO organization structure
- Expanded ICAO Universal Safety Oversight Audit Programme processes and audit results
- The establishment and management of Safety Oversight System
- ICAO safety audit oversight manuals
- Management of aircraft operators
- Selection and recruitment of technical staff for civil aviation
- Development of staff training and competence policy
- The regulatory framework
- Inspectors' handbooks
- National aviation regulatory authority organization structure and roles – powers and enforcement
- Quality systems and safety management
- ICAO aircraft incident/ accident investigation audits

- ❖ Management of aerodrome safety
- ❖ Air traffic services safety management and audits
- ❖ Safety management system
- ❖ Designation and delegation policy
- ❖ Operations and management of personnel licensing
- ❖ Management of cabin safety operations
- ❖ Legal principles underlying safety oversight functions
- ❖ Bilateral agreements and transfer of responsibility
- ❖ Success factors – managing global and corporate strategies
- ❖ Best practices in resource management
- ❖ Strategic business planning for managers
- ❖ Management of the regulator and industry interface
- ❖ Management of aircraft incident/accident investigation
- ❖ Management of dangerous goods
- ❖ Understanding and managing human factors in a regulatory/operational aviation environment

**d) Assessment Method**

Group work assessments and individual presentations with a pass mark of 70%

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Senior level civil aviation inspectors

**g) Duration**

Three weeks

**5.5. Programme: Civil Aviation Management**

**a) Introduction**

The role of the CAA involves regulating the civil aviation industry in the State and the provision of air navigation services. To regulate the industry, it is important to understand how the various sub-sectors within the industry integrate with each other. These sub-sectors include among others airports, airlines, air navigation services, aircraft maintenance organizations, aeronautical meteorology and general aviation. How the CAA inspectors understand the management requirements of each sub-sector will determine the effectiveness of the CAA oversight role. This course will provide an in-depth understanding of how the various components of the civil aviation industry function and integrate.

**b) Objective**

At the end of the course, the manager will be able to demonstrate an understanding of how the various components of the civil aviation industry function and integrate and to effectively carry out their safety oversight management responsibilities.

**c) Content/Outline**

- ❖ Compulsory (7) days
  - ➢ Fundamentals of airport management
  - ➢ Airport infrastructure management
  - ➢ Safety and risk management
  - ➢ Best practices in aviation management
  - ➢ Air transport/airline issues
  - ➢ International air law
- ❖ Elective (4 Weeks)
  - ➢ Airport System and planning; or
  - ➢ Airport Design and Construction; or
  - ➢ Airport operations and Transportation Development
- ❖ Group 2 Electives (select two)
  - ➢ Integrated Safety Management System; (2 weeks)
  - ➢ Safety Oversight Managers; (2 weeks 3 days)
  - ➢ International Air Law: Concepts and Applications (1 week)
  - ➢ Airport Certification (1 week)

**d) Assessment Method**

Open book examination with 70% pass mark

**e) Certification**

Certificate in Civil Aviation Management upon successful completion

**f) Entry Prerequisite**

Senior inspectors with experience in aviation management

**g) Duration**

5 weeks

**5.6.** Other emerging courses (based on the training institution program) including ICAO seminars and workshops.

# APPENDIX 15- Training Programme for MET regulatory staff (Inspector) working under ANS Safety Standard Department

**Purpose:**
The MET training programme includes indoctrination training, initial training, On-the-job training, currency and recurrent training, specialised training and advanced training.

## 1. Indoctrination training:

### 1.1 Programme: CAAN/Safety Directorate Indoctrination

a) **Introduction**

The CAA is the civil aviation regulator of the State. The CAA provides the regulatory function through the Safety Division. The Safety Division Indoctrination is an important aspect of training that will allow new inspectors joining the CAA to understand the regulatory functions of the CAA.

b) **Objective**

At the end of the Division indoctrination the inspector will be expected to demonstrate an understanding of the CAA regulatory mandate in general and specifically the roles and functions of the Safety Division.

c) **Content/Outline**

- Introduction to the Director General and Safety Division Director
- The CAA Safety Division protocols and practices
- Training in office procedures
- Training in other administrative matters
- The CAA and Safety Division Organization Structures
- The Safety Division Manuals and Policies

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Minimum qualification for entry as an ANS inspector

**g) Duration**

One week

**1.2 Programme: Department Indoctrination**

**a) Introduction**

Safety oversight of air navigation services is a role of the ANS Safety Oversight Section of the Safety Division. This involves oversighting of air traffic services, search and rescue, aeronautical information services, cartographic services, flight procedure design, communication, navigation and surveillance services and aeronautical meteorology. To carry out the safety oversight function, an ANS inspector must understand the ANS regulatory mandate, structure and the critical elements of safety oversight. Section indoctrination will expose new staff to the regulatory aspects of ANS safety oversight.

**b) Objectives**

At the end of the indoctrination the new staff will demonstrate an understanding of the regulatory aspects of the ANS Safety Oversight Section.

**c) Content/Outline**

- ICAO critical elements of safety oversight
- Civil Aviation Act
- Relevant ICAO SARPS and associated PANS and documents
- Familiarization with the Civil Aviation regulations (CARs) and associated Technical standards
- Section manuals and procedures

**d) Assessment Method**

Classroom discussion and interaction

**e) Certification**

Certificate of completion

**f) Entry Prerequisite**

Division Indoctrination

**g) Duration**

One month

**2. Initial training Programme:**

**2.1. Safety Audit procedure and/or technique (1 week)**

**a) Introduction**

This course is one of the core courses that ANS safety oversight Inspector need to undertake to be able to plan and manage oversight activities. It is intended to provide the inspectors with an understanding of the principles and practices of auditing to enable them to develop

auditing processes to suit the full range of auditing undertaken by the CAA in response to the ICAO requirements for effective regulatory oversight processes.

**b) Objective**

At the end of the training, inspectors will be able, conduct audits in order to verify compliance with regulatory standards and recommended practices using approved auditing techniques. They will prepare audit reports and conduct post-audit follow-up

**c) Content/Outline**

- ❖ Regulatory Oversight Auditing
- ❖ Auditing in the context of regulatory oversight
- ❖ The need for and importance of effective regulatory oversight management processes
- ❖ Responsibilities within the regulatory organization for oversight management
- ❖ Decision making based on oversight audit results
- ❖ Development of oversight programmes for initial approval and on-going oversight
- ❖ Initial review of an organizations response to regulatory requirements
- ❖ Auditing Techniques:
- ➢ Fundamental principles of auditing
- ➢ Objective-based auditing and reporting methods
- ➢ Audit visit planning
- ➢ Development of auditors working documents, check lists etc.
- ➢ Audit entry / exit meetings
- ➢ Investigative auditing skills and techniques

- ❖ Audit Reporting:
- ➢ Factual reporting of audit findings
- ➢ Regulatory audit reports and records
- ➢ Auditor competency and development issues

- ❖ Post Audit follow-up:
- ➢ Regulatory process for and associated timescales of corrective actions
- ➢ Effective corrective action, audit follow up and close out mechanisms
- ➢ Peer review, oversight harmonisation and international oversight programmes

### 2.2. Safety Oversight Inspection training (1 week)

**d) Introduction**

The role of safety oversight of air navigation services is carried out by inspectors who need to undergo training to gain understanding on the various factors to be taken into account by both the regulator and service providers in ensuring an effective oversight function in the air navigation services (ANS) field. The ANS Inspectors Course is designed for inspectors who will be involved in providing safety oversight of ANS and it focuses on the certification and

inspection principles, procedures and practices. It highlights the need for inspectors to be trained to carry out their responsibilities effectively.

**e) Objective**

At the end of the course the staff will be able to carry out ANS safety oversight duties and responsibilities including conducting inspection of ANS facilities using the aviation safety inspection principles, procedures, best practices and techniques.

**f) Content/Outline**

- Safety Oversight Obligations
- The National Regulatory Framework
- The ATS Oversight Organization
- ICAO USOAP CMA History Evolution
- ICAO USOAP CMA Tools
- ANS Inspector Roles Responsibilities Qualifications and Training
- Auditing-Techniques
- Certification-and-Surveillance
- Post-Audit-Activities
- Enforcement of Regulations and Standards
- Management of Documents
- Overview-of-USOAP-CMA

### 2.3. SSP/SMS Course (1 week)

**a) Introduction**

Safety management is core to civil aviation operations. Managing the state safety programme is the prerogative of the regulatory Authority. It is important that CAA inspectors understand their roles of ensuring that service providers implement their safety programme in a manner that meets the agreed level of safety performance. To do this, they will need to understand how the safety management systems of service providers integrate with the state safety programme. This course is designed to provide and develop officers' knowledge of the State's Safety Programme components and safety management concepts. The course also provides the relevant knowledge required to certify and oversight service provider Safety Management Systems. The course is designed in accordance with the requirements of ICAO Standards and Recommended Practices on safety management contained in the relevant Annexes and related guidance material.

**b) Objective**

At the end of the course, the officer will be able to certify and oversight safety management systems in compliance with the national regulations and relevant ICAO Standards and Recommended Practices.

**c) Contents/Outline**

SSP

- Hazards, consequences and risks
- Safety risk management process
- Safety roles and responsibilities
- Safety reporting
- Service providers' safety reporting system(s)
- Hazard identification and risk management processes
- Safety data collection and analysis
- Establishment of acceptable level(s) of safety performance
- Organization of the SSP
- SSP roles and safety responsibilities
- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

SMS

- Basic safety concepts
- Introduction to safety management
- Hazards
- Risks
- SMS Regulation
- Introduction to safety management system (SMS)
- SMS planning
- SMS operation
- Phased approach to SMS implementation

**3. On the Job Training : 3 month**

**a) Introduction**

Inspectors once recruited into the Section, require to undergo on-job training prior to being assigned individual duties. This is necessary to ensure that the inspector consolidates the knowledge acquired and develops the necessary confidence to provide oversight duties. This will involve an in-depth study of the functions of ANS oversight and will include actual performance of the functions under supervision and/or observation of a qualified officer.

**b) Objective**

Upon the completion of the on job training programme, the inspector is expected to perform ANS oversight functions.

**c) Content/Outline**

- ❖ Pre-inspection/audit file and documents review
- ❖ On-site OJT inspection/audit process observation;
- ❖ At least two observations on preparation for and conduct of periodic inspection/audit – Level 1.
- ❖ Must participate in at least one inspections/audits conducted by an inspector/auditor with credentials – **Level 2**.
- ❖ Conduct at least one inspections/audits under supervision and observations of an experienced ANS inspector with credentials – **Level 3**.
- ❖ Satisfactory completion of OJT will include evaluation of performance using a prescribed checklist, a brief appraisal report and a request for issuance of an inspector credential.

**d) Assessment Method**

Evaluation of performance using a prescribed checklist, a brief appraisal report by the trainer using prescribed checklists

**e) Certification**

Inspector credentials

**f) Entry Prerequisite**

Safety Oversight Inspector (ANS) or MET Inspector Course

**4. Currency and Recurrency training:**

**4.3 Currency training**

**a) Introduction**

The aviation operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Currency training for inspectors is important for effective and continuous oversight of the industry. Currency training involves training the inspector on new and emerging trends and changing circumstances in order to cope with the new challenges and emerging oversight responsibilities.

**b) Objective**

To enable the inspector to keep pace with changing technology, circumstances and trends, procedures and practices.

**c) Content/Outline**

- Attend at least once a year after receiving an MET inspector credential, a training course in new and emerging trends and/or changing circumstances in the relevant area of oversight. This will include attendance of workshops and seminars related to the ANS field organised by ICAO or any recognised aviation organisation or institution.
- Attachment to the relevant MET provider service on a regular basis as may be determined.

### 4.4 Recurrent training (1 week)

**a) Introduction**

The MET operational environment involves development of new technologies. These technologies come with new standards, equipment, procedures, and practices. Introduction of new standards and procedures will result in new demands or changes in the safety oversight activity. To cope with such new demands or changes in oversight activity, the inspector will require to undergo training and re-training as the changes or demands arise.
MET inspectors will undergo re-current training in the following courses:

3) Safety oversight course
4) Safety audit techniques

**b) Objective**

To enable the inspector to keep pace with changing demands for safety oversight.

**c) Content/outline**

As specified for the relevant programme

### 5. Specialized/Advanced training

### 5.6 Aviation Quality Management System. ( 2 weeks )

Able to understand the four main components of quality management and Develop an effective quality management system

**a) Introduction**

Ensuring that an organization is meeting requirements and continuously improving its processes. The purpose of this course is to equip the inspector to apply Aviation Quality Management System with the necessary skills to ensure compliance with regulatory requirements. This course consists of classroom and workshop instruction about the latest re quirements and quality of the ICAO, FAA, International Organization for Standardization(ISO), European Aviation Safety Agency(EASA)

**b) Objective**

To enable the inspector to:

- ❖ Be conversant about the evolution of quality and quality assurance as applied to aviation
- ❖ Understand the quality requirements of key regulatory bodies and national authorities such as ICAO, ISO, EASA, and FAA
- ❖ Be knowledgeable about specific quality requirements for aviation and how to merge them in an integrated Quality Management System
- ❖ Apply quality management principles to your organization
- ❖ Create a quality culture and know how to assure and audit for quality
- ❖ Process the Enforcement Investigation Report according to the Authority's procedures

- ❖ Testify at a hearing or trial in support of the Enforcement Investigation Report and the Authority's position

**c) Content/Outline**

- ❖ Quality definitions and applications
- ❖ Link between quality and safety in aviation
- ❖ ICAO Annexes and SARPs citing the need for quality and safety assurance
- ❖ Quality as a management responsibility
- ❖ Definition, elements and objectives of a QMS
- ❖ ISO 9000 series of standards, in particular, the ISO 9001:2015 model for a QMS
- ❖ Current aviation quality requirements and their implementation from an airline perspective taking into account the European Regulation on Air Operations EC 965/2012 and AS EN 9100: 2009
- ❖ EASA, FAA and IATA requirements
- ❖ Integration of other management standards and requirements to a quality management system
- ❖ Quality and service relationships
- ❖ Auditing for quality
- ❖ Model for quality management and customer service for CAAs and ANSPs

## 5.7 Safety Oversight Managers (2 weeks 3 days)

**a) Introduction :**

This course provides an understanding of the fundamental principles contributing to the effective and efficient management of safety oversight activities of a State's aviation regulatory body.

**b) Objectives :**

- Understand the role and responsibilities of a safety oversight manager
- Understand the ICAO Standards and Recommended Practices (SARPs) and other national civil aviation regulations relating to safety oversight.
- Update your organisation's safety oversight system

**c) Content and outline**

- Obligations under the Chicago Convention
- ICAO SARPs
- ICAO Organisation Structure
- Expanded ICAO Universal Safety Oversight Audit Programme Processes and Audit Results
- Establishment and Management of the Safety Oversight System
- ICAO Safety Audit Oversight Manuals
- Management of Aircraft Operators
- Selection and Recruitment of Technical Staff for Civil Aviation
- Development of Staff Training and Competence Policy

- Regulatory Framework
- Inspectors' Handbooks
- National Aviation Regulatory Authority Organisation Structure and Roles: Powers and Enforcement
- Quality Systems and Safety Management.

## 5.8 Other emerging courses (based on the training institution program) including ICAO seminars and workshops

# APPENDIX 16- **OJT Form of Newly Appointed Official(s) of ANS Safety Standards Department**

OJT Official's Name :

Designation :

OJT Supervisor's Name :

Designation :

| S. No. | Topics to cover | Date | Responsible person | | | Comments/ Remarks |
|---|---|---|---|---|---|---|
| | | | Name | Designation | Signature | |
| 1. | Department familiarization<br>• Roles/Functions of Department<br>• Organization Structure<br>• Different external relations and linkages<br>• Activities conducted by the Department | | | | | |
| 2 | Division familiarization<br>• Roles/Functions of Division and Division Personnel<br>• Organization Structure | | | | | |
| 3 | Safety Oversight System of Nepal | | | | | |
| 4 | Review of Concerned JD | | | | | |
| 5 | Review of CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | | | | |
| 6 | Review of Concerned Civil Aviation Requirements, MOSs, ANS Regulatory Policy and Procedure Manual and other relevant documents | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | Review of Concerned ICAO Annexes and Documents | | | | | |
| 8 | Other Departments familiarization<br>• AIM Department Roles/Functions | | | | | |
| | • ATM Department Roles/Function | | | | | |
| | • CNS Department Roles/Functions | | | | | |
| | • CNAD Roles/Functions | | | | | |
| | • Flight Operations Department, TIACAO Roles/Functions | | | | | |
| 9 | Oral Assessment | | | | | |

Signature of OJT Official :

Signature of OJT Supervisor :

OJT Completion Date :

# APPENDIX 17- ON THE JOB TRAINING (OJT) RECORD OF ATS INSPECTOR

**CIVIL AVIATION AUTHORITY OF NEPAL**
**ANS SAFETY STANDARDS DEPARTMENT**

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) ANS Licensing and Rating Division<br>d) Administrative process<br>c) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the Docs:<br>a) ICAO Annex 2, 11 and CAR 2,11<br>b) ICAO Doc 9734 & Doc 4444<br>c) AIP Nepal<br>d) ANS Regulatory Policy and Procedure Manual<br>e) Relevant Circulars<br>f) MATS Nepal<br>g) Manual of Standards Licensing and Rating of ATC Personnel<br>h) CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as an Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor :

# APPENDIX 18- ON THE JOB TRAINING (OJT) RECORD OF PANS-OPS/MAPS & CHART INSPECTOR

**CIVIL AVIATION AUTHORITY OF NEPAL**
**ANS SAFETY STANDARDS DEPARTMENT**

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) Administrative process<br>d) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the following doc:<br>a. MOS-IFPD<br>b. ICAO Doc 8168, Vol I/II, Doc. 9368, Doc 9734, Doc 9365, Doc 4444<br>c. CAR-11, CAR 4, CAR 5, ICAO<br>d. ICAO Annex11, Annex 4, Annex 5<br>e. AIP Nepal<br>f. Relevant circulars<br>g. MATS Nepal<br>h. CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as an Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor :

# APPENDIX 19- ON THE JOB TRAINING (OJT) RECORD OF CNS INSPECTOR

**CIVIL AVIATION AUTHORITY OF NEPAL**
**ANS SAFETY STANDARDS DEPARTMENT**

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) ANS Licensing and Rating Division<br>d) Administrative process<br>c) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the following documents:<br>a. ICAO Annex 10,11<br>b. ICAO doc 9734,<br>c. AIP Nepal<br>d. ANS Regulatory Policy and Procedure Manual<br>e. Relevant circulars<br>f. CAR 10, 11, Doc. 4444,MATS NEPAL<br>g. CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as a Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor :

# APPENDIX 20- ON THE JOB TRAINING (OJT) RECORD OF SAR INSPECTOR

**CIVIL AVIATION AUTHORITY OF NEPAL**
**ANS SAFETY STANDARDS DEPARTMENT**

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) Administrative process<br>d) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the following doc:<br>a.ICAO Annex 12, CAR 12<br>b.ICAO Doc 9734,9731<br>c.AIP Nepal<br>d. Relevent circulars<br>e.ANS Regulatory Policy and Procedure Manual<br>f. CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as a Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor :

# APPENDIX 21- ON THE JOB TRAINING (OJT) RECORD OF AIS INSPECTOR

**CIVIL AVIATION AUTHORITY OF NEPAL**
**ANS SAFETY STANDARDS DEPARTMENT**

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) Administrative process<br>d) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the following doc:<br>a. ICAO Annex15, CAR 15<br>b. ICAO doc 9734, 8126<br>c. AIP Nepal<br>d. ANS Policy and Procdure Manual<br>e. Relevant circulars<br>f. CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as a Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor:

# APPENDIX 22- ON THE JOB TRAINING (OJT) RECORD OF MET INSPECTOR

| | |
|---|---|
| Name: | |
| Post: | |
| OJT supervisor: | |
| Date of OJT Started: | |
| Date of OJT Finished: | |

**ON THE JOB TRAINING SCHEDULE**

| Ref | Items | Date Completed | Remarks |
|---|---|---|---|
| 1. | Meeting with head of ANSSS Department and its division heads | | |
| 2. | Office/work familiarization:<br>a) Aviation Safety And Security Regulation Directorate<br>b) ANS Safety Standards Department<br>c) Administrative process<br>d) Ongoing activities of department/division | | |
| 3. | Familiarization/study of JD | | |
| 4. | Review of the following doc:<br>a. ICAO Annex3, CAR3<br>b. WMO Technical Regulation Vol I, II<br>c. AIP Nepal<br>d. ANS Policy and Procedure Manual<br>e. Relevant circulars<br>f. CAAN Act 2053, CAAN Regulation 2058, CAAN Employees' Regulation 2056 | | |
| 5. | Familiarization of ANS Audit Process | | |
| 6. | Performing the Audit task as a Observer | | |
| 7. | Performing the Real Audit task in supervision of qualified Inspector | | |
| 8. | Competency Assessment:<br>8.1 Report Writing:<br>8.2 Oral Test: | | |
| 9. | Recommendation | | |

Signature of OJT :
Signature of OJT Supervisor:

# APPENDIX 23- **Sample of ANS Inspectorate Staffs Training Record**

**Name**
**Designation**
**Inspector**
**Department**
**Address**
**Email**
**Phone**

| Qualification | Trainings/Seminars/Workshops | | | | Experience | | |
|---|---|---|---|---|---|---|---|
| | In-country | | Abroad | | | | |
| | Training Course | Date | Training Course | Date | Position | Date from | Date to |
| | | | | | | | |
| | | | | | | | |

# APPENDIX 24- **Airport ATS Facilities Random Inspection Checklist**

**Office:** **Date:**
**Unit (s) inspected:** **Time:**

*Tick (√) in the applicable box.*
**(*S*: *Satisfactory*, *P*: *Partially Satisfactory*, *U*: *Unsatisfactory*, *N/C*: *Not Checked*, *N/A*: *Not Applicable)***

1. Check duty roster

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

2. Check adequacy of manpower(as per duty roster, as per MATS Nepal or Organization Chart)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

3. Check logbook, maintenance record (Std. 16.6.4, MATS Nepal and Rule 75, CAAN Civil Aviation Regulation 2058)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

4. Check license of working Personnel (Rule 31, CAAN Civil Aviation Regulation 2058)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

5. Check use of psychoactive substances (Req. 2.5, CAR 2 and Std. 3.2.8.2, MOSLicensing and Rating of ATC Personnel)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

6. Check workplace environment (Std. 16.7, MATS Nepal and Para 1.3.2, ANS Regulatory Policy and Procedure Manual)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

7. Check equipment status (CAR 10 Vol 1 Para 2.12.3)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

8. Check live performance of personnel(as required by the relevant CARs)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

9. Checked availability of current regulations, documents, SOPs, etc.(as required by MATS Nepal, other relevant requirements)

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| TWR | | | | | |
| APP | | | | | |
| ACC | | | | | |

**Comments:**

10. Overall comments (if any):

Random Inspection done by:

---

---

# APPENDIX 25- **Airport SAR Facilities Random Inspection Checklist**

**Office:** **Date:**
**Unit (s) inspected:** **Time:**

*Tick (√) in the applicable box.*
**(*S*: *Satisfactory*, *P*: *Partially Satisfactory*, *U*: *Unsatisfactory*, *N/C*: *Not Checked*, *N/A*: *Not Applicable)***

1.Check duty roster

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

2.Check adequacy of manpower

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

3.Check logbook, maintenance record

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

4.Check use of psychoactive substances

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

5.Check workplace environment

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

6.Check equipment status

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

7.Checked availability of current regulations, documents, SOPs, etc

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

8.Overall comments (if any):

Random Inspection done by:

---

---

# APPENDIX 26- **Airport CNS Facilities Random Inspection Checklist**

## Airport CNS Facilities
## Random Inspection Checklist

**Office:** **Date:**
**Unit (s) inspected:** **Time:**

*Tick (√) in the applicable box.*
**(*S*:** *Satisfactory,* ***P****: Partially Satisfactory,* ***U****: Unsatisfactory,* ***N/C****: Not Checked,* ***N/A****: Not Applicable)*

1.Check duty roster

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

C

**Comments:**

2.Check adequacy of manpower(as per duty roster or Organization Chart)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

**Comments:**

3.Check logbook, maintenance record (Rule 75, CAAN Civil Aviation Regulation 2058)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

4.Check license of working Personnel (Rule 31, CAAN Civil Aviation Regulation 2058)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

5.Check use of psychoactive substances (Req. 2.5, CAR 2 )

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

6.Check workplace environment (Para 1.3.2, ANS Regulatory Policy and Procedure Manual)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

7.Check equipment status (CAR 10 Vol 1 Para 2.12.3)

**Comments:**

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

8.Check live performance of personnel(as required by the relevant CARs)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

9.Checked availability of current regulations, documents, SOPs, etc.(as required by relevant requirements)

| [redacted] | S | P | U | N/C | N/A |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

**Comments:**

10.Overall comments (if any):

Random Inspection done by:

---

---

# APPENDIX 27- **AFIS Random Inspection Checklists (ATS)**

**Office:** **Date:**
**Unit inspected:** **Time:**

*Tick (√) the applicable box.*
**(*S*:** *Satisfactory,* ***P****: Partially Satisfactory,* ***U****: Unsatisfactory,* ***N/C****: Not Checked,* ***N/A****: Not Applicable)*

1. Check duty roster (Std. 9.7.3.4, MOS AFIS)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

2. Check adequacy of manpower(as per duty roster, or Organization Chart)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

3. Check logbook, maintenance record, etc. (Std. 9.3.4, MOS AFIS and Rule 75, CAAN Civil Aviation Regulation 2058)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

4. Check AFIS room disciplines such as unauthorized access to AFIS room are controlled and cleanliness of the room is maintained(Std. 9.7.3.1, 9.7.3.2, MOS AFIS)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

5. Check use of psychoactive substances (Req. 2.5, CAR 2)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments**

6. Check recording of flight progress(Std. 7.1.2, 7.1.3, MOS AFIS)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

7. Check equipment status (CAR 10 Vol 1 Para 2.12.3)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

8. Check live performance of personnel(as required by the relevant CARs)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

9. Checked availability of current regulations, documents, SOPs, etc.(as required by Std. 9.3.1, MOS AFIS, other relevant requirements)

| S | P | U | N/C | N/A |
|---|---|---|---|---|

**Comments:**

10. Other comments (if any):

Random Inspection done by:

---

---

# APPENDIX 28- **International NOTAM Office Random Inspection Checklist**

**Office:**

**Date:**

**Unit (s) inspected:** **Time:**

*Tick (√) in the applicable box.*

**(*S*:** *Satisfactory,* ***P****: Partially Satisfactory,* ***U****: Unsatisfactory,* ***N/C****: Not Checked,* ***N/A****: Not Applicable)*

1. Check duty roster

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

2. Check adequacy of manpower

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

3. Check of filing record of NOTAM, PIB and others

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

4. Check workplace environment

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

5. Check process of manually verification/validation of NOTAM, PIB and other

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

6. Checked availability of current regulations, documents, SOPs, etc

| | S | P | U | N/C | N/A |
|---|---|---|---|---|---|

**Comments:**

7. Overall comments (if any):

Random Inspection done by:

---

---

# APPENDIX 29- **Format of Inspector Credential**

**Validity**

**CIVIL AVIATION AUTHORITY OF NEPAL**

**……INSPECTOR**

**NAME :**
**POST :**
**DEPT :**
**CARD NO :**

**Signature of Holder**

**Director General**

**The holder is authorized to have unrestricted and unlimited access to aviation facilities, services, equipment, records and documentation for the purpose of testing inspection, verification, investigation, enforcement and regulatory function as authorized by Clause 84 of Civil Aviation Regulation 2002.**

**If found, please handover to**
**CIVIL AVIATION AUTHORITY OF NEPAL**
**Air Navigation Services Safety Standards Department**
**Babarmahal, Kathmandu**
**Tel: 4267784**

# APPENDIX 30- Tracking Form for Corrective Action Plan & Follow Up

**Audit Date** :
**:::Audited Airport/Unit** :
**Audit Area** :
**Report approved date** :
:

**Form forwarded date**
**CAP received date**
**CAP review date**
**Responsible Inspector**
**Responsible Unit for follow up**

| S.N. | Finding Reference | Observation made during Inspection | Recommendation made after Inspection | Corrective Action Plan (to be submitted by ANSP) | Time Limit | Responsible Unit (To be identified by ANSP) | Finding Status (to be filled by ANSSSD) | Remarks | Follow up | Feedback from ANSP after follow up | Date of closure and notification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |

# APPENDIX 31- **ANS SURVEILLANCE PROGRAMME**

| S.N | SURVEILLANCE ACTIVITIES | FREQUENCY | SCOPE OF ACTIVITIES | Job Aids |
|---|---|---|---|---|
| 1. | AUDIT | INTERNATIONAL AIRPORT: ONCE A YEAR<br>OTHER DOMESTIC AIRPORTS: ONCE IN TWO YEAR | DETAILED AUDIT OF ATS, AIS/MAPS AND CHART, PANS-OPS, CNS, AIS AND SAR | Applicable checklist available in this Manual |
| 2. | INSPECTION/ RANDOM INSPECTION | INTERNATIONAL AIRPORT: THRICE A YEAR<br>DOMESTIC AIRPORT: AT LEAST TWO AIRPORTS IN A YEAR: | ATS, AIS/MAPS AND CHART, PANS-OPS, CNS, AIS AND SAR | Applicable checklist available in this Manual |
| 3. | AUDIT INSPECTION FOLLOW UP | LEVEL 1 FINDING: EVERY ONE MONTH<br>LEVEL 2 FINDINGS: | ATS/MAPS AND CHART, PANS-OPS, CNS, AIS AND SAR | Approved Corrective Action Plan of ANSP |
| 4. | SAFETY EVENTS ANALYSIS | AS AND WHEN REQUIRED | ALL ANS AREAS | Report |

# APPENDIX 32- **Tracking table for APANPIRG deficiencies**

| list of deficiencies | date of letter received regarding deficiencies | Analysis of reported deficiency | Proposed Corrective Action and Date | Communication of Proposed Corrective action to APANPIRG | Responsible office to follow-up | Monitoring and Follow-up of corrective actions | Status update to APANPIRG | date of closure | Notification of closure to APANPIRG |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# APPENDIX 33- **ANS (MET) SURVEILLANCE PROGRAMME 2021-2022**

| S.N. | SURVEILLANCE ACTIVITIES | FREQUENCY | SCOPE OF ACTIVITIES | JOB AIDS |
|---|---|---|---|---|
| 1 | AUDIT | Twice a year | Aeronautical Met | Applicable checklist |
| 2 | RANDOM INSPECTION | Twice a year | Aeronautical Met | Applicable checklist |

# APPENDIX 34- **Inspection Checklist for Meteorological Forecasting Division**

## Civil Aviation Authority of Nepal

**General Information**

| | |
|---|---|
| **Person undertaking inspection** | |
| **Organization being inspected** | |
| **Date of inspection** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |

| **Units Visited** | |
|---|---|

**MET Inspection Checklist**

| S.N. | Reference | Inspection Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| **1.** | *CAR - 3 Chapter 2 2.1.3* | Has DHM provided meteorological services for the international air navigation as per the provision of CAR-3? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **2.** | *CAR - 3 Chapter 2 2.1.4* | Has DHM made necessary arrangement for the provision of MET services as published in AIP? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **3.** | *CAR - 3 Chapter 2 2.1.4* | Has organizational chart of the DHM covered the provision and functions of the aeronautical MET services as published in AIP? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **4.** | *CAR - 3 Chapter 2 2.1.5, WMO-M no. 49) Vol-1* | Has the DHM recruited and retained the number of qualified personnel as per its organization to provide the provision of Aeronautical MET service in Nepal? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **5.** | *CAR - 3 Chapter 2 2.1.5, (WMO-M no.49) Vol-V & VI* | Has the DHM maintained the required qualifications, and competencies, education and training to the personnel engaged in providing MET services for the international air navigation at the meteorological watch offices? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **6.** | *CAR - 3 Chapter 2 2.2, WMO No. 1100* | Does DHM establish and implement a properly organized quality management system comprising procedures, processes and resources necessary for the provision of Aeronautical MET Service? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **7.** | *CAR - 3 Chapter 3 3.2.1 Chapter 4 4.1* | Has DHM established adequate number of aerodrome and/or other meteorological offices for the provision of the meteorological services needed for international air navigation. | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **8.** | *CAR - 3 Chapter 3 3.2.2 a)* | Does Aerodrome meteorological office of DHM prepare and/or obtain forecasts and other relevant information for concerned aerodrome flights? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **9.** | *CAR - 3 Chapter 3 3.2.2 d)* | Does Aerodrome meteorological office provide MET forecast briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **10.** | *CAR - 3 Chapter 3 3.3.1* | Has DHM established adequate number of Meteorological Watch Office (MWO) for providing aeronautical | Satisfactory<br>Partially Satisfactory | |

**MET Inspection Checklist**

| S.N. | Reference | Inspection Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| | | meteorological services to the air traffic services units within the Nepalese FIR? | Unsatisfactory<br>Not Applicable | |
| **11.** | *CAR - 3 Chapter 3 3.3.2.a)* | Does DHM maintain a continuous watch over meteorological conditions within its area of responsibility? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **12.** | *CAR - 3 Chapter 3 3.2.1, 3.3.2* | Does DHM watch office or aerodrome MET office prepare, supply, and disseminate aeronautical MET information and SIGMET information to the associated air traffic units? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **13.** | *CAR - 3 Chapter 4 4.1* | Has DHM established criteria for special MET observations and providing report to the concern ATS units and airlines? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **14.** | *CAR- 3 Chapter 4, 4.1.2* | Does DHM aeronautical MET station issue routine observations at the aerodrome in a fixed interval? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **15.** | *CAR - 3 Chapter 4 4.1.2* | Are the routine observations supplemented by special observations whenever specified changes occur in respect of surface wind, visibility, runway visual range, present weather, clouds and/or air temperature? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **16.** | *CAR - 3 Chapter 4 4.1.3* | Does DHM arrange for its aeronautical meteorological stations to inspect at sufficiently frequent intervals to ensure that a high standard of observation is maintained, that instruments and all their indicators are functioning correctly, and that the exposure of the instruments has not changed significantly? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **17.** | *CAR - 3 Chapter 4 4.1.4* | Are the design and display of integrated MET information system clear, concise and user friendly? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **18.** | *CAR - 3 Chapter 4 4.1.4* | Are the MET devices and display backup with adequate additional system and procedure? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **19.** | *CAR - 3 Chapter 4 4.2* | Has the DHM made operational level agreement with the concern ATS | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory | |

**MET Inspection Checklist**

| S.N. | Reference | Inspection Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| | *CAR-11, 2.21* | authority for the provision of aeronautical MET service? | Not Applicable | |
| **20.** | *CAR - 3 Chapter 4 4.2 b)* | Has the DHM calibrated and maintained the meteorological instruments and display system as contracted in agreement? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **21.** | *CAR - 3 Chapter 4 4.3, 4.4 APP 3,5,6* | Does the DHM meteorological watch offices issue the following meteorological reports in accordance with the related technical specifications outlined in CAR 3?<br>a) Local routine and local special reports;<br>b) METAR and SPECI;<br>c) TAF;<br>d) SIGMET and AIRMET; and<br>e) Aerodrome warning and wind shear warning | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **22.** | *CAR - 3 Chapter 4 4.6.1.2* | Has the DHM appropriately sited wind sensors for local routine reports to give the best practicable indication of conditions along the runway/touchdown zone? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **23.** | *CAR - 3 Chapter 4 4.6.1.3* | Has the provided surface wind observation of DHM's METAR and SPECI representing the wind conditions of the whole runway? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **24.** | *CAR - 3 Chapter 4 4.6.3.3* | Does DHM assess the RVR as required in CAR – 3, 4.6.3.4? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **25.** | *CAR - 3 Chapter 4 4.6.3.5* | Does the DHM inform to the concern ATS and AIS units as the serviceability of RVR equipment get impaired? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **26.** | *CAR - 3 Chapter 5 5.8* | Does DHM meteorological watch office develop procedure to receive special air reports including volcanic ash from the air traffic services units by voice communications? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **27.** | *CAR - 3 Chapter 6 6.2.2* | Does the DHM issue the aerodrome forecast of expected meteorological condition at a specified time for a specified period? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

**MET Inspection Checklist**

| S.N. | Reference | Inspection Checklist/Questionnaire | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| **28.** | *CAR - 3 Chapter 6 6.2.3* | Does the DHM issue the amended forecast as TAF which cover all the information required in CAR – 3? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **29.** | *CAR- 3 Chapter 7 7.1* | Does the DHM provide SIGMENT in accordance with CAR-3 requirement? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **30.** | *CAR - 3 Chapter 7 7.3.1* | Has aerodrome meteorological office of DHM issued the aerodrome warnings when Meteorological conditions could adversely affect the operation of the aircraft, facilities and services at the aerodrome ground? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **31.** | *CAR - 3 Chapter 7 7.4.1* | Has DHM issued wind share warnings for the aerodromes where wind share is significant for flight safety? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **32.** | *CAR-3, Chapter 11, 11.1.1* | Are DHM MET watch offices have suitable telecom facilities to supply required MET information to the control towers and approach control unit serving for the aerodrome? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **33.** | *CAR-3, Chapter 11, 11.1.2* | Are DHM MET watch offices have suitable telecom facilities to supply required MET information to the Rescue coordination center and area control center serving for the aerodrome? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| **34.** | *CAR-3, Chapter 11, 11.1.4* | Are the telecom facilities permit communications by direct speech, and the speed with which the communications can be established normally be contacted within approximately 15 seconds? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

# APPENDIX 35- **AFIS Checklist**

## Civil Aviation Authority of Nepal

**General Information**

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| **Organization being reviewed** | |
| **Date of Safety Review** | |
| **Safety Reviewer** | |
| **Information Sources** | |
| **Documents Reviewed** | |
| **Individuals Interviewed** | |

**AFIS Checklist**

| S. N. | Reference | Review Checklists/Questioners | Evaluation | Remarks/ Comments |
|---|---|---|---|---|
| 1. | *AFIS MANUAL Introduction A. General* | Is the AFISOM complete, concise and up-to-date? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 2. | *AFIS MANUAL Introduction Funtions(iii)* | Does the AFIS officer adequately observe the maneuvering area to minimize runway incursions? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 3. | *AFIS MANUAL Introduction Funtions(vi)* | Has AFIS unit developed procedures for the reporting of incidents and other safety related occurrences?<br><br>If yes, are such reports reviewed to identify the need for any remedial action? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 4. | *AFIS MANUAL Chapter 9 Para 9.3.2* | Is there any established levels for temperature, humidity, ventilation, noise and ambient lighting procedure?<br><br>If yes, does the environmental working conditions affect AFIS personnel performance? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 5. | *AFIS MANUAL CHAPTER 10.* | Is there any daily checklist developed to record the status of communication and other safety significant systems and equipment?<br><br>Is the backup communication facility available and functioning in the AFIS operational unit? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 6. | *AFIS MANUAL CHAPTER 10. Para 10.3.2.1* | Does AFIS unit keep detail records of ATS system and equipment serviceability periodically? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 7. | *AFIS MANUAL Introduction Funtions, 2* | Are the AFIS personnel working in unit adequately trained? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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|---|---|---|---|---|
| 8. | *AFIS MANUAL Introduction Funtions, 2* | Does the refresher training include handling of aircraft in emergency? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 9. | *AFIS MANUAL CHAPTER 8* | Does ATS personnel use phraseologies mentioned in the AFIS manual? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 10. | *AFIS MANUAL CHAPTER 9 Para 9.4.1* | Has AFIS Personnel appointed any personnel as Safety Manager responsible for SMS? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 11. | *AFIS MANUAL CHAPTER 9 Para 9.2.1* | Has AFIS Personnel developed any procedures for hazard identification and risk mitigation (HIRM)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 12. | *AFIS MANUAL CHAPTER 9 Para 9.2.4* | Has the AFIS Personnel developed and implemented procedures for the conduct of safety risk assessments?<br>(Check examples of safety risk assessment conducted.) | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 13. | *AFIS MANUAL CHAPTER 9 Para 9.4.2* | Are there qualified personnel available with AFIS Personnel to do safety risk assessment (or SRM) and safety review? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 14. | *AFIS MANUAL CHAPTER 9 Para 9.2.1* | Has AFIS Personnel developed and maintained hazard identification log book? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 15. | *AFIS MANUAL CHAPTER 9 Para 9.3* | Has the AFIS Personnel developed procedures to conduct safety reviews?<br>Does the AFIS Personnel conduct safety reviews (including review of standard phraseology and readback requirement) on a regular and systematic basis? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 16. | *AFIS MANUAL CHAPTER 9 Para 9.1.1* | Does the AFIS Personnel have appropriately qualified personnel to conduct safety reviews? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 17. | *AFIS MANUAL CHAPTER 9 Para 9.1.2* | Does the AFIS Personnel systematically review safety-related reports (including air traffic incident reports)? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |
| 18. | *AFIS MANUAL CHAPTER 9 Para 9.1.2* | Does the AFIS Personnel have a formal safety data collection and processing system (SDCPS) of effectively collecting information about hazards in operations? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |

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|---|---|---|---|---|
| 19. | *AFIS MANUAL CHAPTER 10 Para 10.3.4.1* | Has the AFIS Personnel established and implemented a system to ensure the recording and retention of ANS occurrence data? | Satisfactory<br>Partially Satisfactory<br>Unsatisfactory<br>Not Applicable | |