## RECORD OF AMENDMENTS

<table>
<thead>
<tr>
<th>Revision No.</th>
<th>Date</th>
<th>Pages Affected</th>
<th>Date Entered</th>
<th>Entered By</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17.11.2018</td>
<td>2-3, para 2.3.2</td>
<td>17.11.2018</td>
<td>Ashish Dubey, AD(ops)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12.12.2018</td>
<td>5-3, para 5.4.1.3 &amp; para 5.4.1.4</td>
<td>12.12.2018</td>
<td>Karuna Vimal, AD(ops)</td>
<td></td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>(v)</td>
</tr>
<tr>
<td>GLOSSARY OF TERMS AND ABBREVIATION/ ACRONYMS</td>
<td>(vi)</td>
</tr>
<tr>
<td>CHAPTER 1. Definitions</td>
<td>1-7</td>
</tr>
<tr>
<td>CHAPTER 2. Regulatory Responsibilities and Methodology of ANSS Directorate</td>
<td>2-1</td>
</tr>
<tr>
<td>2.1 General</td>
<td>2-1</td>
</tr>
<tr>
<td>2.2 Structure of DGCA</td>
<td>2-2</td>
</tr>
<tr>
<td>2.3 About ANSS Directorate</td>
<td>2-2</td>
</tr>
<tr>
<td>CHAPTER 3. Training</td>
<td>3-1</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>3-1</td>
</tr>
<tr>
<td>3.2 Training Program</td>
<td>3-2</td>
</tr>
<tr>
<td>3.3 Preparation of Annual Training Plan</td>
<td>3-3</td>
</tr>
<tr>
<td>3.4 Process for Conducting Various Trainings</td>
<td>3-4</td>
</tr>
<tr>
<td>3.5 Review of Training Program</td>
<td>3-4</td>
</tr>
<tr>
<td>3.6 Training Files and Records</td>
<td>3-4</td>
</tr>
<tr>
<td>Appendix-A Initial/Induction Training Programme for ANSS Officers/ Inspectors</td>
<td>3-5</td>
</tr>
<tr>
<td>Appendix-B Recurrent Training Programme for ANSS Officers/ Inspectors</td>
<td>3-10</td>
</tr>
<tr>
<td>Appendix-C Specialized Training Programme for ANSS Officers/ Inspectors</td>
<td>3-12</td>
</tr>
<tr>
<td>Appendix-D Training Evaluation Form</td>
<td>3-13</td>
</tr>
<tr>
<td>Appendix-E Training Dossier</td>
<td>3-15</td>
</tr>
<tr>
<td>Appendix-F Employee’s On-the –Job Training Record</td>
<td>3-17</td>
</tr>
<tr>
<td>CHAPTER 4. Job Description &amp; Qualification</td>
<td>4-1</td>
</tr>
<tr>
<td>4.1 AIS Inspector Job Description &amp; Qualification</td>
<td>4-1</td>
</tr>
<tr>
<td>4.2 ATM Inspector Job Description &amp; Qualification</td>
<td>4-2</td>
</tr>
<tr>
<td>4.3 PANS-OPS Inspector Job Description &amp; Qualification</td>
<td>4-4</td>
</tr>
<tr>
<td>4.4 CNS Inspector Job Description &amp; Qualification</td>
<td>4-6</td>
</tr>
<tr>
<td>4.5 SAR Inspector Job Description &amp; Qualification</td>
<td>4-7</td>
</tr>
<tr>
<td>4.6 Met Inspector Job Description &amp; Qualification</td>
<td>4-9</td>
</tr>
<tr>
<td>CHAPTER 5. Surveillance</td>
<td>5-1</td>
</tr>
<tr>
<td>5.1 Introduction</td>
<td>5-1</td>
</tr>
<tr>
<td>5.2 Objectives of Surveillance Inspection</td>
<td>5-1</td>
</tr>
<tr>
<td>5.3 Scope of Surveillance Inspection</td>
<td>5-1</td>
</tr>
<tr>
<td>5.4 Criteria for Developing Annual Surveillance Program (ASP)</td>
<td>5-2</td>
</tr>
<tr>
<td>5.5 The Role of Inspector(s)</td>
<td>5-5</td>
</tr>
<tr>
<td>5.6 Personal Ethics and Conduct</td>
<td>5-5</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>5.7</td>
<td>Inspection Techniques</td>
</tr>
<tr>
<td>5.8</td>
<td>Inspection Procedure</td>
</tr>
<tr>
<td>5.9</td>
<td>Inspector Credentials</td>
</tr>
</tbody>
</table>
FOREWORD

The Directorate General of Civil Aviation is the regulatory body in the field of Civil Aviation primarily dealing with safety issues. It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations; air navigation services standards, air safety and airworthiness standards. It also co-ordinates all regulatory functions with International Civil Aviation Organisation.

The need for change within the Directorate General Civil Aviation (DGCA) to improve aviation safety arose, mainly due to deficiencies identified in the ICAO USOAP Audit of 2006.

Directorate of Air space & ANS Standards was thus established in December 2009 in order to regulate and conduct continuous oversight of Air Navigation Service Providers in the country and in those areas wherein the responsibility for the provision of Air Traffic Services have been delegated to India under regional agreements. The preparation of specific operating regulations, development of surveillance inspection mechanism, determination of requirements for technical personnel qualification and training, provision of technical guidance with regard to air navigation services and MET services, to conduct surveillance of air navigation services and MET service provider, and resolution of safety concerns are the responsibilities of this Directorate.

This Training and Procedures Manual of ANSS Directorate has been prepared for the use and guidance of the officers/inspectors of Directorate of Airspace & Air Navigation Services Standards (ANSS) in performing their duties and functions. All matters pertaining to ANSS Officer’s/Inspector’s duties, responsibilities and procedures have been covered to the extent possible. Officers/inspectors are expected to use good judgment while dealing with the matters where specific guidance has not been given.

Any reference of officer in this manual implies Inspector & vice versa. The manual will be updated from time to time based on suggestions received or to incorporate any changes in the procedures that may be carried out.

(B. S. Bhullar)
Director General Civil Aviation
GLOSSARY OF TERMS AND ABBREVIATIONS/ACRONYMS

AAI- Airports Authority of India
AIP- Aeronautical Information Publication
AIRAC- Aeronautical Information Regulation and Control
AIS- Aeronautical Information Service
ANS- Air Navigation services
ANSS- Airspace and Air Navigation Services and Standards
ASP- Annual Surveillance Programme
ATM- Air Traffic Management
ATR- Action Taken Report
ATS- Air Traffic Services
CAP- Corrective Action Plan
CNS- Communication Navigation and Surveillance
DGCA- Directorate General of Civil Aviation
ICAO- International Civil Aviation Organization
MET- Meteorological
MoCA- Ministry of Civil Aviation
NOTAM- Notice to Airmen
OJT- On-the-job Training
PANS-Procedure for Air Navigation Services
APANPIRG- Asia Pacific Planning and Implementation Regional Group
RCC- Rescue Coordination Centre
RSC- Rescue Sub Centre
SAR- Search and Rescue
SARPs- Standards and Recommended Practices

SMS- Safety Management System

USOAP- Universal Safety Oversight Audit Programme
CHAPTER 1

DEFINITIONS

1.1 The following terms when used in this Manual, have the meanings assigned to them respectively.

1.1.1 Aeronautical Information Publication (AIP): A publication issued by or with the authority of Director General under Civil Aviation Rules and containing aeronautical information of a lasting character essential to air navigation.

1.1.2 Air Navigation Services: Services provided to air traffic during all phases of operations including Air Traffic Management (ATM); Communications, Navigation and Surveillance (CNS); Meteorological services for air navigation (MET), Search and Rescue (SAR) and Aeronautical Information Services (AIS).

1.1.3 Air Traffic: All aircraft in flight or operating on the manoeuvring area of an aerodrome.

1.1.4 Air Traffic Management: The aggregation of airborne and ground-based functions (air traffic services, air space management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of flight.

1.1.5 Air Traffic Services: A generic term meaning variously, flight information services, alerting services, air traffic advisory services, air traffic control services.

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

1.1.7 Assessment: An appraisal of procedures or operations based largely on experience and professional judgement.

1.1.8 Assumptions: Characteristics or requirements of a system or system state that are neither validated nor verified.

1.1.9 ATM Service: A service for the purpose of Air Traffic Management.
1.1.10 Air Traffic Services Unit: A generic term variously, air traffic control unit, flight information centre or air traffic services reporting office.

1.1.11 Audit/inspection: A systematic and objective review of a State’s aviation framework to verify compliance with the provisions of the Chicago Convention or national regulation, conformance with or adherence to Standards and Recommended Practices (SARPs), procedures and good aviation safety practices.

1.1.12 Inspection activities: Those activities and procedures by which information is obtained in order to verify that the audited unit/organization is in conformance with, or adherence to, applicable Standards and Recommended Practices (SARPs), procedures and good aviation safety practices. Such activities may include, but are not limited to, interviews, observations, inspections, and the review of files and documents.

1.1.13 Inspection finding: The determination with respect to the compliance with the provisions of the Chicago Convention or National Regulations, conformance with or adherence to Standards and Recommended Practices (SARPs), procedures and good aviation safety practices, including the effective implementation of the critical elements of a safety oversight system.

1.1.14 Inspection preparation briefing for team members: A pre-audit briefing provided to team members by the audit team leader, the purpose of which is to provide last minute information and instructions, as appropriate, directly related to the specific State audit to be conducted.

1.1.15 Inspection report: A standardized means of reporting the audit/inspection findings to the designated authorities.

1.1.16 Closing meeting: A meeting of the audit/inspection team and the representatives 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 on audit/inspection findings and proposed recommendations to enable the service provider to start working on its corrective action plan.

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

1.1.18 Corrective action: Action to eliminate the cause of a detected non-conformity or non-compliance 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).

1.1.19 Corrective action plan: An action plan submitted to DGCA by an audited/ inspected Service Provider, detailing the proposed action the service provider to resolve identified deficiencies (safety concerns), on the basis of recommendations made by an inspection team. Implementation of the corrective action plan should bring the service provider into full compliance with the provisions of the National Rules/ Regulations, conformance with or adherence to prescribed Standards and Recommended Practices (SARPs), procedures and good aviation safety practices.

1.1.20 Cause(s): Events that result in a hazard or failure. Causes can occur by themselves or in combinations.

1.1.21 Certification: The process of determining competence, qualification or quality on which an aviation document is based.

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

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

1.1.24 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.

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

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

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

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

1.1.29 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.
1.1.30 **Non-adherence:** A deficiency in characteristic, documentation or procedure with respect to a Recommended Practice, procedure, guideline or good aviation safety practice.

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

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

1.1.33 **Occurrence:** Occurrence means accidents, incidents, defects or malfunctioning of an aircraft/ its equipment, any element of the air navigation system/ aerodrome infrastructure; which is used or intended to be used for the purpose or in connection with the operation of an aircraft or with the provision of an air traffic management service or navigation assistance to an aircraft.

1.1.34 **On-going oversight:** The process undertaken by a designated authority in order to verify that regulatory objectives and requirements are continuing to be effectively met.

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

1.1.36 **Operator:** A person, organization, or enterprise engaged in, or offering to engage in an aircraft operation. (Operator is also defined as a person, organization, or enterprise engaged in, or offering to engage in the operation of an aircraft, aerodrome or associated aviation activity).

1.1.37 **Procedure or process:** A series of steps followed in a methodical manner to complete an activity (what shall be done and by whom; when, where and how it shall be completed; what materials, equipment, and documentation shall be used, and how it shall be controlled).

1.1.38 **Recommended:** 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.

1.1.39 **Regulation:** The giving of authoritative direction to bring about and maintain a desired degree of order.
1.1.40 **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.

1.1.41 **Responsibility/Accountability**: The state of being responsible for an undertaking, person, thing or action and for which an organization or individual or both are liable to be called to account.

1.1.42 **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 acceptable level.

1.1.43 **Safety Assurance**: Planned and systematic actions, necessary to provide adequate confidence, that a service, an organization or a system achieves an acceptable or tolerable level of safety.

1.1.44 **Safety Audit/inspection**: Safety audit is a core safety oversight/management activity, providing a means of identifying potential problems before they have an impact on safety.

1.1.45 **Safety Management**: The management of activities to secure high standards of safety performance which meet as a minimum the regulatory safety requirements.

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

1.1.47 **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 the SARPs.

1.1.48 **Safety Oversight Audit/Inspection Process**: A prescribed three-phase process that consists of the pre-audit/inspection, audit/inspection and post-audit/inspection activities.
1.1.49 Safety Oversight Audit/Inspection activities: Audit/Inspection related activities commencing with the opening meeting of the Inspection/Audit Team with authorities of the service provider and concluding with the closing meeting, including the provision of the draft findings and recommendations.

1.1.50 Safety Oversight Pre-Audit/Inspection activities: Audit/Inspection related activities commencing with the time the initial letter advising the Service Provider of the forthcoming audit/inspection is forwarded by the DGCA Inspection/Audit Team and concludes with the audit/inspection preparation briefing for team members.

1.1.51 Safety Oversight Post-Audit/Inspection activities: Audit/Inspection related activities commencing after the Audit/Inspection team’s debriefing to the Service Provider and concluding with the publication of the final audit/inspection report.

1.1.52 Safety Policy: Policy statement of an organization, regarding the fundamental principles/actions required to achieve and maintain an acceptable or tolerable level of safety.

1.1.53 Safety Program: An integrated set of regulations and activities aimed at improving safety.

1.1.54 SMS Documentation: The set of documents containing safety rules/regulations, SMS manuals, procedures, hazard reports and risk mitigation processes including organizational structures/responsibilities required to achieve safety objective.

1.1.55 Standard Auditing/Inspection procedures: Established criteria governing the conduct of an audit/inspection, aimed at measuring a Service Provider’s level of compliance, conformance or adherence.

1.1.56 Supporting Services: Systems, services and arrangements, including communication, navigation and surveillance (CNS) which supports the Aerodrome operations and provision of ATM services.

1.1.57 System: A combination of physical components, procedures and human resources organized to perform a function; or an integrated set of constituent pieces that are combined in an operational or support environment to accomplish a defined objective. These pieces include people, equipment, information, procedures, facilities, services, and other supporting services.
1.1.58 **System State**: An expression of the various conditions, characterized by quantities or qualities, in which a system can exist.

1.1.59 **Validation**: The process of proving that the functions, procedures, controls, and safety standards are correct and the right system is being built (i.e., the requirements are unambiguous, correct, complete, and verifiable).

1.1.60 **Validated**: Those controls and requirements those are unambiguous, correct, complete, and verifiable;

1.1.61 **Verification**: The independent review, inspection, examination, measurement, testing, checking, observation and monitoring to establish and document that products, processes, practices, services and documents conform to specified standards. This includes evaluating the effectiveness of management systems. Verification may also be defined as the process that ensures that the system requirements have been met by the design solution and the system is ready to be used in the operational environment for which it is intended.
CHAPTER 2

REGULATORY RESPONSIBILITIES AND METHODOLOGY OF ANSS DIRECTORATE

2.1 GENERAL

2.1.1 The Directorate General of Civil Aviation (DGCA) is the regulatory body in the field of Civil Aviation primarily dealing with safety issues. It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety and airworthiness standards. It also coordinates all regulatory functions with International Civil Aviation Organization.

2.1.2 The DGCA headquarters is located in New Delhi with regional offices in various parts of India. The Directorate General of Civil Aviation is an attached office of the Ministry of Civil Aviation. There are 14 (fourteen) Regional/Sub-regional Airworthiness Offices located at Bangalore, Chennai, Delhi, Kolkata, Mumbai, Bhopal, Bhubaneswar, Cochin, Guwahati, Hyderabad, Kanpur, Lucknow, Patiala and Patna. Apart from these Regional Airworthiness Offices, there are 5 (five) Regional Air Safety offices located at Delhi, Mumbai, Chennai, Kolkata and Hyderabad, one Regional office of Aircraft Engineering Directorate at Bangalore and one Gliding Centre at Pune.

2.1.3 India participates in ICAO by the Representative of India.

2.2 STRUCTURE OF DGCA

DGCA has the following 11 Directorates;

(i)   Administration Directorate
(ii)  Aerodrome Standards Directorate
(iii) Air Safety Directorate
(iv)  Air Transport Directorate
(v)   Airworthiness Directorate
(vi)  Flight Standards Directorate
2.3 ABOUT ANSS DIRECTORATE

2.3.1 INTRODUCTION

In order to improve aviation safety, ICAO and the DGCA collaborated to establish Air Navigation Services regulatory and safety oversight capability in respect of ATM, MET, CNS, SAR and AIS, PANS-OPS, Maps and Charts. Based on the deficiencies identified in the ICAO USOAP Audit of 2006, the project focused on legislation, ANS safety oversight regulations, policies and procedures, DGCA staffing with sufficient qualified and experienced personnel, approval of policies, procedures, and programs for determining staffing requirements, review/development of AAI’s ANS document management process and MET safety oversight program.

Airports Authority of India has been entrusted with the job of providing Air Traffic Management i.e. Air Traffic Services & Air Traffic Flow Management services in India. The ATM services within entire Indian airspace over continental and oceanic areas, with the exception of certain military areas, state, military and private aerodromes, are provided by AAI. The total area of Indian airspace is 2.8 Million Square NM, out of these 1.7 Million Square NM is oceanic and rest 1.1 Million square Nm is continental. It is the responsibility of Directorate of Airspace & ANS, DGCA to regulate these activities of ATM.

Aeronautical information/data is provided by Aeronautical Information Services Department of Airports Authority of India, through Integrated Aeronautical Information Package consisting of Aeronautical Information Publication (AIP), AIP Amendments, AIP Supplements, NOTAM and Pre-flight Information Bulletins (PIB). Aeronautical Information Circulars (AICs) are published and distributed by Directorate General of Civil Aviation (DGCA). The Integrated Aeronautical Information Package constitutes fundamental tool for Aviation Industry, as the data so published.
is utilized by Airlines, General Aircraft Operators, ATS Personnel, Aviation Service Providers, etc.

The aeronautical data, so published, is immensely utilized by Aviation Services Providers as the aeronautical data has grown sensitive and earned more significant importance with technological developments with regard to sophisticated computer based air navigation systems, such as Flight Management System (FMS). The provision of Aeronautical Information Services in India is in conformity with the promulgated standards and recommended practices of ICAO.

The Search & Rescue service in India is organized in accordance with the Standards and Recommended Practices of ICAO Annex 12. The Airports Authority of India is responsible for maintenance and operation of the aeronautical rescue coordination centres however the actual search and rescue operations and search and rescue facilities are provided by the Ministry of Defence, Coast Guard, Central Government and State Government. The Ministry of Defence has the responsibility for making the necessary facilities available. The Search & Rescue service is responsible for entire Indian Territory including territorial waters as well as airspace over high-seas encompassed by Chennai, Kolkata and Mumbai FIRs.

2.3.2 RESPONSIBILITY & FUNCTIONS OF ANSS DIRECTORATE:

Director AS & ANSS is overall in-charge for functioning of Directorate. For smooth functioning he will assign work to the officials posted in the Directorate as per their expertise and technical qualification.

2.3.2.1 Issue of Civil Aviation Requirements (CARs) in the field of ANS i.e. ATM, CNS, MET, AIS, Aeronautical Charts & SAR in order to meet the provision of Article 28 of the Convention on International Civil Aviation.

2.3.2.2 Revision to the CARs in the field of ANS i.e. ATM, CNS, MET, AIS, Aeronautical Charts & SAR in order to meet the provision of Article 37 of the Convention on International Civil Aviation adopt and amend from time to time.

2.3.2.3 To ensure proper implementation of CARs, related documents, manuals and directives issued by DGCA.

2.3.2.4 To prepare procedure manual for the safety oversight of the ANSP in the field of Airspace, ATM, CNS, MET, PANS-OPS, AIS,
Aeronautical Charts & SAR in order to ensure safety of aircraft operations.

2.3.2.5 To prepare inspectors’ handbook/checklist and specify the guidelines to the Inspectors for the job to be carried out in a standardized manner.

2.3.2.6 To prepare Inspection schedule for inspection in the field of ANS i.e. ATM, CNS, MET, PANS-OPS, AIS, Aeronautical Charts & SAR.

2.3.2.7 To develop training program for inspectors.

2.3.2.8 Oversee analytical assessments of the relationship between separation standards, emerging technological concepts and new procedures, developed by ANS service providers, for use in developing future airspace separation minima.

2.3.2.9 To participate in ICAO Regional meetings on ANS matters.

2.3.3 AIRSPACE:

2.3.3.1 Matters relating to Air Space Management, including airspace design, planning and procedures.

2.3.3.2 Approval of ATS route structure, realignment of existing ATS routes and airspace in consultation with ANS provider, user airlines and international bodies such as IATA and ICAO.

2.3.3.3 Approval of control zones and control areas and changes to existing ones.

2.3.3.4 Coordination with military authorities on air space planning issues – Flexible use of air space.

2.3.4 ATM:

2.3.4.1 Approval of new ATS concepts, systems and procedures and inter-discipline coordination.

2.3.4.2 Coordination for development of new airports and heliports, Flying Training Institutes etc.
2.3.4.3 Ensuring efficient and safe operation of ATS units as per approved policies, standards and procedures.

2.3.4.4 To prepare Inspection schedule for inspection of ATM facilities at all Civil airports.

2.3.4.5 To inspect the performance of ATM facilities at airports as per approved schedule.
   a) Surveillance of services and procedures of service provider.
   b) Approval and surveillance of service provider training program.

2.3.4.6 To prepare inspection report and highlight the deficiencies pertaining to risk and safety hazards, if any, and review the mitigation plan as received from service provider.

2.3.4.7 To assist service provider in preparing the remedial/corrective action plan and follow up its progress.

2.3.4.8 Coordination with AAI on operational issues.

2.3.4.9 Analysing the staffing needs to keep the controller workforce sufficiently staffed, based on controller workload created by air traffic, encompassing both commercial non-commercial and military activity and issuing suitable recommendations to the ANS service provider on the requirement of additional Air Traffic Controllers.

2.3.4.10 Surveillance of ATS Procedures for uniform application.

2.3.4.11 Approval of ATM separation standards and provisions.

2.3.4.12 Dealing with matters related to VVIP and VIP movements.

2.3.4.13 Parliament questions and Committees.

2.3.4.14 Dealing with matters related to Aeronautical Maps and charts (Cartography).

2.3.4.15 Dealing with Issues of noise abatement procedures.

2.3.5 SMS in ATM, CNS & MET
Chapter 2 - Regulatory Responsibilities and Methodology of ANSS directorate

2.3.6 CNS:

2.3.6.1 Surveillance inspection of following CNS facilities provided by AAI at all airports and civil enclaves and standalone stations in India:

(i) DVOR
(ii) DME
(iii) ILS
(iv) VHF Transmitter and Receiver
(v) HF Transmitter and Receiver
(vi) VHF/HF data link
(vii) VCCS
(viii) DVTR
(ix) AMSS
(x) ATM/ ATS message handling system
(xi) DATIS/ ATIS
(xii) GPS clock
(xiii) NDB
(xiv) Markers
(xv) ASR
(xvi) MSSR
(xvii) ARSR
(xviii) ASMGCS
(xix) ADSB/C & WAM ADS-B
(xx) SBAS (GAGAN)
(xxi) GBAS
(xxii) ATS Automation System
(xxiii) ASBS

2.3.6.2 To associate with the various phases of development of emerging technologies in India at concept, implementation stages and represent DGCA at different levels.

2.3.6.3 To prepare ANNUAL Surveillance Programme for inspection of CNS facilities at all airports and standalone stations in India.

2.3.6.4 To inspect the performance of CNS facilities at airports as per approved programme.
2.3.6.5 To prepare inspection report and highlight the deficiencies pertaining to risk and safety hazards, if any, and review the mitigation plan as received from service provider.

2.3.6.6 To assist service provider in preparing the remedial/corrective action plan and follow up its progress.

2.3.6.7 To inspect and verify training and duty record of technical personnel on sample basis.

2.3.7 AIS:

2.3.7.1 To prepare ASP to inspect AIS Sections

2.3.7.2 To prepare inspection report and highlight the deficiencies, if any, and propose the corrective action plan.

2.3.7.3 To participate in ICAO Regional meetings on AIS matters.

2.3.7.4 To develop training program for inspectors.

2.3.7.5 To prepare ASP to inspect AIS Division at AAI CHQ, International NOTAM Offices (NOFs) and other Aerodrome concerning AIS matters.

2.3.8 PANS-OPS (Procedures for Air navigation Services – Aircraft Operations)

2.3.8.1 Issue the guidelines on the process of development, designing, validation and promulgation of instrument approach procedures at civil airports in India.

2.3.8.2 Examine the draft procedures forwarded by AAI to ensure that:

i) Criteria in respect of designing has been complied as per requirement of ICAO Doc 8168 Vol. II and other related documents.

ii) Instrument approach chart has been prepared as requirement of ICAO Annex 4.
2.3.8.3 Issue approval of conventional instrument approach procedures for flight trails

2.3.8.4 Liaise with airlines for carrying out of flight trails. If required, conduct the meetings with Operators.

2.3.8.5 Examine the flight trial reports forwarded by operators.

2.3.8.6 Issue the approval to AAI for promulgation of procedures after ensuring the satisfactory flight trial reports.

2.3.8.7 Issue approval for promulgation of conventional standard Instrument Departures (SIDs), Standard Instrument Arrival (STARs) forwarded by AAI.

2.3.8.8 Examine the following PBN procedures when forwarded by AAI:

2.3.8.9 Issue approval of promulgation to AAI of all PBN procedures after ensuring compliance with ICAO Documents (Doc 8168 Vol. II, Doc 9613 etc.)

2.3.8.10 Approval of RNP-AR instrument approach procedures.

2.3.8.11 To ensure that procedures are reviewed periodically by service provider (AAI) as provided in the Guidelines issued by DGCA (para 1).

2.3.8.12 Oversight of service provider (AAI) at least once a year to ensure that:
   i) Procedures are developed as per criteria specified as per ICAO DOC 8168 Vol.-II
   ii) AAI has sufficient no. of procedure designers,
   iii) All records regarding the procedure design and procedure designers are maintained satisfactorily.

2.3.8.13 To prepare inspection report and highlight the deficiencies, if any, and propose the corrective action plan.

2.3.8.14 To assist service provider in preparing the remedial/corrective action plan and follow up its progress.

2.3.8.15 To prepare inspection report and highlight the deficiencies, if any, and propose the corrective action plan.

2.3.8.16 To assist service provider in preparing the remedial /corrective action plan and follow up its progress.
2.3.8.17 Approval of RNP-AR instrument approach procedures.

2.3.8.18 Approval of updates on instrument approach procedure DA (H)/OCA (H) and Aerodrome Operating Minima.

2.3.8.19 Implementation of Cat II & Cat III ILS.

2.3.9 SEARCH & RESCUE:

2.3.9.1 To amend the DGCA CAR from time to time to ensure compliance with ICAO Annex on the subject and / or issue any other directions, if required.

2.3.9.2 To file differences with ICAO, if required.

2.3.9.3 To develop and amend Inspector Handbook / Checklist necessary for inspection.

2.3.9.4 To formulate and implement SAR Safety Audit Program.

2.3.9.5 Prepare surveillance inspection schedule to inspect SAR Division at ATS/ SAR service provider HQrs. and RCCs.

2.3.9.6 To carry out surveillance inspection of SAR service provider and RCCs to ensure the proper compliance / implementation of CAR, ICAO Annexes’ concerned manuals, documents, rules, regulations & directives of DGCA as per the approved program of the ANS Directorate.

2.3.9.7 To prepare inspection report and highlight the deficiency, if any for appropriate remedial action by the concerned agency.

2.3.9.8 To ensure flight safety, issue immediate directives to the SAR provider, if there are any issues requiring immediate and urgent action.

2.3.9.9 To coordinate with the concerned SAR provider to amend SAR related documents for incorporating changes in ICAO Standards & Recommended Practices and / or amendments in DGCA CAR or any other directions.

2.3.9.10 To participate in any in-house and abroad workshops and seminars etc. related to SAR matters.
2.3.9.11 To develop training program for inspectors.
2.3.9.12 To review SAR manual, SAR plan and other documents including amendments received from SAR providers and submit for approval.

2.3.10 MET:

2.3.10.1 Regulate the provisions and disseminations of Civil Aviation Requirement (CAR) in India in accordance with ICAO Annex 3 and any other requirement deemed appropriate.

2.3.10.2 To amend the DGCA CAR from time to time to ensure compliance with ICAO Annexures on meteorology (Annex 3).

2.3.10.3 Regulate the Aeronautical Meteorological services provider’s compliance with the directions issued from time to time.

2.3.10.4 Preparation of Annual surveillance programme for Met facilities at the civil airports in India.

2.3.10.5 To develop and amend MET Inspectors Handbook.

2.3.10.6 Periodic inspections and surveillance of the aviation MET stations to ensure that the performance and maintenance of the MET services and/or equipment is in accordance with the stipulated regulations.

2.3.10.7 Review of inspections and surveillance of the aviation MET stations and highlight the deficiency, if any for appropriate remedial action by the concerned authority.

2.3.10.8 To deal with the matters related to aviation meteorology.

2.3.10.9 Update of ICAO documents, adoption of amendments of proposed Standards and Recommended Practices (SARPs) of ICAO Annex 3. Thereafter amendments are to be incorporated in the CAR.

2.3.10.10 To coordinate with the meteorological service provider to amend MET related documents for incorporating changes in ICAO SARPs and/or amendments in DGCA CAR or any other documents.

2.3.10.11 To develop training programme for MET inspectors.
2.3.10.12 To monitor the performance of the Aeronautical Meteorological services at civil airports in India.

2.3.10.13 To provide meteorology inputs from India to ICAO meteorological policy, standards and recommended practices development and future systems planning.

2.3.10.14 To provide assistance & contribution of India at international aviation meteorology.

2.3.11 PROCEDURE TO DEAL WITH MATTER ON ASIA PACIFIC PLANNING AND IMPLEMENTATION REGIONAL GROUPS (APANPIRG)

2.3.11.1 INTRODUCTION

2.3.11.1.1 The Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) was established by the ICAO Council in 1991. All ICAO Contracting States including India, who are service providers in the Asia/Pacific air navigation region and part of the region’s Air Navigation Plan are members of APANPIRG.

2.3.11.1.2 DGCA India is a member of APANPIRG while Member (ANS) AAI is the alternate member. Director (ANSS) is Nodal Officer in DGCA to deal with APANPIRG related issues.

2.3.11.1.3 India is also represented in Air Traffic Management Sub Group, Communication Navigation Surveillance Sub Group, MET Sub Group, Regional Airspace Safety Monitoring Advisory Group (RASMAC), Aerodromes Operations and Planning (AOP) Sub Group of ICAO, Asia and Pacific Regions (APAC). The deficiencies noted down by these Sub Groups are reported to APANPIRG.

2.3.11.1.4 The objectives of the APANPIRG are:
   a) To ensure continuous and coherent development of the Asia/Pacific regional Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and Global Air Navigation Planning.
Navigation plan (DOC9750) and reflecting global requirements;
b) To facilitate the implementation of air navigation systems and services as identified in the Asia/Pacific Regional Air Navigation Plan with due observance to primacy of air safety, regularity and efficiency; and
c) To identify and address specific deficiencies in the air navigation field.

2.3.11.1.5 In order to meet the above objectives, the APANPIRG has the following responsibilities:
a) Review, and propose when necessary, the target dates for implementation of facilities, services and procedures to facilitate the coordinated development of the Air Navigation System in the Asia/Pacific Region;
b) Assist the ICAO Asia/Pacific Regional Office in fostering the implementation of the Asia/Pacific Regional Air Navigation Plan;
c) In line with the Global Aviation Safety Plan (GASP), facilitate the conduct of any necessary system performance monitoring, identify specific deficiencies in the air navigation field, especially in the context of safety, and propose corrective action;
d) Facilitate the development and implementation of action plans by States to resolve identified deficiencies, where necessary;
e) Develop amendment proposals to update the Asia/Pacific Regional Air Navigation Plan to reflect changes in the operational requirements;
f) Monitor implementation of air navigation facilities and services and where necessary, ensure inter regional harmonization, taking due account of organizational aspects, economic issues (including financial aspects, cost/benefit analyses and business case studies) and environmental matters;
g) Examine human resource planning and training issues and propose where necessary human resource development capabilities in the region that are compatible with the Asia/Pacific Regional Air Navigation Plan;
h) Review the Statement of Basic Operational Requirements and Planning Criteria and recommend to the Air Navigation Commission such changes as may be required in the light of new developments in the air navigation field;
i) Request financial institutions, on a consultative basis as appropriate to provide advice in the planning process;

j) Maintain close cooperation with relevant organizations and State grouping to optimize the use of available expertise and resources;

k) Conduct the above activities in the most efficient manner possible with a minimum of formality and documentation and call meetings of the APANPIRG when deemed necessary to do so; and

l) Coordinate with Regional Aviation Safety Group (RASG) APAC on safety issues.

23.11.2 PARTICIPATION OF INDIA IN APANPIRG MEETING:

23.11.2.1 Nominated members or team of Officers from DGCA and/or AAI officers approved by Government of India shall attend the APANPIRG Meetings. Representatives of Airlines to form a member of the team participating in APANPIRG meeting may also be nominated.

23.11.2.2 The Working Papers /Information Papers will be sent to the Secretary APANPIRG by Director ANSS after due scrutiny before due date as given in APANPIRG meeting notification.

23.11.2.3 The Officers who participated in the meeting should identify the action items for India and present to Director ANSS.

23.11.3 NOTIFICATION OF DEFICIENCY, REMEDIAL ACTION AND REVIEW CORRECTIVE ACTION PLAN

23.11.3.1 **Deficiency:** A situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices (SARPs), and which situation has a negative impact on the safety, regularity and /or efficiency of international civil aviation (adopted by ICAO Council 30 November 2001).

23.11.3.2 APANPIRG List of Air Navigation Deficiencies
One of the main objectives of the APANPIRG is to identify and address specific deficiencies in the air navigation field. To meet these objectives the Group shall:

- In line with the Global Aviation Safety Plan (GASP), facilitate the conduct of any necessary systems performance monitoring, identify specific deficiencies in the air navigation field, especially in the context of safety, and propose corrective action;
- Facilitate the development and implementation of action plans by States to resolve identified deficiencies, where necessary.

231133 In order to ensure transparency and facilitate resolution of deficiencies, ICAO Regional Office has established a regional on-line database of air navigation deficiencies and provided secure access to States’ Administrations and other users concerned. The ANS deficiencies in respect of India as noted by APANPIRG are available in the ANS deficiencies database.

23114 FOLLOW UP ACTION ON DEFICIENCIES DISCUSSED IN APANPIRG MEETING:

231141 Director ANSS shall prepare action plan for deficiencies discussed during meeting for taking follow up action by DGCA and AAI etc. An action plan shall include time frame for each issues which shall be monitored by the ANSS Directorate.

231142 The Nodal Officer will consolidate the action taken reports for concerned stakeholders and provide to ICAO Regional Office from time to time.
Appendix-A

Structure of Directorate of Airspace & Air Navigation Service Standards (ANSS)

Diagram showing the organizational structure of the Directorate of Airspace and Air Navigation Services Standards (ANSS) with various departments and their respective heads.
CHAPTER 3

TRAINING

3.1 Introduction

3.1.1 International aviation standards require that a civil aviation authority provide its safety inspectors with comprehensive training to ensure the competency of its inspector workforce.

3.1.2 In order to ensure that the ANSS officers/inspectors in DGCA are qualified, have operational or technical work experience and their training is compatible with the activities they are required to carry out, training shall be provided as per training requirements detailed in DGCA Training Policy.

3.1.3 This chapter describes the training requirements for the ANSS officers/inspectors with the intention to provide initial training, recurrent training and specialized training in the field of Air Traffic Management (ATM), Aeronautical Information Services (AIS), Search and Rescue (SAR), Procedure for Air Navigation Services – Aircraft Operations (PANS-OPS), Communication Navigation and Surveillance (CNS), Cartography (CARTO) and Meteorology (MET). The purpose of this chapter is to ensure that officers/inspectors of ANSS directorate are in tune with the changes in technology, procedures, rules, regulations etc., by laying down the procedures and curricula for training in order to enhance the level of knowledge, standardize the training programme and to derive the maximum benefit from the time and energy invested in imparting training.

3.1.4 In the training curriculum, subjects of regulatory functions and specialised areas have been dovetailed in order to provide overall knowledge to an officer to meet the intent of the following objective:-

- Instil knowledge and ethics regarding overall functioning of DGCA and regulatory framework.
- Familiarise with authenticated knowledge, procedure and practices required at various level of functioning.
- Bring the knowledge and understanding of officers/inspectors into common standard.
- Orient the officers/inspectors towards their functioning in specific area of work.
- Enable the officers/inspectors to take various decisions in their area of work. Make the officers to be aware with best international practices followed by other regulatory authorities in dealing with ANSS matters.
• Provide guidance for technical documentations and record keeping.
• Optimise resources and management of work.
• Develop skill and confidence through structured “On Job Training” (OJT) so as to enable the officers to work independently and in team.
• Improve the overall personality of officers/inspectors.

3.2 Training Program

3.2.1 Training Programme for ANSS officers/inspectors shall contain primarily initial/induction training, recurrent training and specialised training.

3.2.1.1 Initial/Induction Training: The newly inducted officers shall be provided an induction training to enable them to get a general understanding about the organisation, its vision, and mission and acquire necessary competencies required for performing their job.

3.2.1.1 The Initial/Induction Training course will be conducted in 3 modules, as follows:

• Module I - Organised by the Training Directorate in co-ordination with other directorates and training establishments for newly inducted officers only.

• Modules II – Topics related to ATM, AIS, SAR, PANS-OPS, CNS, CARTO and MET will be structured and conducted by ANSS directorate according to the qualification and work experience of the officers/inspectors. Topics to be covered in this module are detailed in Appendix- A of this Chapter.

• Module III – On job training (OJT) shall be conducted in the various fields as ATM, CNS, AIS, SAR, PANS-OPS, CARTO and MET according to the qualification and work experience of the officers/inspectors. On-the-Job Training will be structured according to Training Policy for DGCA Officers. Detailed on job training programme is attached at Appendix- A of this chapter.

Note: In case of any existing Officer (Dy. Director and below) being posted in the Directorate for the first time, there will be a class room based Orientation training module followed by the requisite OJT. In case the Officer has a prior experience in the Directorate, he/she would be required to undergo the refresher/recurrent training module.

3.2.1.2 Recurrent Training
32.12.1 ANSS officers/inspectors will be provided recurrent training to maintain the competency level and also for updating their awareness to relevant regulations/developments etc. This training shall be conducted at least once in two years. To ensure that officers maintain proficiency and keep current on latest techniques, procedures and new developments in their respective areas of expertise, it is essential that they receive periodic recurrent training.

32.12.2 The Recurrent Training course may share content with the Initial Training course, but varies in emphasis from one to other, as the Initial Training course provides a fuller treatment across all subject area. The Recurrent Training course focuses on changes from year to year in regulations, guidance material as well as significant events occurring in the industry and the local environment from time to time.

32.12.3 The Recurrent training programmes for ANSS officers/inspectors have been structured keeping in view that these officers are already having working knowledge and experience in some of the ANSS functioning depending upon their area of working. Further these trainings are aimed to improve officer’s decision making capability, develop maturity to share more responsibilities in elevated position and provide knowledge/exposures with international standard.

32.12.4 The Recurrent training will be imparted by senior officers from ANSS Directorate. The recurrent training programme for ANSS officers/inspectors is placed at Appendix-B of this chapter.

3.2.1.2 Specialized Training

3.2.1.2.1 The purpose of specialized training is to upgrade the knowledge and competency of ANSS officers/inspectors at par with international standards and for efficient functioning. Duration of training is based on the course and the hosting organization. DGCA shall periodically develop programmes under special training programmes/schemes in association with international organisations like EU-India Co-operation Project, India-US ACP program, COSCAP, ENAC France, ICAO FPP China, SAA etc. The specialized training programme for ANSS officers/inspectors is placed at Appendix-C of this chapter.

3.3 PREPARATION OF ANNUAL TRAINING PLAN

33.1 ANSS directorate shall establish and maintain Training Plans that sets out the training to be provided to each of its officers/inspectors annually and all the proposals along with estimated cost are submitted to the Training Directorate. The Training Directorate shall finalise the training plans of all the Directorates in
consultation with their representatives in Training Committee Meeting. Final proposal may be submitted to DG for in-principle approval and accordingly projected budget requirement may be sent to MoCA. Training Calendar will be finalised in March once the budget is allocated by MoCA under training head. Approved training Calendar for the year will be shared with each Directorate and also uploaded on the website of DGCA.

3.4 PROCESS FOR CONDUCTING VARIOUS TRAININGS

34.1 ANSS Directorate will move the proposal for individual training as per approved calendar through Training Directorate and get the approval of the competent authority.

3.5 REVIEW OF TRAINING PROGRAM

35.1 ANSS Directorate should periodically review the Training Program and carry out revisions so that the training of officers/inspectors is continuously updated to keep abreast of the latest developments taking place in the aviation field. One of the methods is to analyse the feedback received after training which may be considered for revision of policies, syllabus, and curriculum. The directorates may utilize the Training Evaluation Form, set forth in Appendix-D of this chapter for this purpose.

3.6 TRAINING FILES AND RECORDS

36.1 All the trainings completed by an officer will be documented in his or her training file.

36.2 Officers/inspectors who complete a formal external or in-house training course will receive a Certificate of Completion to be added to their training file (Physical File).

36.3 On completion of training each officer will submit a feedback report. The data/feedback will be considered while formulating next training programme.

36.4 ANS directorate shall establish and maintain a training dossier for each officer as per format given at Appendix-E of this chapter.

36.5 OJT shall be documented as per format given at Appendix-F of this chapter.
### INITIAL/INDUCTION TRAINING PROGRAMME FOR ANSS OFFICERS/INSPECTORS

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Name of the Course</th>
<th>Duration</th>
<th>Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Module I (Phase I, II, III)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Common for all directorates. Refer DGCA Training Policy of 2015.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td><strong>Orientation (Common for all inspectors)</strong></td>
<td>06 sessions</td>
<td>ANSS Officers</td>
</tr>
<tr>
<td></td>
<td>ANSS Setup in DGCA-India, Context for the creation of this Directorate, Different Areas of responsibility, Duties and Responsibilities of the Directorate, Overview of the relevant regulatory provisions pertaining to ANS in the Aircraft Act 1934, Aircraft Rules 1937, and various CARs under Section 9 and an overview of the ICAO Annexes (1, 2, 3, 4, 10, 11, 12, 15, and 19) relevant for the Directorate, Internal/External Stakeholders, ANSS Procedure Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Overview of ATM Functions (for ATM inspectors only)</strong></td>
<td>04 sessions</td>
<td>ANSS Officers</td>
</tr>
<tr>
<td></td>
<td>CAR- Section 9 Series C, E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annex 2 and 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATM Inspector Handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Role of SMS in ATM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cases of ATM Matters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevant ICAO Docs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Overview of PANS-OPS Functions (for PANS-OPS inspectors only)</strong></td>
<td>04 sessions</td>
<td>ANSS Officers along with officers from AAI</td>
</tr>
<tr>
<td></td>
<td>Introduction of Doc 8168</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PANS-OPS Inspector Handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction of PANS-OPS service provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction of IFPD Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cases of PANS-OPS Matters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><strong>Overview of AIS Functions (for AIS inspectors only)</strong></td>
<td>04 sessions</td>
<td>ANSS Officers along with officers from AAI</td>
</tr>
<tr>
<td></td>
<td>CAR- Section 9 Series I</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annex 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIS Inspector handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction of AIS Service Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIS Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevant ICAO Docs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>Overview of CARTO Functions (for CARTO inspectors only)</strong></td>
<td>04 sessions</td>
<td>ANSS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Module III OJT (On Job Training)

#### 1 OJT for ATM Inspectors

<table>
<thead>
<tr>
<th>Level I – Knowledge</th>
<th>Level II – Understanding</th>
<th>Level III- Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Study of following documents by on job trainee:</td>
<td>Visit to ATS units as per the approved surveillance programme to learn Inspection techniques</td>
<td>4 weeks</td>
</tr>
<tr>
<td>a) CAR Section 9 Series C,E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ICAO Annex 2,11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Relevant ICAO Docs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) AIP India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Study of ATM inspector handbook and Checklist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Relevant AICs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Previous inspections reports and ATRs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **2 weeks** (prior the scheduled surveillance inspection)
- **Officer of ANSS Directorate**

- **As per the approved ASP**

#### 2 Sessions

- **ANSS Officers along with officers from IMD**
- **ANSS Officers along with officers from AAI**

#### 3 Sessions

- **ANSS Officers along with officers from AAI**
## Prepare Inspection report showing compliances/non-compliances as per prescribed rules and regulations.

### 2 OJT for PANS-OPS Inspectors

<table>
<thead>
<tr>
<th>Level I – Knowledge</th>
<th>2 weeks (prior the scheduled surveillance inspection)</th>
<th>Officer of ANSS Directorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study of following documents:</td>
<td>As per the approved ASP</td>
<td></td>
</tr>
<tr>
<td>a) Relevant ICAO Docs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) AIP India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) PANS-OPS inspector handbook and Checklist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Relevant AICs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Previous inspections reports and ATRs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level II – Understanding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit to IFPD Section of AAI CHQ as per the approved surveillance programme to learn Inspection techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level III- Performance</strong></td>
<td>4 weeks</td>
<td></td>
</tr>
<tr>
<td>Prepare Inspection report showing compliances/non-compliances as per prescribed rules and regulations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3 OJT for AIS Inspectors

<table>
<thead>
<tr>
<th>Level I – Knowledge</th>
<th>2 weeks (prior the scheduled surveillance inspection)</th>
<th>Officer of ANSS Directorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study of following documents:</td>
<td>As per the approved ASP</td>
<td></td>
</tr>
<tr>
<td>a) CAR Section 9 Series I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) ICAO Annex 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Relevant ICAO Docs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) AIP India/AIP Supplement/NOTAM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) AIS inspector handbook and Checklist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Relevant AICs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Previous inspections reports and ATRs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level II – Understanding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit to AIS units/ NOFs as per the approved surveillance programme to learn Inspection techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level III- Performance</strong></td>
<td>4 weeks</td>
<td></td>
</tr>
<tr>
<td>Prepare Inspection report showing compliances/non-compliances as per prescribed rules and regulations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4 OJT for CARTO Inspectors
### Level I – Knowledge
Elf-study of following documents:
- a) CAR Section 9 Series G
- b) ICAO Annex 4
- c) Relevant ICAO Docs
- d) AIP India
- e) Relevant AICs
- f) Previous inspections reports and ATRs

**2 weeks** (prior the scheduled surveillance inspection)  
Officer of ANSS Directorate

### Level II – Understanding
Visit to CARTO Section of AAI CHQ as per the approved surveillance programme to learn Inspection techniques.

**As per the approved ASP**

### Level III- Performance
Prepare Inspection report showing compliances/ non-compliances as per prescribed rules and regulations.

**4 weeks**  

## 5 OJT for CNS Inspectors

### Level I – Knowledge
Self-study of following documents:
- a) CAR Section 9 Series D
- b) ICAO Annex 10 (Vol. I to V)
- c) Relevant ICAO Docs
- d) AIP India
- e) CNS inspector handbook and Checklist
- f) Relevant AICs
- g) Previous inspections reports and ATRs

**2 weeks** (prior the scheduled surveillance inspection)  
Officer of ANSS Directorate

### Level II – Understanding
Visit to CNS units as per the approved surveillance programme to learn Inspection techniques

**As per the approved ASP**

### Level III- Performance
Prepare Inspection report showing compliances/ non-compliances as per prescribed rules and regulations.

**4 weeks**

## 6 OJT for MET Inspectors

### Level I – Knowledge
Self-study of following documents:
- a) CAR Section 9 Series M
- b) ICAO Annex 3
- c) Relevant Documents of ICAO
- d) AIP India
- e) MET inspector handbook and Checklist
- f) Relevant AICs

**2 weeks** (prior the scheduled surveillance inspection)  
Officer of ANSS Directorate
|---|---|
| **g) Previous inspections reports and ATRs** | **Level II – Understanding**  
Visit to MET units as per the approved surveillance programme to learn Inspection techniques.  
As per the approved ASP  
4 weeks |
| **Level III- Performance**  
Prepare Inspection report showing compliances/ non- compliances as per prescribed rules and regulations. | **Level I – Knowledge**  
Self-study of following documents:  
a) CAR Section 9 Series S  
b) ICAO Annex 12  
c) Relevant ICAO Docs  
d) NAMSAR Manual  
e) AIP India  
f) SAR inspector handbook and Checklist  
g) Relevant AICs  
Previous inspections reports and ATRs  
2 weeks (prior the scheduled surveillance inspection)  
Officer of ANSS Directorate  
**Level II – Understanding**  
Visit to RCCs/ RSC as per the approved surveillance programme to learn Inspection techniques  
As per the approved ASP  
4 weeks  
**Level III- Performance**  
Prepare Inspection report showing compliances/ non- compliances as per prescribed rules and regulations. |

Note: Duration of each session will be 45 Min.
## Appendix-B

### RECURRENT TRAINING PROGRAMME FOR ANSS OFFICERS/INSPECTORS

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Name of the Course</th>
<th>Duration</th>
<th>Trainer</th>
</tr>
</thead>
</table>
| 1     | Review of general Information on Act, Rules & Regulations: (common for all officers/inspectors)  
- Relevant regulations including any changes thereto  
- amendments to the relevant ICAO annexes 1, 2, 3, 4, 10, 11, 12, 15, and 19  
- ANSS Procedure manual  
- Directorate’s Surveillance program and analysis of findings/observations in the different areas  
- review of surveillance checklists in different areas | 04 sessions | ANSS Officers |
| 2     | Review of ATM Functions (for ATM inspectors only)  
CAR- Section 9 Series C, E  
Annex 2 and 11  
ATM Inspector Handbook  
Role of SMS in ATM  
Cases of ATM Matters  
Relevant ICAO Docs | 02 sessions | ANSS Officers |
| 3     | Review of PANS-OPS Functions (for PANS-OPS inspectors only)  
Discussion about Doc 8168  
PANS-OPS Inspector Handbook  
Cases of PANS-OPS Matters  
Any emerging technology | 02 sessions | ANSS Officers |
| 4     | Review of AIS Functions (for AIS inspectors only)  
CAR- Section 9 Series I  
Annex 15  
AIS Inspector handbook  
AIS Manual  
Relevant ICAO Docs  
Cases of AIS matters | 02 sessions | ANSS Officers |
| 5     | Review of CARTO Functions (for CARTO inspectors only)  
CAR Section 9 Series G  
Annex 4  
Differences filed by State | 02 sessions | ANSS Officers |
### Various types of Charts

<table>
<thead>
<tr>
<th></th>
<th>Review of CNS Functions (for CNS inspectors only)</th>
<th>02 sessions</th>
<th>ANSS Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>CAR Section 9 Series D (PART I to VI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CNS Inspector Handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annex 10 (Vol. I to V)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emerging CNS facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cases of CNS matters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Review of MET Functions (for MET inspectors only)</td>
<td></td>
<td>ANSS Officers</td>
</tr>
<tr>
<td></td>
<td>CAR Section 9 Series M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annex 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MET Inspector Handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emerging MET facilities and technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Review of SAR Functions (for SAR inspectors only)</td>
<td></td>
<td>ANSS Officers</td>
</tr>
<tr>
<td></td>
<td>CAR Section 9 Series S</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annex 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAR Inspector Handbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NASAR Manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Duration of each session will be 45 Min.
### SPECIALISED TRAINING PROGRAMME FOR ANSS OFFICERS/INSPECTORS

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Course</th>
<th>Duration</th>
<th>Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Train the Trainer</td>
<td>1-2 week</td>
<td>SAA</td>
</tr>
<tr>
<td>2.</td>
<td>Safety Oversight Inspection of ANS</td>
<td>1 week</td>
<td>SAA</td>
</tr>
<tr>
<td>3.</td>
<td>ICAO Computer based Training (CBT) for Safety Oversight Auditors in ANS Discipline.</td>
<td></td>
<td>A rigorous online training</td>
</tr>
<tr>
<td></td>
<td>ICAO Certified Safety Oversight Auditors Training</td>
<td></td>
<td>platform from ICAO which</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>includes ICAO certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>as Safety Auditor in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>respective area.</td>
</tr>
<tr>
<td>4.</td>
<td>Basic PANS-OPS Course</td>
<td>6-8 weeks</td>
<td>SAA, ENAC France, ICAO FPP China,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AAI (CATC Allahabad)</td>
</tr>
<tr>
<td>5.</td>
<td>Advanced PANS-OPS Course</td>
<td>3-4 weeks</td>
<td>SAA, ENAC France, ICAO FPP China,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AAI (CATC Allahabad)</td>
</tr>
<tr>
<td>6.</td>
<td>PBN Oversight Course</td>
<td>2 weeks</td>
<td>ENAC, SAA</td>
</tr>
<tr>
<td>7.</td>
<td>AIS/AIM Course</td>
<td>3-4 weeks</td>
<td>SAA</td>
</tr>
<tr>
<td>8.</td>
<td>SAR Administrator Course</td>
<td>2 weeks</td>
<td>SAA</td>
</tr>
<tr>
<td>9.</td>
<td>Procedures and Design Process for PBN Air Space Course</td>
<td>3 weeks</td>
<td>SAA, ENAC</td>
</tr>
<tr>
<td>10.</td>
<td>CNS/ATM workshop</td>
<td>1 week</td>
<td>SAA, ENAC</td>
</tr>
<tr>
<td>11.</td>
<td>Applications of GNSS in Civil Aviation</td>
<td>2 weeks</td>
<td>ENAC</td>
</tr>
<tr>
<td>12.</td>
<td>WAM/ADS-B workshop</td>
<td>1 week</td>
<td>ENAC, SAA</td>
</tr>
<tr>
<td>13.</td>
<td>ICAO Safety Management System (SMS) Course</td>
<td>1 week</td>
<td>ICAO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partner Institution like SAA</td>
</tr>
<tr>
<td>14.</td>
<td>ICAO Seminars and Workshops in the emerging areas of ANS</td>
<td>--</td>
<td>ICAO, COSCAP etc</td>
</tr>
<tr>
<td>15.</td>
<td>Safety Oversight Managers</td>
<td>2 weeks 4 days</td>
<td>SAA</td>
</tr>
<tr>
<td>16.</td>
<td>Safety oversight of Aviation Meteorological Services</td>
<td>4 days</td>
<td>SAA</td>
</tr>
</tbody>
</table>
Training Evaluation Form

Name of the officer __________________________________________________________

Employee id ______________________________________________________________

Designation ________________________________________________________________

Topic/ Title of Course ________________________________________________________

Duration Date from ____________________________

Date to ____________________________

Institution/organisation ______________________________________________________

Location/ venue ____________________________________________________________

Evaluation

Rate each of the following statements using the scale below. Indicate your rating by marking the applicable letter to the right of each statement. Place additional comments in the space provided on page two. Use back of the page if you need more room for comments and suggestions.

<table>
<thead>
<tr>
<th>A = Strongly Agree</th>
<th>B = Agree</th>
<th>C = Neither Agree or Disagree</th>
<th>D = Disagree</th>
<th>E = Strongly Disagree</th>
</tr>
</thead>
</table>

1. The objectives were clearly presented for each lesson.

2. The design (organization, pace, sequence, transitions, feedback) of the lessons enhanced by ability to meet the course/lesson objectives.

3. The lesson content was directly related to the stated intent (objectives) of the lessons.

4. The information in the course materials supported the lesson objectives.

5. The learning environment was free from distractions.

6. The instructor provided assistance when I needed it.

7. The facilities supported the lesson objectives.

8. The course provided opportunity to demonstrate my knowledge and practice my skills.
9. The skill performance evaluations assessed my proficiency level.
10. The tests reflected the course materials presented.
11. I feel confident that I met the stated objectives
12. Overall, this training was highly effective.

Comments
If you answered “Disagree” or “Strongly Disagree,” please explain why.

Overall course evaluation:

Describe the effectiveness of instructors:

Please note any additional suggestions for improving the course:
## Appendix E

### TRAINING DOSSIER

**MASTER LIST**  
Name: ________________________________

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 1 - EMPLOYMENT DOCUMENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>DGCA Vacancy Circular</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Appointment Letter</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Certificate of Assumption Charge/Joining Letter</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Job Description</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Any Previous Employment (Prior to DGCA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 2 - CREDENTIALS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>DGCA Inspector Identification (Authorization Card)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Airport Entry Pass</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Passport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 3 - QUALIFICATIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Academic Qualification</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Professional Qualifications</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AME/Pilot/Other License (if available)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 4 - DGCA INITIAL TRAINING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>DGCA Indoctrination Training Course</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Personnel Licensing Training (PEL)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 5 - DGCA ON-THE-JOB TRAINING (OJT)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>DGCA – On-the-Job Training</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RED CONTINUATION AND RECURRENT TRAINING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>DGCA Documentation of Continuation Training</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DGCA Recurrent Inspector Training</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Any Specialized Training</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 7 - ALL OTHER INDUSTRY TRAINING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Training 1</td>
<td></td>
</tr>
</tbody>
</table>
2. Training 2

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>

**SECTION 8 MISCELLANEOUS**

1. Additional Qualifications (as applicable)
EMPLOYEE'S ON-THE-JOB TRAINING RECORD

1. IDENTIFYING INFORMATION
Last Name: ___________________________ First Name: ___________________________ Initials: ________
Position: ___________________________ Section / Division: ___________________________

2. OJT ACTIVITY DOCUMENTATION

<table>
<thead>
<tr>
<th>Job Task or Subject Matter</th>
<th>Date Level Completed</th>
<th>Name(s) and Signature of OJT Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level I (Understanding)</td>
<td>Level II (Demonstration)</td>
</tr>
</tbody>
</table>

3. CERTIFICATION

(a) * By appending my signature in this column, I certify that the trainee has completed the OJT documented above and is competent to perform the task without supervision.

(b) I hereby confirm that I have completed the OJT documented above with the qualified OJTTrainer(s).

Signature: ___________________________ Date: ___________________________
CHAPTER 4

JOB DESCRIPTION & QUALIFICATION

4.1 AIS INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.1.1 Name of the Office- DGCA, Opposite Safdarjung Airport, New Delhi

4.1.2 Title of Position- AIS Inspector

4.1.3 Service- Technical

4.1.4 Directorate - Airspace & ANS Standards

4.1.5 Reporting Officer- Director of Operations (Airspace & ANS)

4.1.6 Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing Safety Oversight function of AIS service providers in India i.e. AAI. The purpose of this position is to ensure the compliance of CAR Section 9 Series ‘I’ Part 1- Aeronautical Information Services, CAR Section 9 Series ‘G’ Part I Issue II- Aeronautical Charts, relevant manuals, documents, rules, regulations, directives and upgrade the safety level of AIS service provider.

4.1.7 Duties and Responsibilities:-

4.1.7.1 Develop and amend Inspector Handbook/Checklist necessary for inspection.

4.1.7.2 Formulate and implement AIS/ Aeronautical Maps & Charts Safety Audit Surveillance Program.

4.1.7.3 Prepare safety oversight inspection schedule to inspect AIS Division at AAI, International NOTAM Office and other Aerodromes concerning AIS matters.

4.1.7.4 Carry out safety oversight inspection and surveillance of AIS service provider to ensure the proper implementation of CAR Section 9 Series ‘I’ Part 1-Aeronautical Information Services, CAR Section 9 Series ‘G’ Part I Issue II- Aeronautical Charts, related documents, manuals and directives issued by DGCA as per the approved program of the Directorate and report deficiencies noted for remedial action.

4.1.7.5 Prepare inspection report and highlight the deficiencies, if any.
4.1.7.6 To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.

4.1.7.7 Coordinate with concerned units to amend AIS/ Aeronautical Maps & Charts related documents to incorporate changes in ICAO SARPs and advise the Head of the Directorate.

4.1.7.8 Prepare documents, manuals related to AIS/Aeronautical Maps & Charts.

4.1.7.9 Participate in any in-house and abroad workshops and seminars related to AIS/ Aeronautical Maps & Charts matters.

4.1.7.10 Develop training program for inspectors.

4.1.7.11 Perform any other duty assigned by the Director to enhance performance of the directorate.

4.1.8 Qualification - An AIS Inspector shall have the following qualifications:

4.1.8.1 Trained in AIS/ Aeronautical Maps & Charts.

4.1.8.2 The AIS inspector should have at least 05 years of job experience in AIS/ATS operations.

4.1.8.3 The inspector should have adequate knowledge of ICAO Annex-15, Annex 4 and Doc 8126, Indian Aircraft Act and other relevant DGCA rules and regulations.

4.1.8.4 The inspector should have adequate knowledge of State Safety Program, Safety Management System (SMS), and ICAO Safety Audit Program.

4.1.8.5 Knowledge of Human Factors involved in flight operation.

4.1.8.6 Knowledge of Quality Management System in AIS.

4.1.8.7 The inspector should have successfully completed an audit/ Inspection course/OJT.

4.2 ATM INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.2.1 Name of the Office- DGCA, Opposite Safdarjung Airport, New Delhi.

4.2.2 Title of Position- ATM Inspector.

4.2.3 Service- Technical
4.2.4  Directorate: - Airspace & ANS Standards

4.2.5  Reporting Officer: - Director of Operations (Airspace & ANS)

4.2.6  Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing Safety Oversight function of ATM service providers in India. The purpose of this position is to ensure the compliance of relevant CARs, manuals, documents, DGCA rules/ regulations, directives and upgrade the safety level of ATM service provider.

4.2.7  Duties and Responsibilities:-

4.2.7.1  Develop and amend Inspector Handbook/Checklist necessary for inspection.

4.2.7.2  Formulate and implement ATM Safety Audit Surveillance Program.

4.2.7.3  Prepare safety oversight inspection schedule to inspect ATM service provider.

4.2.7.4  As per the approved program of the directorate, carry out safety oversight inspection and surveillance of ATM service provider to ensure the proper implementation of relevant ICAO Annexes, CARs, related documents, manuals and directives issued by DGCA.

4.2.7.5  Prepare inspection report and highlight the deficiencies, if any.

4.2.7.6  To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.

4.2.7.7  Amend ATM related documents to incorporate changes in ICAO SARPs.

4.2.7.8  Prepare documents, manuals related to ATM.

4.2.7.9  Participate in any in-house and abroad workshops and seminars related to ATM matters.

4.2.7.10 Develop training program for ATM inspectors.

4.2.7.11 Ensure service provider has developed training program including refresher training for ATS staff.

4.2.7.12 Ensure that training records or files for its ATS staff are maintained.
4.2.7.13 Ensure procedure developed by ATS service provider for continued competency of ATC in new equipment, procedures and updated communication.

4.2.7.14 Perform any other duty assigned by the Director to enhance performance of the directorate.

4.2.8. Qualification - An ATM Inspector should have the following qualifications:

4.28.1 Having a minimum of 5 years ATC experience in Aerodrome Control/Approach control/ Area control.

4.28.2 The inspector should have successfully completed an audit/ ATM inspection course.

4.28.3 The Inspector should be conversant with the Indian regulations/ requirements and ICAO SARPS and related guidance material.

4.28.4 Possess adequate knowledge of Air Regulation and experience in ATS procedures/practices, personnel licensing/ training, procedure designing.

4.28.5 Possess training in SMS in ATM, USOAP, and CNS/ATM system.

4.28.6 Possess good analytical ability; good inter personnel skills, flexibility of approach and some auditing experience.

4.3 PANS-OPS INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.3.1 Name of the Office- DGCA, Opposite Safdarjung Airport, New Delhi.

4.3.2 Title of Position- PANS-OPS Inspector

4.3.3 Service- Technical

4.3.4 Directorate- Airspace & ANS Standards

4.3.5 Reporting Officer- Director of Operations (Airspace & ANS)

4.3.6 Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing safety oversight functions of PANS-OPS service providers in India i.e. AAI. The purpose of this position is to ensure that the IFP are developed in compliance with the provisions of relevant CARs, manuals, ICAO DOC 8168, DGCA rules, regulations by the service provider.

4.3.7 Duties and Responsibilities:-
4.3.7.1 Develop and amend Inspector Handbook/Checklist for use.

4.3.7.2 Formulate and implement PANS-OPS/Maps and Charts Safety Audit Surveillance Program.

4.3.7.3 Carry out safety oversight inspection and surveillance of PANSOPS service provider as per the approved program of the directorate and report deficiencies noted for remedial action.

4.3.7.4 To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.

4.3.7.5 Participate in any in-house and abroad workshops and seminar related to PANS-OPS.

4.3.7.6 Prepare inspection schedule to inspect PANS-OPS service provider.

4.3.7.7 Ensure if service provider has developed adequate training program including refresher training for PANS-OPS technical staff.

4.3.7.8 Perform any other duty assigned by the Director to enhance performance of the directorate.

4.3.8 Qualifications: A PANS-OPS Inspector shall possess at least the following qualification:

4.3.8.1 Have completed basic course in ATM from an approved training organization.

4.3.8.2 Having a minimum of 5 years ATC experience in Aerodrome Control/Approach control/ Area control.

4.3.8.3 Possess basic/advance training including refresher course in PANS-OPS.

4.3.8.4 The inspector should have successfully completed an audit/ATM inspection course from an approved institution.

4.3.8.5 Possess adequate knowledge of Air Regulation and experience in PANS-OPS procedures/ practices, instrument flight procedure designing.


4.3.8.7 Analytical ability, good inter personnel skill, flexibility of approach and some safety oversight experience.
4.4 CNS INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.4.1 Name of the Office- DGCA, Opposite Safdarjung Airport, New Delhi.

4.4.2 Title of Position- CNS Inspector

4.4.3 Service- Technical

4.4.4 Directorate: - Airspace & ANS Standards

4.4.5 Reporting Officer- Director of Operations (Airspace & ANS)

4.4.6 Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing safety oversight functions of CNS service providers in India i.e. AAI. The purpose of this position is to ensure the compliance of relevant CARs, ICAO Annexes, manuals, documents, DGCA rules, regulations, and directives of CNS service provider.

4.4.7 Duties and Responsibilities: -

4.4.7.1 Develop and amend Inspector Handbook/Checklist for use.

4.4.7.2 Formulate and implement CNS Safety Audit Surveillance Program.

4.4.7.3 Carry out safety oversight inspection and surveillance of CNS service provider as per the approved program and report deficiencies noted for remedial action.

4.4.7.4 Scrutiny and processing of manual of aeronautical telecommunication stations submitted by AAI or the purpose of approval and safety management manuals in respect of such stations.

4.4.7.5 To ensure flight safety, issue immediate directives to the CNS service provider if there are any issues that need immediate attention.

4.4.7.6 Participate in any in-house and abroad workshops and seminars related to CNS matters.

4.4.7.7 Prepare inspection schedule to inspect CNS service provider.

4.4.7.8 Ensure if service provider has developed adequate training program including refresher training for CNS technical staff.

4.4.7.9 Perform any other duty assigned by the Director to enhance performance of the directorate.
4.4.8 Qualifications: A CNS Inspector shall possess at least the following qualification:

4.4.8.1 Have minimum of five years of technical work experience in aeronautical telecommunication field after having completed basic course in aeronautical telecommunication maintenance or in bachelor in electronics and/or communication engineering.

4.4.8.2 Possess basic/advance training either in navigation or surveillance course.

4.4.8.3 The inspector should have successfully completed an audit/inspection course from an approved institution.

4.4.8.4 Possess adequate experience in CNS procedures/practices, personnel training.

4.4.8.5 Analytical ability, good inter personnel skill, flexibility of approach and some safety oversight experience.

4.5 SAR INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.5.1 Name of the Office- DGCA, Opposite Safdarjung Airport, New Delhi.

4.5.2 Title of Position- SAR Inspector

4.5.3 Service- Technical

4.5.4 Directorate: - Airspace & ANS Standards

4.5.5 Reporting Officer: - Director of Operations (Airspace & ANS)

4.5.6 Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing Safety Oversight function of SAR service providers in India. The purpose of this position is to ensure the compliance of CAR SECTION 9 SERIES S; ICAO annexes relevant manuals, documents, rules, regulations, directives to SAR service provider.

4.5.7 Duties and Responsibilities:-

4.5.7.1 To amend the DGCA CAR from time to time to ensure compliance with ICAO Annexure on the subject and / or issue any other directions, if required.

4.5.7.2 To file differences with ICAO, if required.
4.5.7.3 Develop and amend Inspector Handbook/Checklist necessary for inspection.

4.5.7.4 Formulate and implement SAR Safety Audit Surveillance Program.

4.5.7.5 Prepare safety oversight inspection schedule to inspect SAR Coordinator’s Head Office i.e. AAI, and RCCs.

4.5.7.6 Carry out safety oversight inspection and surveillance of SAR Coordinator and RCCs to ensure the proper implementation of CAR SECTION 9 SERIES S, related documents, manuals and directives issued by DGCA as per the approved program of the department and report deficiencies noted for remedial action.

4.5.7.7 Prepare inspection report and highlight the deficiencies, if any for appropriate remedial action by the concerned agencies.

4.5.7.8 To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.

4.5.7.9 Coordinate with concerned units to amend SAR related documents to incorporate changes in ICAO SARPs and advise the Head of the Department.

4.5.7.10 Review documents, manuals related to SAR including amendments received from ATS/SAR provider and submit for approval.

4.5.7.11 Participate in any in-house and abroad workshops and seminars related to SAR matters.

4.5.7.12 Develop training program for inspectors.

4.5.8 Qualification - An SAR Inspector shall have the following qualifications:

4.5.8.1 The SAR inspector should have at least 05 years of job experience in ATS / SAR operations.

4.5.8.2 The inspector should have adequate knowledge of ICAO Annex-12 and Doc 7134, Indian Aircraft Act and other relevant DGCA rules and regulations.

4.5.8.3 The inspector should have adequate knowledge of State Safety Program, Safety Management System (SMS), and ICAO Safety Audit Program.

4.5.8.4 The inspector should have successfully completed an audit/ inspection course from an approved institution.
4.6 MET INSPECTOR JOB DESCRIPTION & QUALIFICATION

4.6.1 Name of the Office: - DGCA, Opposite Safdarjung Airport, New Delhi.

4.6.2 Title of Position:- MET Inspector

4.6.3 Service:- Technical

4.6.4 Directorate: - Airspace & ANS Standards

4.6.5 Reporting Officer: - Director of Operations (Airspace & ANS)

4.6.6 Brief Description of the Position and its Purpose: - The holder of this position shall be responsible for performing Safety Oversight function of Aeronautical Meteorological service provider (AMSP) in India i.e. IMD (Indian Meteorological Department).

The purpose of this position is to ensure the compliance of CAR SECTION 9 SERIES M; ICAO annexes, relevant manuals, documents, rules, regulations, directives to MET service provider.

4.6.7 Duties and Responsibilities:-

4.6.7.1 To amend the DGCA CAR from time to time to ensure compliance with ICAO Annexure on the subject and / or issue any other directions, if required.

4.6.7.2 To file differences with ICAO, if required.

4.6.7.3 Develop and amend Inspector Handbook/Checklist necessary for inspection.

4.6.7.4 Develop training program for inspectors.

4.6.7.5 Formulate and implement MET Safety Audit Surveillance Program.

4.6.7.6 Carry out safety oversight inspection and surveillance of AMSP as per the approved program and report deficiencies noted for remedial action.

4.6.7.7 Prepare inspection report and highlight the deficiencies, if any for appropriate remedial action by the AMSP.

4.6.7.8 Assist if needed AMSP in preparing the remedial/corrective action plan and follow up its progress.
4.6.7.9 To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.

4.6.7.10 Ensure AMSP has developed training programme including refresher training for staff.

4.6.7.11 Ensure training records or files for staff are maintained.

4.6.7.12 Ensure AMSP has an agreement with ATC service provider.

4.6.7.13 Review documents, manuals related to Meteorology including amendments received from MET provider and submit for approval.

4.6.7.14 Participate in any in-house and abroad workshops and seminars related to aeronautical MET matters.

**4.68 Qualification – A MET Inspector shall have the following qualifications:**

4.6.8.1 The MET inspector should have at least 05 years of job experience in Meteorology.

4.6.8.2 The inspector should have adequate knowledge of ICAO Annex-3, Indian Aircraft Act and other relevant DGCA rules and regulations.

4.6.8.3 The inspector should have adequate knowledge of State Safety Program, Safety Management System (SMS), and ICAO Safety Audit Program.

4.6.8.4 The inspector should have successfully completed an audit/inspection course from an approved institution.
5.1 INTRODUCTION

The ANSS Directorate has been formed within the ambit of Director General of Civil Aviation, New Delhi, India to perform the surveillance function in the matter pertaining to ATM, PANS-OPS, AIS, Aeronautical Charts, CNS, MET and SAR field. Inspectors have been appointed within ANSS Directorate who will carry out their duties and responsibilities as per the policies laid down in this manual. The Inspectors shall carry out the surveillance of all aspects of ANS concerning services, procedures, method and functions of Air Navigation Service Provider and their applicability in accordance with rules & regulations, relevant CARs, Manual, and any other direction laid down in the documents.

5.2 OBJECTIVES OF SURVEILLANCE INSPECTION

The objectives of the surveillance inspection are as follows:

a. Ascertain compliance with the Civil Aviation Requirement (CARs), ICAO Standards and Recommended Practices and ANSP's 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.

5.3 SCOPE OF SURVEILLANCE INSPECTION

5.3.1 The scope of the Surveillance Inspection will mainly cover the four broad components;

i) Personnel training

ii) Equipment / Materials / Environment

iii) Procedures

iv) Documentation
5.4 CRITERIA FOR DEVELOPING ANNUAL SURVEILLANCE PROGRAM (ASP)

5.4.1 Surveillance in the field of ATM, PANS-OPS, AIS, Aeronautical Charts (Cartography), CNS, MET and SAR field is the responsibility of ANSS directorate. Airports Authority of India is the service provider in the field of ATM, PANS-OPS, AIS, Aeronautical Charts, CNS, and SAR and India Meteorological Department (IMD) is the responsible agency for providing aviation MET services.

5.4.1.1 For ATM ASP

ATM inspectors of ANSS Directorate shall carry out surveillance activities at all civil airports across the country where air traffic services are provided by Airports Authority of India. For preparing annual surveillance programme of ATM facilities, airports have been categorized and frequency of inspection is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Details/ specifications of ATM facilities to be inspected</th>
<th>Frequency of surveillance inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Major International Airports having Area Control Centers (ACCs) and handling ground movements more than 1 lakh per annum</td>
<td>Once in every two years</td>
</tr>
<tr>
<td>B1</td>
<td>International Airports having Area Control Centers (ACCs) handling ground movements less than 1 lakh per annum</td>
<td>Once in every three years</td>
</tr>
<tr>
<td>C1</td>
<td>International Airports but not having ACCs</td>
<td>Once in every four years</td>
</tr>
<tr>
<td>D1</td>
<td>Domestic Airports</td>
<td>Once in every five years</td>
</tr>
</tbody>
</table>

5.4.1.2 For CNS

CNS inspectors of ANSS Directorate shall carry out surveillance activities at all international, domestic, civil enclaves and state/private airports across the country where CNS facilities are installed/maintained and CNS services are provided by Airports Authority of India. For preparing annual surveillance programme of CNS facilities, airports/stations have been categorized and frequency of inspection is as follows:
### Category Details/ specifications of ATM facilities to be inspected

<table>
<thead>
<tr>
<th>Category</th>
<th>Details/ specifications of ATM facilities to be inspected</th>
<th>Frequency of surveillance inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A2</strong></td>
<td>Major International Airports located in Metro cities with a load factor of over 1,00,000 movements.</td>
<td>Once in every 02 years.</td>
</tr>
<tr>
<td><strong>B2</strong></td>
<td>International Airports other than Major International</td>
<td>Once in 03 years.</td>
</tr>
<tr>
<td><strong>C2</strong></td>
<td>Civil Enclaves Defense Airports with civil terminal operating scheduled/ nonscheduled commercial flights where CNS facilities are provided by AAI.</td>
<td>Once in 04 years.</td>
</tr>
<tr>
<td><strong>D2</strong></td>
<td>Domestic airports</td>
<td>Once in 05 years.</td>
</tr>
<tr>
<td><strong>E2</strong></td>
<td>State / Private Airports</td>
<td>Once in 05 years.</td>
</tr>
</tbody>
</table>

#### 5.4.1.3 For SAR

SAR inspectors of ANSS Directorate shall carry out surveillance activities at all Rescue Coordination Centres (RCCs) of FIRs and Rescue Sub Centre (RSC) of Sub FIR across the country. Airports Authority of India is responsible for maintaining these RCCs and RSC. All the RCCs and RSC to be inspected are listed below and frequency of inspection would be once in every 02 years:

i) SAR Section at AAI CHQ  
ii) RCC Delhi at Delhi Airport  
iii) RCC Mumbai at Mumbai Airport  
iv) RCC Kolkata at Kolkata Airport  
v) RCC Chennai at Chennai Airport  
vii) RSC Guwahati at Guwahati Airport

#### 5.4.1.4 For AIS

AIS inspectors of ANSS Directorate are responsible for carrying out surveillance activities at all Aeronautical Information Service (AIS) Sections and International NOTAM Offices (NOFs) across the country. Airports Authority of India is the only service provider in civil aviation providing AIS. All the AIS sections NOFs to be inspected are listed below and frequency of inspection would be once in every 02 years:

i) AIS Section at AAI CHQ, Delhi  
ii) AIS Section and International NOF, Delhi  
iii) AIS Section and International NOF, Mumbai  
iv) AIS Section and International NOF, Kolkata  
v) AIS Section and International NOF, Chennai
54.15 For PANS-OPS

PANS-OPS inspectors of ANSS Directorate are responsible for carrying out surveillance activities at Flight Procedure Design (FPD) Section where procedures to be followed by all civil operators are designed. Airports Authority of India is the only service provider in civil aviation providing PANS-OPS services.

FPD Section at AAI CHQ, Delhi is the only facility to be inspected for PANS-OPS surveillance inspection and frequency of inspection will be every year.

54.16 For Cartography

Cartography inspectors of ANSS Directorate are responsible for carrying out surveillance activities at Cartography (CARTO) Section where aeronautical maps and charts applicable to the state are prepared. Airports Authority of India is the only service provider in civil aviation for preparing and providing these maps and charts.

CARTO Section at AAI CHQ, Delhi is the only facility to be inspected for Cartography surveillance inspection and frequency of inspection will be every year.

54.17 For MET

MET inspectors of ANSS Directorate shall carry out surveillance activities at all civil airports across the country where meteorological (MET) services are provided by Indian Meteorological Department (IMD) in coordination with Airports Authority of India. For preparing annual surveillance programme of MET facilities, airports have been categorized and frequency of inspection is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of MET Office</th>
<th>Frequency of inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>International Airports having Meteorological Watch Offices (MWO)</td>
<td>once in 02 years</td>
</tr>
<tr>
<td>B3</td>
<td>International Airports having Aerodrome Meteorological Offices (AMO)</td>
<td>once in 03 years</td>
</tr>
<tr>
<td>C3</td>
<td>International Airports having Aerodrome Meteorological Station (AMS)</td>
<td>once in 03 years</td>
</tr>
</tbody>
</table>

5.5 THE ROLE OF INSPECTOR(S)

5.5.1 The tasks to be undertaken by each inspection team member will be assigned by the team leader. These tasks may include conducting interviews with staff of the
unit, section or division being inspected, reviewing documentation, observing operations, and writing material for the inspection report.

5.6 PERSONAL ETHICS AND CONDUCT

5.6.1 As Inspectors are always in the public eye, they are expected to exercise good judgment, ethics and professional behaviour at all times while on duty.

All Inspectors must observe the following rules of conduct:
- Report for work on time and in a condition that will permit performance of assigned duties.
- Maintain a professional appearance, as appropriate, during duty hours.
- Respond promptly to directions and instructions received from Director ANSS.
- Exercise courtesy and tact in dealing with co-workers, director and others.

5.7 INSPECTION TECHNIQUES

5.7.1 The techniques for gathering the information on which the inspection team’s assessment will be made include:

i) Review of documentation;
ii) Interviews with staff; and
iii) Observations by the inspector
iv) The inspection team should work systematically through the items on the relevant checklist
v) Observation should be noted on standard observation sheets.

5.7.2 The following guidelines may be followed by Inspectors

5.7.2.1 The principal way in which inspectors obtain information about the functioning of the systems is by asking questions.

5.7.2.2 The persons to be interviewed should be drawn from a range of management, supervisory operational positions.

5.7.2.3 The purpose of inspection interviews is to elicit information, not to enter into discussions.

5.7.2.4 All Inspectors should observe the following guidelines relating to the conduct of inspection interviews:
a. Listen attentively and let the speaker know you are listening.
b. Remain neutral. Do not disagree, criticize or interrupt.
c. Ask ‘W’ questions – what, why, where, when, who, and how these are the key words that will bring forward facts and information.

5.8 INSPECTION PROCEDURE

The Surveillance activity of the ANS aspects includes ATM/ CNS/ AIS/ AERONAUTICAL CHARTS/ PANS-OPS/ SAR and MET facilities and it begins with the preparation of the yearly schedule for the inspection and consists of the following sub activities.

5.8.1 Planning

58.1.1 The program provides the information regarding the list/ names of the airports/ aeronautical stations for which surveillance inspection is to be carried out.

58.1.2 While selecting a station to be inspected in a particular month the season prevailing in the region during that period is given consideration.

58.1.3 The schedule for next year is communicated to the ANSP in the month of November of the previous year.

5.8.2 Preparation & Execution/conduct of the surveillance inspection

58.2.1 Inspection of ATM facilities

58.2.1.1 ATM Inspector shall familiarize himself/ herself with the ATM facilities available at the station to be inspected.

58.2.1.2 ATM inspector shall go through all the information available regarding the station through AIP, relevant AIP Supplement and ATMC etc.

58.2.1.3 On the basis of the information available, areas that need to be given more emphasis during physical inspection are identified, noted and a questionnaire is prepared to be used during inspection.

58.2.1.4 The duration of the tour is normally of 2 to 3 days (including journey period) and is decided depending upon the number of ATS unit & the ATM facilities available at the airport.
5.8.2.1.5 Approval for tour of the nominated ANS inspector is obtained, one week prior to the proposed date of tour, from the concerned Joint Director General.

5.8.2.1.6 On the basis of the approval AIC is applied for the Air tickets and tour order is signed by the Director (ANS).

5.8.2.1.7 The tour order is forwarded to Executive Director (ATM) in AAI HQ, Executive Director of Region concerned and the Airport Director of the concerned airport for information and necessary arrangements.

5.8.2.1.8 On arrival at the airport, inspector conducts an entry meeting with the Airport Director along with all the In-charges of CNS, ATM, Fire Services and C & E Engineering to get an overview of the station and facility.

5.8.2.1.9 Physical inspection of the ATM facilities is conducted & inspection is carried out as per aforementioned procedures.

5.8.2.1.10 The observations made by the inspector during the inspection of the ATM facilities & procedures are recorded by him/her in checklist.

5.8.2.1.11 On the last day of the inspection the inspector lists his observations and discusses it with the unit In-charges.

5.8.2.1.12 An exit meeting is conducted on the last leg of the inspection wherein Airport Director along with all the Unit In-charges participates. Here the final observations are conveyed to all concerned.

5.8.2.1.13 The Inspector brings this list on return along with him for preparation of the report.

5.8.2.2 Inspection of CNS facilities

5.8.2.2.1 The ANSP i.e. AAI CHQ is required to submit the CNS manual/documents of the station and the filled checklist one month prior to the month of inspection for examination by this office.

5.8.2.2.2 The CNS manual and filled checklist is scrutinized in next seven days and discrepancies in the checklist, if any, are communicated to ANSP HQ for mitigation and resubmission.
5.8.2.3 If the resubmitted checklist is received before proceeding for inspection then it is carried along by the inspector otherwise it is collected at the time of inspection.

5.7.2.2.4 On the basis of the information provided in the CNS manual and checklist areas that need to be given more emphasis during physical inspection are identified, noted and a questionnaire is prepared to be used during inspection.

5.8.2.5 The duration of the tour is normally of 3 to 4 days (including journey period) and is decided depending upon the number of the facilities and the complexity of the CNS systems at the airport.

5.8.2.6 Approval for tour of the nominated CNS inspector is obtained, one week prior to the proposed date of tour, from the concerned Joint Director General.

5.8.2.7 On the basis of the approval AIC is applied for the Air tickets and tour order is signed by the Director (ANSS).

5.8.2.8 The tour order is forwarded to Executive Director (CNS) in AAI HQ, Executive Director of Region concerned and the Airport Director of the concerned airport for information and necessary arrangements.

5.8.2.9 On arrival at the airport inspector conducts an entry meeting with the Airport Director along with all the In-charges of CNS, ATM, Fire Services and C & E Engineering to get an overview of the station and facility.

5.8.2.10 Physical inspection of the CNS facilities is conducted and correlation with the check lists done.

5.8.2.11 Verification of performance parameters of the different CNS facilities is done using test equipment BITE system wherever required. A copy of all the latest record of performance parameters is obtained for each facility.

5.8.2.12 Availability of maintenance manuals and ICAO Annexure, Docs, DGCA CARs etc. is further verified.

5.8.2.13 The information recording in the maintenance schedules and their availability is checked. Any other records like that of Earth systems,
AC maintenance and Fire systems are also checked and copies of the latest records are obtained.

5.8.2.14 The Inspector gathers information about actual performance status of the CNS facilities by interacting with the maintenance personnel and the users.

5.8.2.15 The observations made by the inspector during the inspection of the CNS facilities are recorded by him on a separate note book.

5.7.2.2.16 On the last day of the inspection the inspector lists his observations and discusses it with the unit In-charges.

5.8.2.17 A final list of mutually agreed observations is then prepared.

5.8.2.18 An exit meeting is conducted on the last leg of the inspection wherein Airport Director along with all the Unit In-charges participates. Here the final observations are conveyed to all concerned.

5.8.2.19 The Inspector brings this list on return along with him for preparation of the report.

5.8.2.3 Inspection of Aeronautical Information Service (AIS) Provider

Based on the annual surveillance programme to inspect the AIS provider and International NOTAM offices, a formal notification of intention to perform the inspection will be forwarded in adequate time for necessary preparations for the inspection to be made. This notification will specify at least the following information:

5.8.2.3.1 The name of unit to be inspected;

5.8.2.3.2 The authority under which the inspection is conducted;

5.8.2.3.3 The proposed schedule;

5.8.2.3.4 The overall purpose of the inspection and the scope of the topics to be discussed;

5.8.2.3.5 The documentation required for inspection, and

5.8.2.3.6 The particulars of inspection team member(s).
Thereafter, following actions are taken:

i) Approval for tour of the nominated AIS/Aeronautical Maps & Charts Inspector will be obtained one week prior to the proposed date of tour from the concerned Joint Director General.

ii) On the basis of the approval, Air Tickets will be obtained and the tour order is signed by the Director ANS.

iii) The tour order is forwarded to the Executive Director ATM AAI CHQ and GM (CNS)/ GM (ATM) concerned for information and necessary arrangements.

iv) On arrival, the Inspector will conduct an entry meeting with the concerned GM (CNS)/ GM (ATM) to get an overview of the concerned facility.

v) Physical inspection will be conducted and correlation with the check list will be carried out.

vi) Availability of various manuals, documents, ICAO Annexure and DGCA CARs etc. is further verified.

vii) The duty log books / event log books will be checked. The serviceability of various communication facilities, photo copiers, internet facilities etc. will also be checked.

viii) The Inspector will interact with the designated officers responsible for the facility being inspected for eliciting more information with a view to ensure compliance.

ix) The observation made by the Inspector will be recorded on the check list and wherever required on a separate note book.

x) On the completion of the inspection the Inspector will list his observations and discuss with the GM (CNS)/ GM (ATM) and the in-charge of the facility for finalization of the observations.

xi) The Inspector will bring the final list of observations for preparation of the report in the Directorate of ANS.
5.8.2.4 Inspection of SAR Services

Based on the annual surveillance programme to inspect the SAR facilities a formal notification of intention to perform the inspection will be forwarded to the concerned station to be inspected in adequate time for necessary preparations required for the inspection to be made. This notification will specify at least the following information:

5.8.2.4.1 The RCC, RSC or SAR section to be inspected;
5.8.2.4.2 The authority under which the inspection is conducted;
5.7.2.4.3 The proposed schedule;
5.8.2.4.4 The overall purpose of the inspection and the scope of the topics to be discussed;
5.8.2.4.5 The number and type of staff who may be required for interview;
5.8.2.4.6 The documentation required by the inspection team, and the name of inspection team members.

Thereafter following actions are taken:

i) Approval for tour of the nominated SAR Inspector will be obtained one week prior to the proposed date of tour from the concerned Joint Director General.

ii) On the basis of the approval, Air Tickets will be obtained and the tour order is signed by the Director ANSS.

iii) The tour order is forwarded to the Executive Director ATM, AAICHQ and GM (ATM)/ Airport Director of the Station concerned for information and necessary arrangements.

iv) On arrival at the Airport, the Inspector will conduct an entry meeting with the concerned GM (ATM)/ Airport Director to get an overview of the concerned facility.

v) Physical inspection will be conducted and correlation with the check list will be carried out.

vi) Availability of various manuals, documents, ICAO Annexure and DGCA CARs etc. is further verified.
vii) The duty log books / event log books will be checked. The serviceability of various communication facilities, photo copiers, internet facilities etc. will also be checked.

viii) The checklists of various telephone numbers pertaining to various agencies providing Search and Rescue Services and Search and Rescue Facilities will also be checked at random for correctness.

ix) The Inspector will interact with the designated officers responsible for the facility being inspected for eliciting more information with a view to ensure compliance.

x) The observation made by the Inspector will be recorded on the check list and wherever required on a separate note book.

xi) On the completion of the inspection the Inspector will list his observations and discuss with the GM (ATM)/ Airport Director and the in charge of the facility for finalization of the observations.

xii) The Inspector will bring the final list of observations for preparation of the report in the Directorate of ANSS.

5.8.2.5 Inspection of PANS-OPS Services

5.8.2.5.1 Inspection of Flight Procedure Design (IFPD) office of Airports Authority of India (AAI) would be conducted at least once a year.

5.8.2.5.2 Advance intimation of at least 15 days would be provided to GM (FPD), AAI to make the necessary preparation for the inspection.

5.8.2.5.3 At least one procedure designer would be associated with the PANS-OPS inspector for the purpose of facilitations.

5.8.2.5.4 A minimum period of three days would be needed for the inspection. On the first day a meeting would be held with GM (FPD) to discuss the course of action during the inspection. On the last day a small briefing would be provided to GM (FPD).

5.8.2.5.5 The following actions shall be taken to examine the following during the inspection:

- Record control system of regulatory documents and reference material along with amendments.
Record control system of design drawings and worksheets;
Record control system of input data including items such as:
Aeronautical data, Obstacle data, survey data and charting
Records of personnel competence and qualifications;
Training (Basic and OJT) records of procedure designers;
Internal quality audits and corrective actions;
Control procedures for validation of software tools;
Control of non-conforming design;
System for drawing the instrument approach charts, SIDs/STARs charts.
System for maintenance and updating of procedures;
Any other item as considered necessary for procedure designing criteria associated with the safe aircraft operations.

5.8.2.5.6 The PANS-OPS inspector may conduct the audit of at least one procedure to be selected randomly to verify the compliance with the specifications of ICAO documents.

5.8.2.6 Inspection of Meteorological Service Provider

5.8.2.6.1 Based on the annual surveillance programme to inspect the Meteorological services provider at an airport, a formal notification of intention to perform the inspection will be forwarded in one week advance for necessary preparations for the inspection to be made. This notification will specify at least the following information:

i) The name of MET facility to be inspected;
ii) The proposed schedule;
iii) The documentation required for inspection, and
iv) The particulars of inspection team member(s).

5.8.2.6.2 The duration of the tour is normally of 2 to 3 days (including journey period) and is decided depending upon the type of MET facilities available at the airport.

5.8.2.6.3 Approval for tour of the nominated MET Inspector(s) will be obtained one week prior to the proposed date of tour from the concerned Joint Director General.
5.8.2.6.4 On the basis of the approval, Air Tickets will be obtained and the tour order is signed by the Director ANS.

5.8.2.6.5 The tour order is forwarded to the Deputy Director General of Meteorology (DDGM), Central Aviation MET Division (CAMD); DDGM of concerned Regional Meteorological Centre (RMC) and Meteorological Watch Office (MWO)/Aviation MET Office/Station (AMO/AMS) In-charge concerned for information and necessary arrangements.

5.8.2.6.6 On arrival, the MET Inspector(s) will conduct an entry meeting with the concerned MWO/AMO/AMS In-charge to get an overview of the concerned facility.

5.8.2.6.7 Physical inspection will be conducted and correlation with the check list will be carried out.

5.8.2.6.8 Availability of various registers, manuals, documents, ICAO Annexure and DGCA CARs etc. is further verified.

5.8.2.6.9 The serviceability of various MET instruments, communication facilities, internet facilities etc. will also be checked.

5.8.2.6.10 The Inspector will interact with the designated officers responsible for the facility being inspected for eliciting more information with a view to ensure compliance.

5.8.2.6.11 The observation made by the Inspector will be recorded on the check list and wherever required on a separate note book.

5.8.2.6.12 On the completion of the inspection, the MET Inspector will list his observations and discuss with the MWO/AMO/AMS In-charge for finalization of the observations.

5.8.2.6.13 The Inspector will bring this list of observations for preparation of the report.

5.8.3 Report writing

5.8.3.1 The information collected during inspection and the final list of findings is prepared and submitted to Director ANSS for discussion and vetting within 30 days after the completion of inspection. The findings are classified in two levels:

- **Level 1 (L1)** - any significant non-compliance with the applicable requirement which lowers the safety standard and hazards seriously the flight safety.
- **Level 2 (L2)** - any non-compliance with the applicable requirement which could lower the safety standard and possibly hazard the flight safety.

> Note: Level 1 finding observed by the inspector during the inspection will be informed to the service provider after discussing with Director (ANSS) to act upon it immediately.

5.8.3.2 In the next 2 to 3 days the above list of findings will be forwarded to the service provider.

### 5.8.4 Follow up action

5.8.4.1 **For Level 1 finding**: Level 1 finding has to be resolved **immediately (within 7 days)** by the service provider and the same should be informed to the DGCA through suitable means.

**For Level 2 finding**: The service provider shall establish and submit a corrective action plan (CAP)/ ATR for level 2 findings within a period of 45 days.

Service provider’s CAP for level 2 findings should be as follows:

<table>
<thead>
<tr>
<th>DETERMINED ACTION LEVEL</th>
<th>TIME FRAME FOR ELIMINATION OF DEFICIENCIES IDENTIFIED BY INSPECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>60 days from the date of receipt of the inspection report.</td>
</tr>
<tr>
<td>Medium-term</td>
<td>90 days from the date of receipt of the inspection report.</td>
</tr>
<tr>
<td>Long-term</td>
<td>180 days from the date of receipt of the inspection report.</td>
</tr>
</tbody>
</table>

> Note: A single ATR may contain details of action taken i.r.o. L1 and L2 findings).

5.8.4.2 The ATR is examined and the issues that are mitigated are removed from the list of pending issues.

5.8.4.3 After submitting initial ATR and CAP, updated status on pending findings is required to be submitted till compliance is achieved against all the findings of the inspection.
5.8.4.4 Where the service provider could not implemented the CAP within the said period, it may be granted a further period of 15 days by the Director (ANSS). The past performance of the organization will be considered while granting the additional time period.

5.8.4.5 Where the organization fails to implement the corrective action within the time frame agreed with DGCA and no reasonable and justified reasons are assigned, necessary enforcement action will be initiated against the organization or the person responsible as per the guidelines mentioned in enforcement policy of DGCA from time to time.

5.9 INSPECTOR CREDENTIALS

5.9.1 DGCA Inspector Identification that identifies the Inspector as an “Authorized Person” shall be issued by Director General of Civil Aviation for the purpose to perform the duties and exercise the powers. An Inspector must display his credential while working in these areas and be permitted entry into airport secured areas.

5.9.2 If the credential is lost, stolen, or damaged, the Inspector should report the occurrence immediately to the Director of ANS.