




ANS SAFETY OVERSIGHT MANUAL

Fifth Edition, July 2022

(i) RECORD OF AMENDMENTS AND CORRIGENDA

AMENDMENTS				
<i>No</i>	<i>Date applicable</i>	<i>Date entered</i>	<i>Entered by</i>	<i>Subject(s)</i>
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6	05.01.23	05.12.22	ANS	Inspector qualification, training policy & programme, enforcement actions (follow-up audit), and staffing needs.
1-6	Incorporated in this edition			
<p><i>Note: The amendments are identified by a vertical line in the left margin (or immediately to the left) of the change/addition.</i></p>				

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(iii) FOREWORD

The ANS Safety Oversight Manual has been developed based on the Civil Aviation Act of Bhutan 2016 and ICAO Doc. 9734 (Safety Oversight Manual) to describe the procedures for safety oversight of air navigation services and to provide guidance to the ANS Inspectorate of BCAA in implementing applicable aviation rules and regulations. This document also contains job descriptions, responsibilities and minimum qualification requirements for ANS inspectors.

It is strictly forbidden for persons or agencies to reproduce, reformat or transmit this document, or any part thereof, for commercial sales purposes including photocopying, recording, or through information storage/retrieval systems, unless otherwise permitted to do so by the BCAA.

Furthermore, the BCAA, expressly disclaims all and any liability to any person, in respect of anything done or omitted, and the consequences of anything done or omitted, by any such person relying solely on the contents of this manual.

This edition hereby supersedes the fourth edition of the manual that was published in March, 2022.


The information contained in this manual is subject to review with changing rules and regulations.



Director

Date: 30/06/2022

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(iv) ABBREVIATIONS

AIP – Aeronautical Information Publication

AIS – Aeronautical Information Service

ANAD – Air Navigation and Aerodrome Division

ANS – Air Navigation Services

ANSP – Air Navigation Service Provider

ATC – Air traffic control

ATS – Air traffic service

ATM – Air Traffic Management

BCAA – Bhutan Civil Aviation Authority

BCARs – Bhutan Civil Aviation Requirements

CAAB – Civil Aviation Act of Bhutan

CAP – Corrective Action Plan

CNS – Communication, Navigation and Surveillance

FPDAM – Flight Procedure Design and Management

HoA – Head of Authority

ICAO – International Civil Aviation Organisation

NOTAM – Notice to Air Missions

PANS-OPS – Procedures for Air Navigation Services – Aircraft Operations

RNAV – Area navigation

SARPs – Standards and Recommended Practices

SMS – Safety management system

SSP – State safety programme

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CHAPTER 1. DEFINITIONS

Air Navigation Services (ANS): Air traffic services; communication, navigation and surveillance services; meteorological services for air navigation; aeronautical information services; PANS-OPS and Search and Rescue.

ANS Inspectorate: The inspectors within the BCAA performing safety rulemaking and the oversight functions in relation to ANS.

Air Navigation Service Provider (ANSP): Person or organization, or designated representative of an organization, which is subject to regulation by the ANS Inspectorate.

Air Traffic Management (ATM): The aggregation of ground-based (comprising variously ATS, ASM, ATFM) and airborne functions required to ensure the safe and efficient movement of aircraft during all appropriate phases of operations.

ATM System: The part of the ANS system is composed of a ground-based ATM component and an airborne ATM component. The ATM system includes human, technical systems and procedures, and assumes the existence of a supporting CNS system.

Auditee: Person with responsibility and authority over the area to be audited.

Auditor: Authorized person carrying out a safety audit on behalf of the ANS Inspectorate.

ANS Inspector: The ANS Inspector or the designated representative for the purposes of a particular procedure.

Designated Authority: The competent body designated by the Royal Government of Bhutan responsible for ANS safety regulation.

Head of Authority: Director or Director General of BCAA.

Inspection: An extension to the Safety Regulatory Audit process to verify that the final product and/or service complies with requirements and approved procedures and processes as well as the effectiveness of those procedures and processes.

Point of Responsibility (POR): Point of Responsibility - point nominated within the ANS Inspectorate to receive the audit report and undertake appropriate actions with regard to the findings of the audit.

Safety Directive: A document issued or adopted by BCAA which mandates actions to be performed on a system to restore a tolerable level of safety, when evidence shows that aviation safety may otherwise be compromised.

Safety Oversight: The function undertaken by the ANS Inspectorate to verify that safety

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regulatory objectives and requirements are effectively met.

Safety Regulation: The process of rulemaking for and oversight of all the safety related aspects of the ANS systems, procedures, practices and personnel under the control of the service provider.

Safety Rulemaking: The process by which safety objectives and requirements are set.

Safety Regulatory Audit: A systematic and independent examination conducted by the ANS Inspectorate to determine whether complete safety-related arrangements or elements thereof, to processes and their results, products or services, comply with required safety-related arrangements and whether they are implemented effectively and are suitable to achieve expected results.

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CHAPTER 2. BHUTAN CIVIL AVIATION AUTHORITY (BCAA)

2.1 Introduction

- 2.1.1 The BCAA was established in 2015 after the bifurcation of the erstwhile Department of Civil Aviation (DCA) with the mandate of regulating safety and security in civil aviation. The Civil Aviation Act of Bhutan (CAAB) 2016 mandates that a board be formed. Accordingly, the first board was formed in August 2018.
- 2.1.2 As per Section 13 of the CAAB 2016, the Authority shall be a legal entity operating within the laws of Bhutan responsible for:
- a) Regulation of civil aviation activities in the country including regulation of aircraft and certification of commercial air carriers;
 - b) Safety and security of civil aviation;
 - c) Licensing of aviation personnel and organisations;
 - d) Certification of the aeronautical telecommunications system, airports and aerodrome services, facilities and infrastructures;
 - e) Accident/Incident prevention programme;
 - f) On the basis of findings from the investigation of civil aircraft involved in an accident or incident with a Military aircraft occurring in the territory of the State of the Authority or within the Military site, take any corrective action intended to prevent similar accidents or incidents in coordination with the military; and
 - g) Issuing Civil Aviation Requirements, Circulars and publication of annual safety report; and
 - h) oversight, safety/security standards and implementation process through routine surveillance audits, inspection and corrective measures.

2.2 Vision

An Exemplary, safe and secure civil aviation system in the region.

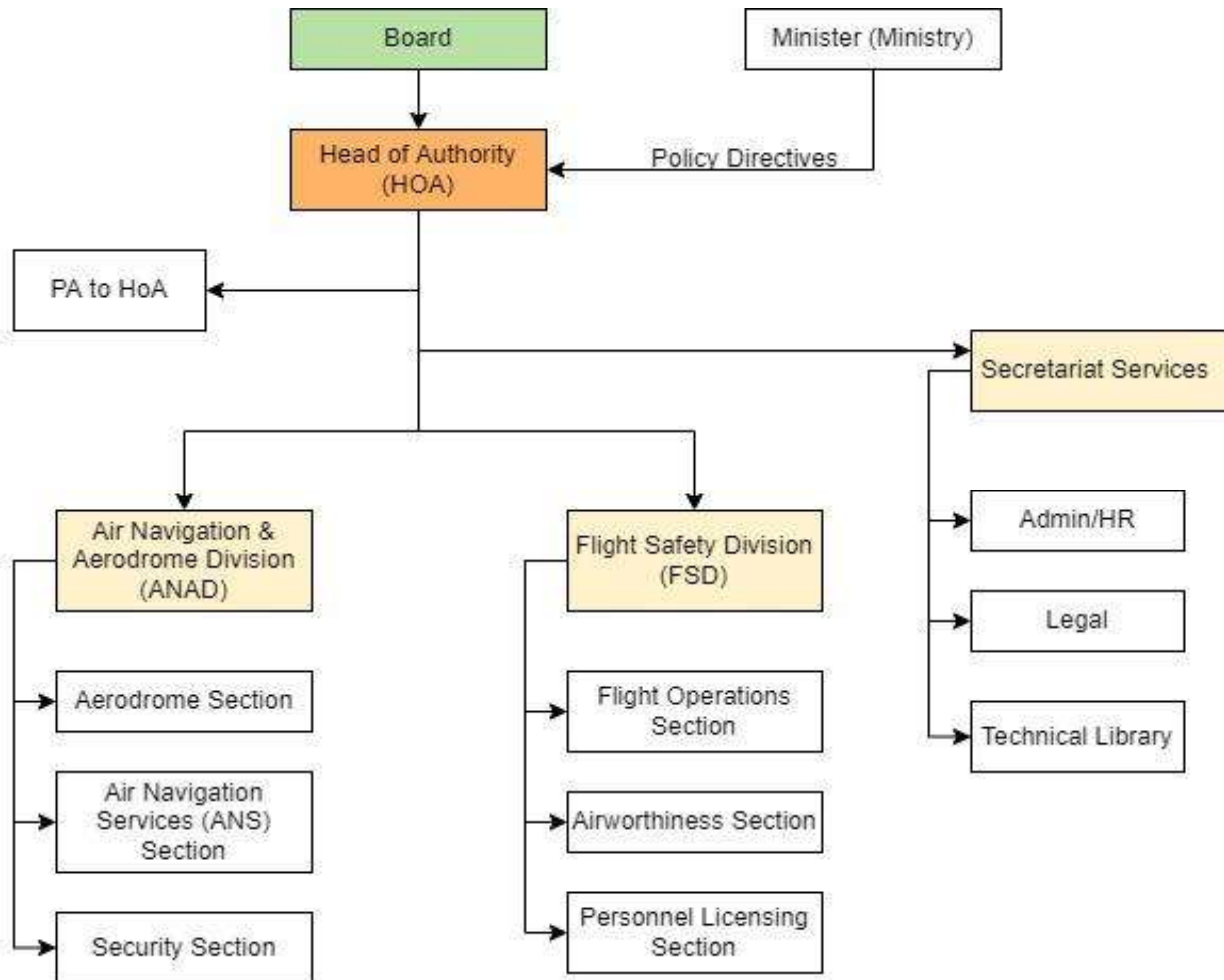
2.3 Mission

- Ensure aviation safety and security standards through continuous oversight functions in line with the best international practices.

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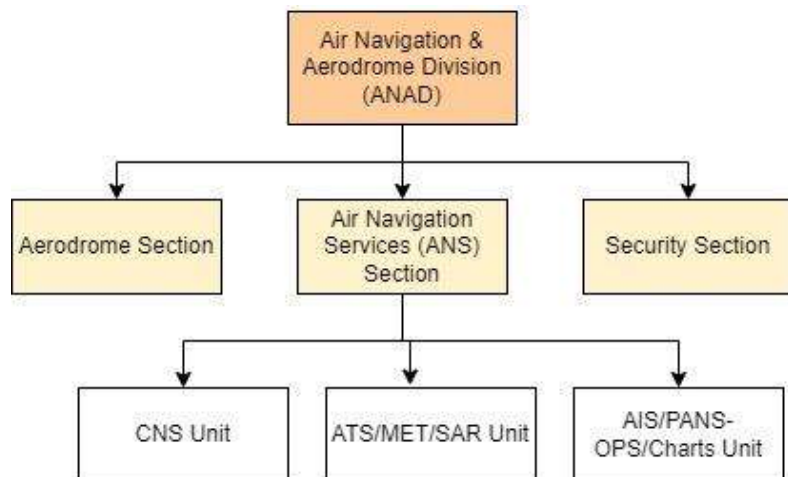
- To provide continued effective oversight functions through competent professionals.
- Facilitate air connectivity through international collaboration.
- Regulate and foster general aviation activities.

2.4 Organizational Structure of BCAA

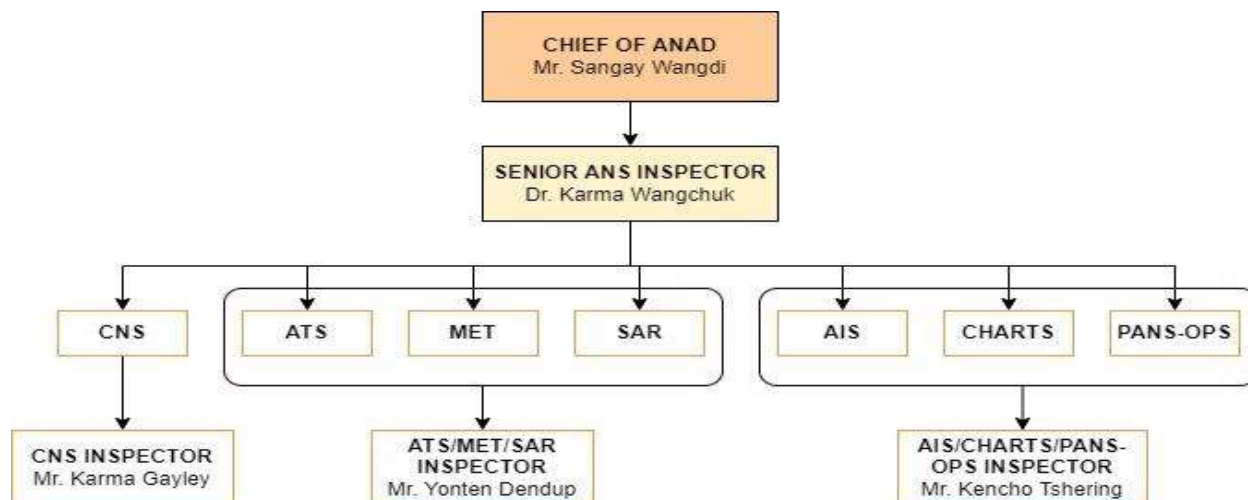




2.5 Organisational Structure of Air Navigation and Aerodrome Division (ANAD)



2.6 Organisational Structure of ANS Section



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2.7 ANS Section Staffing Methodology

2.7.1 Introduction

2.7.1.1 The ANS Inspectorate is required to establish a process to determine the number of inspectors required to perform safety oversight functions covering the entire range of ANS specialties.

2.7.1.2 The methodology described herein aims at providing a mechanism for determining the number of inspectors required to perform ANS safety oversight duties and responsibilities, and to ultimately ensure that the ANS Inspectorate has sufficient human resources to meet its safety oversight obligations.

2.7.1.3 To be able to carry out all the ANS related safety oversight activities, a mix of disciplines is required within the Inspectorate. In determining staffing needs for the ANS Inspectorate, the mix of disciplines required for oversight must be considered.

2.7.2 Factors to be considered when determining ANS oversight staffing needs

2.7.2.1 The ANS Inspectorate is required to establish a process to determine the number of inspectors required to perform safety oversight functions covering the entire range of ANS specialties.

2.7.2.2 The following factors should be taken into account:

- a) Scope of work for each ANS oversight area (individual tasks based on the ANS BCARs requirements and inspector job descriptions contained in Appendix-A of this manual);
- b) The volume of work within each ANS oversight area (based on level of activity); and
- c) Available working days (7hours/day) per year.

2.7.2.3 Tasks to be considered should include actual oversight tasks, including ANS approvals, development and amendment/review of regulations and technical guidance material, and surveillance activities. In addition, the time needed for training, inspector leave days, weekends and national holidays and attendance of meetings and conferences should be factored in, when calculating working hours available.

2.7.3 Available working hours per inspector/employee in a year

Every ANS area (ATS, SAR, CNS, AIS, Cartographic, MET, and PANS-OPS) must calculate its staffing needs, based on the available number of days for carrying out its workload. The following table provides the number of available working days per year for a staff:

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Item	Item description	Days
1.	Total calendar days in a year	365
2.	Weekend days (for 52 weeks)	104
3.	Declared public holidays in a year	24
4.	Local festivals (Tshechu/Dromchoe) in a year	5
5.	Other ad-hoc off days	3
	Available working days in a year (1 minus 2, 3 & 4)	229
6.	Total working hours per day	7 hours
7.	Total working hours per year	1603

2.7.4 ANS Inspectorate staffing needs

2.7.4.1 The total inspectors required for each ANS area are shown in the table below:

Sl. No.	ANS Area		Required working hours for each area in a year *	Total required working hours in a year	Total available working hours per Inspector in a year	No. of inspectors required* *
1.	AIS	AIS	1084	2158	1603	1.35
		Cartography	554.5			
		PANS-OPS	519.5			
2.	ATS	ATS	1847	3632.5	1603	2.27
		MET	1084			
		SAR	701.5			
3.	CNS	CNS	1830.5	1830.5	1603	1.14

* The detailed mechanism used for calculation of the total working hours required for each ANS area are provided in Appendix B of this manual.


** Decimal numbers should be rounded to the nearest whole number.

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2.7.4.2 Depending on the scope of the activities the related ANS area are combined under one ANS area and the responsibility is assigned to an inspector. This arrangement will be assessed every five years coinciding with the Royal Government's Five-Year Plan period.

2.7.4.3 The above staffing requirements are in addition to one Sr. ANS Inspector who shall be responsible for administrative matters and able to stand in for any of the inspectors in their absence.

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CHAPTER 3. GENERAL

3.1 Purpose

This manual describes the functions of ANS safety oversight with descriptions of principles underlying their application. The aim of safety oversight is to verify the uniform application of all applicable rules and regulations by ANSPs in their area of responsibility. The manual also describes detailed procedures, processes, forms, and other internally used documents.


3.2 Legal and Regulatory Basis for ANS’ “Safety Regulation and Safety Oversight”

3.2.1 Legal framework

The regulatory requirements and standards applicable to ANSPs are:

- BCAR - ATM/ANS, contains certification requirements for ANSPs
- BCAR - ATCO-PEL, contains personnel licensing requirements for air traffic controllers
- BCAR - 1, incorporating ICAO annex 1 – Personnel Licensing
- BCAR - 2, incorporating ICAO Annex 2 – Rules of the Air
- BCAR - 3, incorporating ICAO Annex 3 – Meteorological Service for International Air Navigation
- BCAR - 4, incorporating ICAO Annex 4 – Aeronautical Charts
- BCAR - 5, incorporating ICAO Annex 5 – Units of Measurement to be used in air and ground operations
- BCAR - 10, incorporating ICAO Annex 10 – Aeronautical Telecommunications
- BCAR - 11, incorporating ICAO Annex 11 – Air Traffic Services
- BCAR - 12, incorporating ICAO Annex 12 – Search and Rescue
- BCAR - 15, incorporating ICAO Annex 15 – Aeronautical Information Services
- BCAR - 19, incorporating ICAO Annex 19 – Safety Management
- Other relevant ICAO documents and international standards and requirements

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3.2.2 BCAA principles of safety regulation and safety oversight

- 3.2.2.1 The BCAA is independent of the ANSPs and shall monitor safety performance through regular monitoring and assessment of the levels of safety achieved against the tolerable levels of safety determined by the BCAA.
- 3.2.2.2 The results of the safety monitoring will be used by BCAA to determine areas where the verification of compliance with regulatory requirements is necessary as a matter of priority. The BCAA will take action as appropriate in the identified areas of concern.
- 3.2.2.3 To achieve a common safety goal the relationship between BCAA and ANSPs should be that of a partnership.
- 3.2.2.4 The BCAA shall set and oversee regulatory requirements required to maintain the safety of the ANSPs' systems. Regulatory activity shall be kept to the minimum practical level consistent with effective safety regulation and safety oversight.
- 3.2.2.5 The BCAA shall monitor the investigation, or conduct its own investigation as necessary, of reportable events.
- 3.2.2.6 The BCAA shall ensure that all regulatory and oversight functions are carried out by personnel who are appropriately qualified. Audits will only be conducted by suitably trained and qualified inspectors.
- 3.2.2.7 All safety related aspects of the technical systems, procedures, practices and personnel under the control of the ANSP shall be regulated.


3.2.3 ANSP principles of safety regulation and safety oversight

- 3.2.3.1 All safety related aspects of the technical systems, procedures, practices and personnel under the control of the ANSP shall be regulated.
- 3.2.3.2 The primary responsibility for the safety of the ANS rests with ANSPs.
- 3.2.3.3 ANSPs shall have a Safety Policy Statement that is approved by the head of management within the organization.
- 3.2.3.4 ANSPs shall use an effective Safety Management System (SMS) for verification of the safety of the services provided by them, and that of any service used by them.
- 3.2.3.5 Regulatory approval from BCAA shall be obtained for all safety related aspects of their service.

3.2.4 Implementing the principles of ANS safety regulation and safety oversight

The BCAA shall implement the principles through two main procedures: 'Rulemaking' and

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‘Oversight’, and their related procedures are contained in Chapter 4 of this manual.

3.2.5 Safety rulemaking

3.2.5.1 Safety requirements are set by the rulemaking procedure. It consists of the definition of applicable safety requirements and associated standards and practices to ensure that the determined national tolerable levels of safety and any appropriate regulatory provisions that result from international or national obligations are complied with.

3.2.5.2 Those principles of the rulemaking procedure are equally applicable to the production of other forms of regulatory material, including standards, recommended practices and policies, promulgated acceptable means of compliance, and guidance material.

3.2.6 Safety oversight

The procedures for safety oversight, both initial and ongoing, in general, may be defined as tasks undertaken by a designated authority to verify that the defined safety regulatory objectives and requirements are met in an effective manner.

The BCAA will obtain the verification primarily through the conduct of audits or by analyzing the output or the effectiveness of the ANSP’s processes and procedures.

The BCAA may engage the services of specified organizations or experts from other organizations to conduct audits on behalf of the ANS Inspectorate. These organizations and experts need specific authorization from BCAA.

3.2.6.1. Initial safety oversight

The procedures to gain objective information to enable a decision to be made to permit an ANS organization to operate in a particular ATM functional area as well as the introduction of new systems and changes to existing systems. Safety regulatory auditing will be used to obtain information to assist the ANS Inspectorate in making decisions relating to the initiation of operations by an ANSP.

This procedure is termed “Initial Oversight”.


Initial oversight may also be required following changes to the organization or infrastructure of the service provider in order to verify that the changes have not negatively impacted the service provider’s ability to continue to provide services with the necessary level of safety.

The responsibility to demonstrate to the ANS Inspectorate that the resulting system will meet all appropriate safety requirements throughout its complete lifecycle lies with the specific ANSP.

3.2.6.2. Ongoing safety oversight

Following initial oversight, the ANS Inspectorate will need to implement an annual surveillance programme designed to verify the continued effective operation of the service provider’s

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management and hence allow for the continued operation of the ANSP.

This procedure is termed “On-going Oversight”.

Ongoing safety oversight includes all procedures undertaken by the ANS Inspectorate to verify that safety objectives continue to be met for the operational lifetime of the function or system.

The verification procedures of the ongoing safety oversight include the monitoring of safety performance and safety regulatory audits and inspections which are normally done routinely.

Ad-hoc audits and inspections may be initiated where received information suggests that such action is necessary.

3.3 Complains to BCAA

Should a person or organization wish to complain about any aspect of BCAA policy and procedures herein or have any grievance in respect of their application, that person or organization should inform the HoA at the address below. The complaint should provide sufficient information to enable a proper response.

Bhutan Civil Aviation Authority

Paro International Airport

Tel: +975 08 271347

E-mail: bc aa@bc aa.gov.bt or bc aa-techdiv@bc aa.gov.bt

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CHAPTER 4. ANS SAFETY OVERSIGHT PROCEDURES

4.1 Procedure 1 – Audit Management

Guidance:

Auditing means all procedures used to obtain independent evidence that will provide confidence in the effective operation of a safety management system that has been designed to enable an organization to meet defined objectives or regulatory requirements. It is an in-depth review of the activities of an organization to verify conformance to defined objectives or regulations and standards.

An inspection, however, is the basic activity of an audit, involving examination of a particular element of the system with a much smaller scope. An inspection can also be carried out on its own and does not need to be part of an audit.

Safety regulatory audit/inspection is an audit/inspection organized by the ANS Inspectorate in order to obtain confidence in the ability of the ANSP to operate effective management of safety that meets the applicable safety regulatory requirements and provides a safe service.

To ensure that safety regulatory audits/inspections are effectively managed, audits/inspections need to be organized in a planned and systematic manner to provide the ANS Inspectorate, through its designated “point of responsibility”, with appropriate information to support the initial oversight and the on-going oversight of ANSPs.

The senior ANS inspector shall always be in full control of the audit procedures and of the auditors.

The ANS Inspectorate should use an internal audit process as a means of monitoring the continued compliance with their own safety regulatory audit procedures.

Objective:

To ensure that the ANS Inspectorate meets its responsibilities in respect of auditing the effective implementation of all applicable regulatory requirements.

Scope:

This procedure describes all stages of the ANS Inspectorate activities in the planning and conduct of audits/inspections of ANSPs against applicable regulatory requirements. It includes the determination of the required qualification and training of the ANS Inspectorate.

Responsibility:

The Chief of Air Navigation and Aerodrome Division (ANAD) has the overall responsibility for

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the implementation, review and revision, as necessary, of the safety oversight activity, including the safety regulatory audit process/procedures. He/she is responsible for resourcing the various functions.

The ANS audit/inspection management procedures

The audit management procedures consist of the following stages/processes:

- a) Surveillance programme
- b) Annual Surveillance plan
- c) Audits/inspection:
 - (i) Scheduled/planned audits/inspections
 - (ii) Ad-hoc audits/inspections
 - (iii) Conduct of audits/inspection
 - (iv) Audit/Inspection report requirements
 - (v) Classification of non-compliances including identified unsafe conditions
 - (vi) Follow-up actions
 - (vii) Special procedures if unsafe conditions are found during audits/inspections
- d) Qualification and training requirements.

4.1.1 Surveillance programme

4.1.1.1 The surveillance programme will be established for each ANS area which includes, at a minimum, the elements below:

- a) the types of surveillance activities (e.g. audits, inspections, tests, safety events analyses);
- b) the timeframe or frequency of the activities;
- c) items to be covered or scope of the activities; and
- d) related methodology/procedures, job aids and guidance on how the activity should be conducted, starting from the notification of the service provider, if applicable, to the closure of the deficiencies identified during the activities.

4.1.1.2 The ANS surveillance programme is provided in **Appendix C** of this manual.

4.1.2 Annual surveillance plan

4.1.2.1 For each individual or ANSP approved to carry out ANS activities, an annual surveillance plan will be developed based on the surveillance programme. The surveillance plan will detail the type of activities to be performed and the specified timeframe as well as the

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scope of each activity, as applicable. The timeframe and frequency of surveillance activities may be adapted for each ANSP, based on the information available.

4.1.2.2 The annual surveillance plan will be developed by the Chief of ANAD and will be approved by the HoA every June.

4.1.3 Audits/inspection


4.1.3.1 Auditing/inspection is a process requiring an independent auditor to search for evidence in order to verify that a system is functioning in the way that the organization has declared that it should function in order to meet applicable safety requirements.

4.1.3.2 The audit will always be a sampling activity, never a 100% check, and is designed to provide confidence in an organization's ability to meet applicable regulatory requirements and to operate a safe system.

4.1.3.3 Audits involve the collection of evidence in order to verify that what should be happening is actually happening. This requires the auditor to work with information obtained from interviews and questioning of staff and undertake the necessary investigations to find the evidence that proves compliance or noncompliance as the case may be.

4.1.3.4 The audit/inspection checklist for ANS areas (AIS, ATS, Charts, CNS, MET, PANS-OPS, SAR) are maintained independently by respective ANS inspectors. The list of audit/inspection checklists for ANS areas is as provided in the table below:

Sl. No.	Area	Checklist Reference No.
1.	BCAR-ATM/ANS	BCAA/CL/ATM-ANS BCAA/CL/PANS-ATM
2.	BCAR-ATCO-PEL	BCAA/CL/ATCO-PEL
3.	BCAR-2	BCAA/CL/BCAR-2
4.	BCAR-3	BCAA/CL/BCAR-3
5.	BCAR-4	BCAA/CL/BCAR-4
6.	BCAR-10	BCAA/CL/BCAR-10
7.	BCAR-11	BCAA/CL/BCAR-11
8.	BCAR-12	BCAA/CL/BCAR-12
9.	BCAR-15	BCAA/CL/BCAR-15

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10.	BCAR-IFP	BCAA/CL/BCAR-IFP
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4.1.3.5 Audits/inspections can be performed as:

- planned/scheduled in accordance with the published annual surveillance plan;
- additional “ad-hoc audits”; or
- “desk audits” (the auditor will check the documentation/written procedures against regulatory requirements).

4.1.3.6 Planned/scheduled audits and ad-hoc-audits shall include an on-site visit; desk audits do not include an on-site visit.

4.1.3.7 *Scheduled or programmed audits*

- The ANS Inspectorate will notify each ANSP of the audit scope 30 days before the scheduled commencement of an audit.
- 15 days before the scheduled audit, the ANS Inspectorate shall appoint an audit team leader and an audit team, if necessary, suitable to the audit task.

4.1.3.8 *Ad-hoc audits*

- The ANS Inspectorate may initiate an ad-hoc audit for an ANSP or at a specific unit when received information or other evidence suggests that such action is necessary.
- Such evidence will normally arise from previous audits; performance indicators or from a trend observed in occurrence reports. In such circumstances, notification to the ANSP shall be at the discretion of the Chief of ANAD.

4.1.4 Audit/inspection planning

4.1.4.1 In order to make the best/effective use of the time available, audits must be planned. Such planning must ensure that specialist knowledge held by individual auditors is also put to best use and that neither the audit team’s nor the staff members of the audited organization’s time is wasted.

4.1.4.2 The planning process must include all phases of the audit, including any document review and report preparation as well as the on-site visit.

4.1.4.3 An individual audit forms part of an overall safety oversight process. The audit team may need to take account of the findings of previous audits and other information provided by the ANS Inspectorate or the service provider when planning their work.

4.1.4.4 The audit team leader should ensure that the audit plan takes account of such actions in order to ensure that sufficient resources are available.

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4.1.4.5 The auditor must always remain in control of the process of information gathering otherwise the results will be of limited value. In order to remain in control auditors will need to consider in advance of the audit what evidence they require and a general plan or strategy that will be adopted to obtain this evidence in a systematic and unbiased way. They will therefore need to undertake sufficient audit planning in advance of the audit.

4.1.4.6 The audit planning will need to be undertaken at two levels:

- a) Planning the visit to the ANSP; and
- b) Planning the audit activities to be undertaken during the visit.

4.1.4.7 It is the primary responsibility of the audit team leader to ensure the adequacy of audit planning and the following of plans by individual auditors to ensure the achievement of audit objectives.

4.1.4.8 Preparation for an audit/inspection:

a) Responsibility: ANS Inspectorate

The audit team leader should be appointed by the ANS Inspectorate among the auditors.

b) Responsibility: Audit team leader

Ensure that the audit purpose, scope, and objectives are clearly defined and understood before proceeding with the audit activity.

c) Responsibility: Auditor

Preliminary preparation for the audit requires the auditor to:

- develop an understanding of the ANSP to be audited that is sufficient to enable the audit to be conducted;
- identify, or confirm with the audit team leader, which specific provisions of the applicable safety regulatory requirements are to be verified and in which areas of the ANSP, or in relation to which regulatory requirements;
- determine a suitable audit visit schedule;
- communicate with the organization to be audited to advise them of the audit intention, the objectives and scope of the audit, and where necessary the audit visit schedule to enable the ANSP to ensure availability of appropriate personnel.

4.1.4.9 Once the preliminary preparation has been undertaken, an audit visit schedule provided and an audit team put in place, the audit team leader shall meet with the audit team and allocate audit tasks to each auditor indicating clearly the areas or specific processes, that they are required to audit.

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4.1.4.10 In some cases, it may be appropriate for the auditor(s) to undertake a “pre- audit visit” in order to obtain the necessary information to enable the auditor to begin planning the audit. Such visits may involve guided tours of the facility and explanations of how the organization functions.

4.1.4.11 The auditor may also request key documents that will be used to assist his/her understanding and facilitate audit planning.

4.1.5 Conduct of audits/inspection

4.1.5.1. Responsibility

a) ANS Inspectorate

The main responsibilities of the ANS Inspectorate are:

- Receive the audit report produced by the auditors;
- Ensure that the audit findings are communicated to the senior management of the ANSP audited;
- Request corrective action to address the non-compliances identified;
- Assess the corrective actions determined by the auditee, and accept them or not;
- Keeping proper records;
- Undertake additional actions if required, such as providing inputs to:
 - support the decisions related to the oversight procedures;
 - allow the Chief of ANAD to maintain and refine the annual surveillance plan (e.g., as regards follow up audits);
 - inform the Chief of ANAD as regards the need for sanctions in accordance with the existing regulatory framework.

b) Audit team leader

Audit team leaders have specific responsibilities in relation to the audit process – they are placed in overall charge of the audit.

The specific responsibilities of the audit team leader include:

- Coordinating with the Chief of ANAD and HoA;
- Ensuring that audit plans are followed by individual auditors;
- Liaising with the ANSP and ensuring the adequacy of communication with the main point of contact in the service provider throughout the duration of the audit visit;
- Assisting the audit team members to undertake specified audit tasks;

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- Finalizing the audit report and submitting it to the HoA.

c) Audit team members (auditors)

The auditors, including the audit team leader, should be responsible for:

- Complying with applicable audit procedures and working practices, communicating and clarifying them appropriately;
- Planning and carrying out assigned responsibilities effectively and efficiently;
- Studying key documents to facilitate their understanding of the service provider and processes forming the subject of the audit;
- Verifying the requirements assigned by the audit team leader within the time allocated;
- Documenting the observations and reporting the findings;
- Retaining and safeguarding audit documentation in accordance with the procedures established for audits;
- Keeping confidentiality with regard to findings of the audit and the information gathered during the audit.

4.1.5.2. Conduct of audits (on-site phase)

It is the responsibility of the audit team leader to ensure the adequacy of communication with the ANSP’s main point of contact and that the audit is conducted in a fully acceptable and open manner throughout all stages of the audit.

The time of arrival of the audit team, together with the intention to hold a brief audit entry meeting, should be confirmed with the ANSP.

a) Audit entry meeting

Upon arrival at an ANSP and before commencing any audit activities the audit team leader should hold a brief audit “Entry” meeting in order to:

- introduce the audit team;
- communicate the objectives and scope of the audit; and
- provide details concerning the basic audit process to ensure that both parties have a clear understanding of how the audit is to be undertaken.

The entry meeting is an opportunity for the audit team leader to ensure that the ANSP management understands and feels comfortable with the process that is about to be undertaken.

b) The audit investigation

It is the responsibility of the audit team leader to ensure that audit investigations are

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conducted effectively and that the audit objectives are achieved.

The audit team leader is responsible for managing the audit and the audit team, and for acting as the main communication channel with the ANSP throughout the audit process.

Each auditor is responsible for verifying the compliance with applicable requirements within the time allocated, and for ultimately ensuring that they satisfy their respective audit objectives.

If the audit is being conducted over several days the audit team leader should consider offering a short meeting at the end of each day during which audit results obtained so far may be indicated to a designated member of the management team.

Detailed discussion concerning any findings should be avoided; however, it may provide opportunities for clarification on either side.

c) Audit exit meeting

Before leaving the audited ANSP, the audit team leader should always ensure that the audit findings are presented to the audited ANSP both verbally and in writing.

It is good practice to conduct a short exit meeting, chaired by the audit team leader and attended by all audit team members and to which the management team of the audited ANSP is invited.

The audit findings are to be clearly presented to the audited ANSP by means of a short presentation by the audit team leader, and copies of the audit findings in the form of well-written non-compliance statements are passed to the audited ANSP.

Exit meetings should be brief and should not be used to debate the findings. It is only necessary to ensure that the ANSP understands the findings. It is important that all findings are expressed factually and objectively and that they are not merely the auditor's.

As a general rule, auditors must NOT make any recommendations to service providers in relation to the specific corrective action that must be taken to overcome a reported audit finding as this will effectively transfer the ownership of the failed process from the service provider to the ANS Inspectorate and render the ANS Inspectorate liable to any resultant consequences.

d) Audit close-out

Once the ANS Inspectorate is satisfied that the root cause of an originally reported non-compliance has been addressed, and no further symptoms of the problem have been noted during the follow-up audit then the audit may be 'closed out'. This will require a formal sign-off of the original audit finding and associated corrective action to indicate that the follow-up audit has revealed no further similar findings and the audit report is 'closed'. The date of the follow-up audit and the verification action(s) should be recorded.

4.1.5.3. Indicators for the classification of non-compliance severity levels

Level 1: Any non-compliance with the applicable safety regulatory requirements which lowers the

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safety standard and significantly hazards the safety of aircraft.

Level 2: Any non-compliance with the applicable safety regulatory requirements which lowers the safety standard and may possibly hazard the safety of aircraft.

[Note: For those cases not requiring level 1 and level 2 findings, the authority will issue “Observation”.]

4.1.5.4. Special procedures if unsafe conditions are found during audits

Responsibility: Audit team leader

- The audit team leader shall immediately notify the HoA if an audit reveals an unsafe condition. Then the HoA will identify the severity level of the condition found using the indicators above.
- On notification, the HoA will, if an audit reveals ‘Level 1’ non-compliances, ensure immediate action is taken by the ANS Inspectorate.
- Depending on the case, measures taken may include:
 - The determination of corrective actions to be implemented by the auditee in a specific period of time;
 - The imposition of sanctions, operational restrictions, and any other enforcement measure such as the revocation or suspension of relevant approvals.
- For non-compliances with Level 2, the normal corrective action process should be followed.

4.1.6 Audit report

4.1.6.1 The ANS Inspectorate shall develop an audit reporting process and report formats to support the Inspectorate’s needs with regard to initial and ongoing oversight. Auditors are required to use this process and the report formats to communicate the results of audits within the Inspectorate.

4.1.6.2 The audit team leader will create and forward an audit report, including the details of the non-compliances and their severity levels, to the Chief of ANAD no later than 14 days after the end of the audit.

4.1.6.3 The ANS Inspectorate should communicate as a minimum the following information to ANSPs within a reasonable timeframe of the audit visit:

- date of oversight visit (on-site phase)
- auditor(s)/audit team
- observers/specialists accompanying the auditors

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- objectives and scope of the oversight audit
- schedule (*areas of the ANSP visited together with times spent in each area*)
- details of non-compliances identified by the audit team
- requirements for corrective actions, (*including timeframes - determined by perceived significance/impact on safety*)
- considerations for investigations (*relating to the auditor(s) general observations*)
- intended ANS Inspectorate’s audit follow up action(s)
- the ANS Inspectorate’s conclusions - (*relating to the continued operation, limited operations, sanctions, etc.*).

4.1.6.4 The ANS Inspectorate will:

- a) ensure that the audit findings are communicated to the senior management of the ANSP or other organization audited within 14 days of completion of the audit;
- b) ensure that for ‘Level 1’ findings, the audited ANSP takes immediate and appropriate corrective actions, and request the submission of corrective actions or plans for level 2 findings within 14 days from the date of receipt of audit/inspection report.

4.1.7 Audit record system

4.1.7.1 The ANS Inspectorate will need to be able to demonstrate to third parties that it is in full control of its safety oversight process and that judgments made relating to continued service provider operation are based on factual data.

4.1.7.2 The ANS Inspectorate should also be able to demonstrate that corrective actions in relation to reported non-compliances are being monitored and effectively verified for adequacy and that there is full justification for extensions to timescales for corrective action implementation.

4.1.7.3 Consequently, the ANS Inspectorate shall set up a safety regulatory audit records system that will not only serve as a repository for all audit records, but will also provide a valuable source of data to be used for future safety oversight planning, and provide evidence of an effective audit process to third parties.

4.1.7.4 The ANS Inspectorate shall ensure the retention and access to the records of all audit activities and related results.

4.1.8 Follow-up actions

Responsibility: Audit team leader

4.1.8.1 The team leader or his nominated representatives will:

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- a) assess, within 14 days after the receipt of corrective action plan (CAP) submitted by the ANSP. Those CAPs assessed by the service provider as sufficient to address the root causes of the identified non-compliances found in the audit will be accepted. The ANSP will be informed if any of the CAPs are not considered appropriate and are, therefore, unacceptable.
- b) review and notify the team leader his acceptance, or otherwise, of the timetable proposed by the service provider for the implementation of the agreed corrective actions.
- c) notify the ANSP of the timetable for completion of subsequent follow-up audits.
- d) maintain the “Safety Oversight Log” to demonstrate, in respect of each audit conducted:
 - the identified non-conformities;
 - the corrective actions;
 - target dates for their implementation;
 - the audit observations; and
 - completion of follow-up actions.

4.1.8.2 Follow-up on the implementation of the acceptable CAPs shall be conducted in accordance with procedure described in 4.8 [**Procedure 8**] of this Manual.

Responsibility: Audited ANSP

4.1.8.3 The audited ANSP’s CAP for Level 2 findings should be as follows:

CAP Category	Time frame for the elimination of identified deficiencies
Short term	30 days from the date of receipt of the audit/inspection report
Long term	180 days from the receipt of the audit/inspection report

4.1.8.4 It is the responsibility of the audited ANSP to confirm to the team leader the completion of agreed corrective actions. If in exceptional circumstances, it is not possible for these actions to be completed within the agreed time-scale, the team leader will require that an alternative plan is produced by the ANSP. A follow-up audit may be scheduled in order to establish the status of corrective actions or improvements.

4.1.8.5 When individual corrective actions are verified by the team leader as having been implemented and effective, the entry in the Safety Oversight Log will be signed off.

4.1.8.6 Annually, the ANS Inspectorate shall organize a review of all audit reports to establish trends and consider:

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- whether implemented corrective actions taken are considered effective;
- whether some findings have wider safety implications requiring closer attention;
- whether changes or improvements are needed to the audit procedures;
- whether lessons learned from the current year's audits are disseminated to all staff of the ANS Inspectorate.

4.1.9 Qualification and training

The Chief of ANAD must ensure that audits are conducted only by appropriately qualified and competent auditors of the Inspectorate. The training for ANS inspectors will be provided in accordance with the ANS Training policy, Training programme and Training plan contained in **Appendix D** of this Manual.

4.1.10 Audit forms

The relevant audit forms pertinent to the audit finding, observations, corrective action/plan and audit closeout are given in Appendices E to P of this Manual

4.2 Procedure 2: Certification/Approval of ANSP

[Note: The detailed procedures for certification/approval of ANSP are provided in the ANSP Certification Manual]

4.3 Procedure 3: Oversight of the introduction of changes in ATM system

Objective:

The objective of this procedure is to independently verify that:

- ATM system changes are assessed for safety significance;
- any associated risks are reduced to tolerable levels prior to the implementation of any change; and
- such risk assessment and mitigation address the total ATM system through the complete lifecycle of that system.

Scope:

This procedure applies to all changes to ATM systems and the supporting services under the managerial control of an ANSP.

Responsibility: Chief of ANAD

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The Chief of ANAD has overall responsibility for this procedure.

4.3.1 Guidance on the level of oversight needed

4.3.1.1 The level of safety oversight involved for the acceptance of a safety change to an ATM system depends on both:

- a) the significance of the change; and
- b) the level of maturity of the ANSP's safety management system.

4.3.1.2 The ANS Inspectorate will categorise the proposed change as follows:

a) **Category 1:** This will normally involve a (major) change to the ATM system that could introduce new hazards that have not been previously assessed. A full systematic safety assessment is necessary. This may involve extensive liaison with the service provider resulting in the delivery to the ANS Inspectorate of a safety case which will include the provision of some or all of the following documentation:

- an operational concept;
- a safety plan;
- a method of performing hazard identification, the hazard identification itself, the risk assessment and the risk mitigation strategy;
- a transition plan for the implementation of the change.

A programme of auditing of the new system will normally be undertaken to establish that the equipment, procedures and people continue to support and maintain a safe system at all times.

- b) **Category 2:** This change could introduce new hazards into the system. However, a similar change has already been assessed. A systematic safety assessment, based on the results of the previous assessment and the effects of the changes introduced, is necessary.
- c) **Category 3:** This refers to changes to an ATM system that do not result in hazards. These changes would normally be implemented directly through the ANSP's SMS procedure and be audited as part of ongoing safety oversight.

4.3.2 Notification procedure

Responsibility: ANSPs

4.3.2.1 ANSPs are required to notify their planned changes to the ANS Inspectorate, in advance even if their relation to safety is still unknown.

4.3.2.2 Changes that are related to safety shall be notified (including a proposal of the category of that change) as soon as they are planned and sufficient data are available about them, for example at the time they are budgeted or included in the business or annual plan.

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4.3.2.3 It is sufficient to get a copy of the change notification, fill it in, get it signed by the ANSP's safety manager and send it back to the ANS Inspectorate together with its mandatory attachments if any. Hard copies, as well as electronic versions of the notification form and its attachments, are accepted. Electronic versions shall be sent by the ANSP's safety manager.

4.3.2.4 Planned safety-related changes shall be notified as soon as possible.

4.3.2.5 ANSP(s) shall communicate to the ANS Inspectorate any modification associated with a safety-related change.

4.3.3 Notification receipt and oversight procedure

Responsibility: Chief of ANAD

- a) ANSP(s) shall communicate to the ANS Inspectorate any modification associated with a safety-related change.
- b) On receipt of such notification, the Chief of ANAD will nominate an auditor who will have ANS oversight responsibility regarding the proposed change.
- c) He/she will ensure that implementation of the change is subject to on-going oversight.

Responsibility: Nominated auditor

- a) This auditor will advise the ANSP Safety Manager within 7 days of any initial documentation required to enable a decision to be made on the requirement for and level of regulatory oversight of the change.
- b) Following receipt of the initial documentation the auditor will, within one month, consult the ANSP as necessary.
- c) Notify the ANSP safety manager of the extent of the safety case required in respect of the change.
- d) Agree with the ANSP safety manager, and document, the timescales and dates for the production and response to elements of the safety case.
- e) If appropriate, the nominated ANS oversight person will:
 - initiate the creation of an audit plan in respect of the change;
 - ensure that the planned audits are carried out.
- f) The auditor will establish a file on the change to which all relevant documentation will be attached, including records of any regulatory activity.
- g) He/she will ensure that records of documents of approval issued and associated documentation are kept according to the document control procedures and in such a manner that allows the ANS Inspectorate to track any documents of approval issued in respect of systems or subsystems through the complete lifecycle of such systems.

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h) Prior to the introduction of a (major) change into service, the auditor will ensure that:

- all processes in respect of the change are complete;
- a formal document indicating that the acceptance of the change has been issued, which includes any safety-related conditions if applicable;
- the auditor will prepare and submit a summary report to the Chief of ANAD/HoA at the end of the process.

4.4 Procedure 4: Occurrence Reporting Oversight and Safety Data Management

Objective:

The objective is to monitor ANS system safety performance through:

- a) Oversight of the occurrence reporting and investigation processes of the ANSP; and
- b) monitoring by the ANS Inspectorate of all ANS occurrence reports in the airspace of Bhutan to detect unfavorable trends and to identify key risk areas.

Scope:

This procedure applies in respect of all incidents and ANS specific occurrences in the airspace of Bhutan or at an ANS unit that is subject to safety regulation by the ANS Inspectorate, and which are reportable under the requirements of regulations. In the case of accidents and serious incidents, the BCAA shall coordinate as appropriate with the appropriate aeronautical accident and incident investigation authority.

Responsibility: Chief of ANAD

The Chief of ANAD has overall responsibility for this procedure.

4.4.1 Oversight of the occurrence reporting procedures of ANSPs

Responsibility: ANS Inspectorate

The ANS Inspectorate shall audit, in accordance with Procedure 1 of this manual, the ANSP(s) to ensure that a formal means exists for systematic and consistent reporting of safety occurrences by any person.

Responsibility: ANSPs

The ANSP shall ensure that:

- a) each occurrence is uniquely identified, all relevant data is collected, secured, recorded and stored in a manner that ensures their quality and confidentiality;

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- b) there is a formal means of safety occurrence investigation and assessment by personnel with the necessary expertise;
- c) there is a process:
 - for the immediate investigation of occurrences considered to have significant implications for flight safety and/or the ability to provide safe air navigation services;
 - to take any necessary remedial action.
- d) the severity of each occurrence is determined, the risk classified, and the results recorded;
- e) there is objective analysis of occurrences to identify how the ANS system contributed or could have contributed to reduce the risk and the results recorded;
- f) there is a means by which safety recommendations, interventions and corrective actions are developed, recorded where necessary, and their implementation monitored;
- g) reporting forms made available by the ANS Inspectorate on BCAA website are used for reporting any occurrence to BCAA.

4.5 Procedure 5: ATM Incident and Occurrence Investigation

Objective:

The sole objective of the investigation of an incident in which an ATM is implicated or an ATM-specific occurrence is the prevention of accidents and incidents is not to apportion blame or liability.

Scope:

This procedure applies with respect to any reportable incident or ATM-specific occurrence in the airspace of Bhutan or at an ANS unit which is subject to safety regulation by the ANS Inspectorate and which the BCAA or the Chief of ANAD decides to investigate independently of the ANSP.

Responsibility: Chief of ANAD

The Chief of ANAD has overall responsibility for this procedure.

4.5.1 Investigation process

4.5.1.1 The Chief of ANAD shall, within one week of the reported incident, nominate a person (the Investigator) of the appropriate expertise for the investigation task.

4.5.1.2 The investigator shall as soon as possible commence the investigation and:

- collect the evidence from the ANSP;
- acquire reports from involved flight crew where appropriate;

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- review evidence with support from a different technical specialist if needed;
- get transcripts of all air/ground and ground/ground communications (including intercom, telephone and direct verbal if recorded) relevant to the incident;
- listen to all communication recordings;
- replay radar/surveillance recordings;
- interview involved personnel (human factors specialist assistance should be considered for this task).

4.5.1.3 Upon completion of the investigation, the investigator shall document the findings and identify the causes of the incident/occurrence.

4.5.1.4 The investigator shall submit the report to the ANS Inspectorate for review.

4.5.1.5 The ANS Inspectorate and the Chief of ANAD shall determine the need for any remedial action(s) relating to technical systems and/or procedures and/or personnel in conjunction with the ANSP.

4.6 Procedure 6: Safety Directives

Objective:

This procedure defines the process whereby, where appropriate, the ANS Inspectorate will issue a safety directive.

Scope:

The ANS Inspectorate will initiate the issue of a safety directive in respect of any ANS system, service, or component thereof:

- a) where it believes such a rule or regulation is in the interest of public safety;
- b) when an international body such as ICAO generates or identifies the need for a safety directive which Bhutan is obliged to implement.

Responsibility: ANS Inspectorate

The ANS Inspectorate is responsible for the implementation, review and revision as necessary of this procedure.

4.6.1 Initiation procedure

4.6.1.1 The timescales specified in this procedure are maxima and the ANS Inspectorate shall accelerate the process to the degree necessary in the interest of public safety (for example,

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in the event of an unsafe condition being found during an audit - see Procedure 1 of this manual).

4.6.1.2 A safety directive may be proposed if it is deemed necessary to react urgently by publishing appropriate requirements without recourse to the consultation process in the event of, for example, an investigation of an accident or serious incident in which ANS was found to be a contributory factor.

- a) the HoA shall, within one week of receipt, review the proposal and supporting evidence submitted by the ANS Inspectorate.
- b) On the basis of that review the HoA will decide whether or not to initiate a safety directive.
- c) The ANS Inspectorate in consultation with the Chief of ANAD will appoint a person to conduct the safety directive process.
- d) The appointed person, within one week of being appointed:
 - e) will determine the scale of the task;
 - f) determine the resources needed to draft the directive.

4.6.2 Finalization procedure

Responsibility: Nominated Person

The nominated person (and drafting team) shall finalise the safety directive in consultation with the ANS Inspectorate and submit it to the HoA for sign-off.

Responsibility: HoA

- a) If the safety directive has been prepared as a temporary or interim amendment to a rule pending a full review and the issue of a fully revised rule, the HoA shall set the duration of the directive (maximum 18 months) and terminate the review and rule drafting.
- b) Finalise the mapping of the new rule to international requirements and sign the safety directive.
- c) This finalisation stage shall last no more than one week.

4.6.3 Publication procedure

Responsibility: ANS Inspectorate

The safety directive shall be published and promulgated, through appropriate national regulatory frameworks, within one AIRAC cycle of finalization and sign-off.

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4.6.4 Monitor and review procedure

- 4.6.4.1 The implementation and compliance with a safety directive will be subject to safety oversight in accordance with the processes and procedures of this manual.
- 4.6.4.2 The ANS Inspectorate will review the applicability and effectiveness of rules including safety directives based upon the findings of safety oversight audits or in the light of any relevant and appropriate information received that would indicate the need for review.

4.7 Procedure 7: Development and Distribution of Guidance Materials

Objective:

This procedure defines the process whereby the ANS Inspectorate will develop and distribute guidance materials on implementation of ANS regulations, requirements and safety directives.

Scope:

The ANS Inspectorate will initiate the development of a guidance materials:

- a) if it believes that existing documents and materials are insufficient in explaining and illustrating the meaning of standards and recommendations in the regulations and requirements – such conclusion could be reached based on audit/inspection findings or could be pre-empted when issuing new regulations/requirements/directives;
- b) when an ANSP, or entities over which the BCAA provide oversight, request for guidance on implementing the ANS specific operating regulations and requirements, and the ANS Inspectorate concur on the need for one;
- c) when an independent entity, such as the ICAO, identifies the need for the BCAA to provide guidance materials to the ANSP on its regulations, requirements and directives.

Responsibility: ANS Inspectorate

The ANS Inspectorate is responsible for the implementation, review and revision, as necessary, of this procedure.

4.7.1 Initiation

- 4.7.1.1 Chief of ANAD shall, within one week of identification of the need for guidance material, review the case, and on the basis of that review decide whether or not to develop guidance material.
- 4.7.1.2 The Chief of ANAD will appoint a person to develop the guidance material.
- 4.7.1.3 The appointed person, within two weeks of being appointed:

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- will determine the scale of the task and timeframe;
- determine the resources needed to draft the guidance material; and
- Identify team members, experts and organizations to involve.

4.7.2 Finalization

4.7.2.1 The nominated person (and drafting team) shall finalise the guidance material and submit it to the Chief of ANAD.

4.7.2.2 The Chief of ANAD shall review or have the guidance material independently reviewed before getting it approved from the head of the authority.

4.7.2.3 This finalisation stage shall last not more than two months.

4.7.3 Publication

The ANS Inspectorate shall publish and distribute guidance materials to relevant entities, through appropriate national regulatory frameworks, just like any other regulation or requirements. A copy of the latest version of the guidance materials will also be made available on the BCAA website.

4.7.4 Monitor and review

The ANS Inspectorate will review the relevance and effectiveness of the guidance materials periodically and when there is additional information that makes it necessary to review and/or amend the published guidance materials.

4.8 Procedure 8: Follow-up of Audit/Inspection Findings

4.8.1 ANS Inspectorate actions

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

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

4.8.1.3 Where the ANS Inspectorate deems that follow-up of corrective action require on-site visit, a follow-up audit/inspection will be carried out to verify that non-compliances have been rectified and that corrective actions are effective.

4.8.1.4 Progress will be monitored until the ANSP completes implementation of the corrective action plans. The Chief of ANAD will update such progress using a spreadsheet. The

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spreadsheet shall identify the finding number, the level, the type of inspection/audit follow-up undertake (administrative or on-site) and the date upon which the corrective action was completed.

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

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

- monitor the ANSP entity to ensure that the corrective action plan timelines are being observed and that corrective actions required by a specific date have been completed;
- monitor the progress of the corrective action plan by maintaining the follow-up section of the corrective action form, the corrective action tracking form or applicable functional database and ensuring that the appropriate follow-up (administrative or on-site) has been conducted;
- ensure that all completed corrective action forms and corrective action tracking forms, together with any supporting documentation are placed in the Inspection/audit file; and
- provide updates to the Chief of ANAD for purpose of maintain the finding tracking spreadsheet.

4.8.2 Follow-up audit/inspection process

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

4.8.2.2 A follow-up audit or inspection may be conducted to validate the satisfactory implementation of the ANS entity's corrective action plan.

4.8.2.3 This may be conducted between three and six months after the audit or inspection, or as decided, based on the information available to ANS Inspectorate on the implementation of the corrective actions.

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

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

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4.8.3 Preparation of ANS entity-specific audit follow-up schedule and plan

- 4.8.3.1 Follow-up of long-term corrective actions will also be done through routine audits/inspections.
- 4.8.3.2 The follow-up audits are planned at the same time as the initial audits.
- 4.8.3.3 The team members assigned to a follow-up audit may or may not have been members of the original audit team.

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4.8.3.4 Follow-up audits are generally limited to ascertaining whether safety issues identified during the initial audit have been satisfactorily resolved, hence the preparation for the follow-up audit will be different.

4.8.3.5 The audit team will develop an audit follow-up checklist based on the actions defined in the corrective action plan or from findings noted during the initial audit.

4.8.4 On-site follow-up audit

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

4.8.4.2 The standard finding forms produced during the initial audit will be completed to record the status of the corrective actions.

4.8.4.3 If the follow-up audit identifies significant safety concerns in relation to the ANS entity's compliance with the applicable ANS safety regulations which are outside of the scope of the follow-up audit, it will record those concerns as "observations" requiring corrective action by the audited ANS entity. These observations will be recorded in the Audit/inspection Report.

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

4.8.5 Closure of audit findings

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

4.8.6 Follow-up report and summary report to the HoA

4.8.6.1 The ANS Inspectorate, through Chief of ANAD, will submit the follow-up report to the HoA.

4.8.6.2 ANS Inspectorate will disseminate the follow-up report in the same way as for the initial audit.

4.8.6.3 In the exceptional case of persistent non-compliance, the ANS Inspectorate and the Chief of ANAD will determine an appropriate type of enforcement action to be taken in accordance with procedures established in 'Enforcement Policy and Procedure Manual' of BCAA, and report this to the HoA in the same way as for the initial audit.

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4.9 Procedure 9: Follow-up of Deficiencies identified within the framework of the Regional PIRG

- 4.9.1 Follow-up of Deficiencies identified within the framework of the Regional Planning and Implementation Regional Group (PIRG) will be carried out by ANS Inspectorate in accordance with the procedures described in 4.8.
- 4.9.2 The Chief of ANAD will be responsible for the follow-up of the Deficiencies identified within the framework of the Regional PIRG.
- 4.9.3 The Chief of ANAD will ensure that the concerned ANSP prepares a corrective action plan on the Deficiencies identified within the framework of Regional PIRG. The developed corrective action plan will be submitted to the Chief of ANAD. The Chief of ANAD will evaluate the corrective action plan in accordance with the corrective action plan evaluation procedures described in 4.1.8.
- 4.9.4 Follow-up audits will be aimed at ascertaining whether safety Deficiencies identified within the framework of PIRG have been satisfactorily resolved in accordance with the corrective action plan. The audit team will develop an audit follow-up checklist based on the corrective action plan prepared by the concerned ANSP.
- 4.9.5 The Chief of ANAD will, through the HoA, keep the ICAO Regional Office informed, on a continuous basis, of progress made in addressing the deficiencies identified within the framework of the Regional PIRG. The Regional Office will also be informed once a Deficiency has been fully addressed.

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CHAPTER 5. PROCEDURES FOR APPROVAL OF INSTRUMENT FLIGHT PROCEDURE DESIGNS

Introduction

5.1 Purpose

5.1.1 These procedures are primarily intended for use by ANS Inspectorate when conducting an approval audit of Visual or Instrument Flight Procedures (flight procedures) that have been created by an approved designer. The intent is not to create another layer of process for the procedure designer – or to ‘redesign’ the procedures. Because of the absolutely safety critical nature of instrument flight procedures, the intent is to encourage ANS inspectors to apply ‘diverse path’ or ‘cross check’ techniques to ensure that procedures submitted for approval meet regulatory requirements.

5.1.2 For the purposes of this document, the term ‘*approved designer*’ has the following meaning:

Approved Designer: An instrument flight procedures design organisation acceptable to the BCAA.

5.1.3 For the purposes of this document, the term ‘*approval audit*’ has the following meaning:

Approval Audit: A formal regulatory review of the submission to ANS made by an ANSP/approved designer containing a proposed design for a new instrument or visual flight procedure, or a proposed amendment to an existing design. The purpose of the approval audit is to ensure that the proposed design meets all regulatory requirements, and can be recommended for approval by the HoA, and subsequent publication in the Aeronautical Information Publication (AIP).

5.1.4 **All flight procedures intended for use will be subject to an approval audit by ANS.** A flight procedure may not be published by AIS unless it has approved for publication by the HoA.

5.1.5 This procedure focuses on the processes and procedures that should be used by ANS to ensure that instrument flight procedures are appropriately audited before presentation to the HoA for approval and subsequent publication by AIS.

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5.2 Overview of flight procedure Approval Audit Process

- 5.2.1 This procedure focuses on the processes and procedures that should be used by ANS to ensure that instrument flight procedures are appropriately audited before presentation to the HoA for approval and subsequent publication by AIS.
- 5.2.2 This section provides an overview of the process that ANS will apply when conducting an approval audit on flight procedure designs. The overall process is outlined in the flow diagram in Figure 1. The process is designed to amplify the evaluation and quality control regulatory requirements.
- 5.2.3 The approval audit process itself is a series of regulatory compliance and technical design assessments intended to determine if the design has been conducted by appropriately qualified organisations and designers, using appropriate data and standards, and if the design itself has been prepared correctly and is consistent with ICAO design standards and procedures and meets all applicable criteria for obstacle clearance as required by the civil aviation regulations and standards (refer Figure 2).
- 5.2.4 The regulatory compliance and technical assessments will be conducted in accordance with the guidance provided in Chapter 2.
- 5.2.5 The procedures in Chapter 2 assume that designs have been created in accordance with ICAO provisions as adopted in BCAR-11 and BCAR-IFPD.

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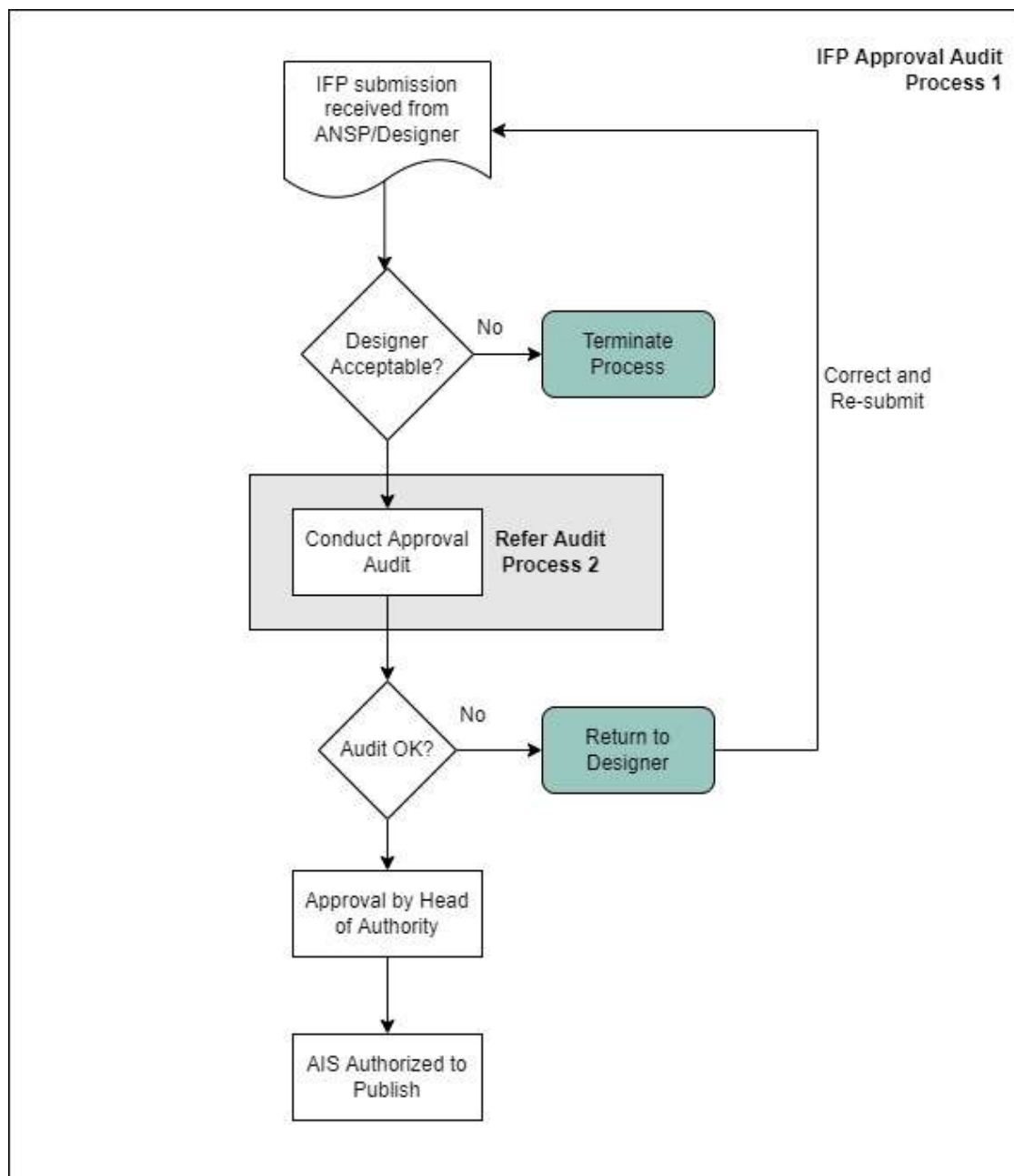


Figure 1: Flight Procedure Approval Audit Process- Outline

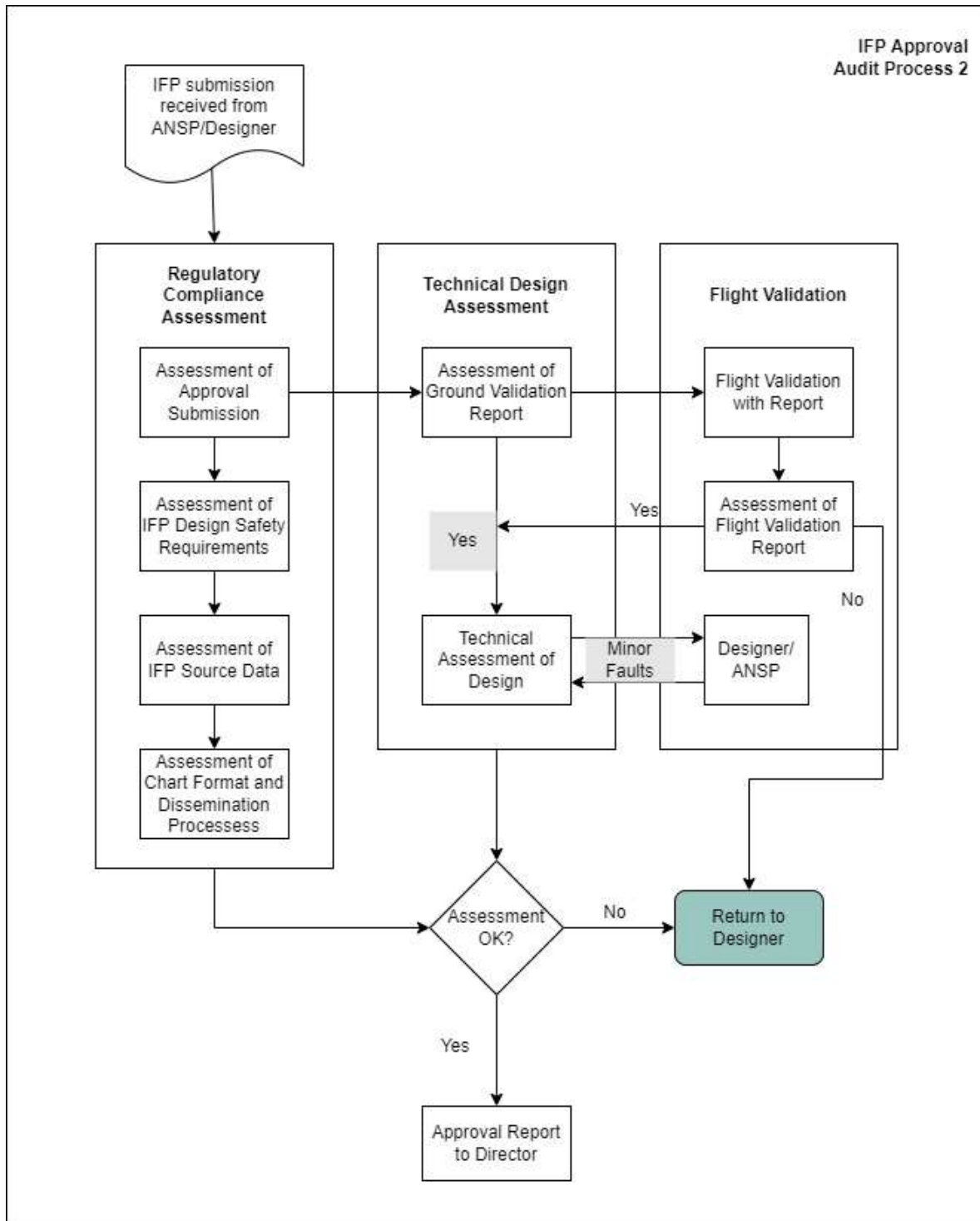



Figure 2: Flight Procedure Assessment Process- Outline

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Approval Audit of a Flight Procedure

After a submission has been made, ANS will audit the proposed flight procedure in accordance with the following procedures.

5.3 Design Submission

5.3.1 The procedures in Chapter 2 assume that designs have been created in accordance with ICAO provisions as adopted in BCAR-11 and BCAR-IFPD.

5.3.2 A flight procedure designer or an ANSP, on completion of a flight procedure design, is required to submit a flight procedure design report to ANS in accordance with the requirements in BCAR-11 and BCAR-IFPD. That report must contain evidence that the flight procedure has been constructed, designed, and will be maintained, in accordance with the regulatory requirements of BCAR-11 and BCAR-IFPD, and the applicable ICAO design procedures.

***Compliance Note:** ANS recognizes that all procedures are different and therefore a fully standardized submission is not practical. The processes in this chapter, and the associated checklist, should be applied flexibly – but must ensure that a sufficient level of confidence is gained about the submitted procedure to enable the inspectors to recommend approval (or otherwise). Flight procedure designers or ANSP will contact ANS if they have any doubts about the content and format of a specific submission; ANS inspectors must be prepared to indicate what they need and why, without adding unnecessary requirements or complexity.*

5.3.3 When auditing the flight procedure design report submission, ANS must check that it contains at least the following information:

1) Details of the design criteria used in the construction of the flight procedure

This should include:

- a) evidence of the procedure’s compliance with respect to the requirements of the design criteria described in the regulations;
- b) a brief design rationale in text format; and
- c) references to those parts of Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) Volume 2 where a deviation from the standard design criteria or policy has been employed.

2) A description of the procedure

This should include:

- a) names of the procedure designer and independent validator;

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- b) waypoint names, type and coordinates;
- c) obstacles assessed in the construction of the procedure including height and position coordinates;
- d) description of the source of obstacle, terrain and aerodrome data used as applicable in the design of the flight procedure;
- e) a diagram detailing the obstacle surfaces used in plan and profile to aid safeguarding assessment;
- f) a procedure chart compliant with the requirements in ICAO Annex 4 (Charts), ICAO Doc 8697 (Aeronautical Chart Manual) and ICAO Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) Volume 2, as applicable;
- g) a text narrative that describes the flight procedure in an unambiguous manner.

Compliance Note: All or some of the requirements in a) to g) above may be met through the designer’s Record of Quality Assurance and Quality Control.

3) Information about electronic design equipment and associated software

This should include:

- a) a statement regarding any electronic design equipment or capability used (e.g., FPDAM, etc.);
- b) a statement of the software version associated with any electronic design equipment.

4) A flight validation report

This should include:


- a) evidence of aircraft used;
- b) flight crew and certification approvals; and
- c) the actual flight validation report.

5.3.4 In addition, the design submission should include all procedure design drawings. These may be submitted as electronic drawing files using an appropriate computer aided design tool, or paper drawings. The dominant obstacle for each segment of the procedure must be clearly marked, identified and references to the survey or other data source.

5.4 Instrument Flight Procedure Design Requirements

5.4.1 Instrument flight procedures are safety critical and it is essential that the design be checked to ensure not only compliance with basic design requirements, but also that the designed procedure will meet its operational requirement (i.e., is ‘fit for purpose’), is flyable, and meets appropriate human factors requirements.

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5.4.2 When auditing the flight procedure design report, ANS must check that flight procedure design construction:

1) is compliant with ICAO standards or procedures

ANS should check that:

- a) all flight procedures have been designed adhering to the methodology and design criteria specified in ICAO Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) Volume 2 ensuring in particular that required obstacle clearances are achieved;
- b) when the flight procedure being developed is an Area Navigation (RNAV)-based or Performance Based navigation (PBN) procedure, then the additional requirements from ICAO Doc 9613 (PBN Manual) Volumes 1 and 2 have also been applied; and
- c) as applicable, the provisions from ICAO Doc 9906 (Quality Assurance Manual for Flight Procedure Design) in the construction of flight procedures have been applied.

2) has been completed by an approved design organisation

ANS must confirm that the organisation that has completed the design is acceptable to BCAA, and that the design has been completed by a qualified individual designer.

3) has been undertaken with sufficient documented coordination

ANS should check that appropriate (documented or otherwise) coordination has been carried out between ATS, airlines, the aerodrome certificate holder, the CNS provider and the design organisation, as applicable. This shall include:

- a) a review of the obstacles¹ applicable to the procedure with ANS or the aerodrome license holder prior to any design work; and
- b) development of the flight validation plan, taking into account the requirement for operational ground navigation aids as necessary; and
- c) validation of both the operational and certification status of all applicable navigation aids.

Compliance Note: *the design organisation, or the individual designer, may not actually document all such coordination processes. Nevertheless, ANS should check that such coordination has been carried out (where applicable). If the design submission does not contain a statement about coordination, ANS should contact the designer to check if it has been done, and indicate this in the checklist form.*

¹ This requirement assumes that the aerodrome license holder has responsibility for managing/monitoring obstacles in the vicinity of the affected aerodrome. Where this is not the case, ANS should check to ensure that the designer has undertaken coordination with the authority or authorities that hold information about obstacles.

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Formal records and procedures

5.4.3 ANS must also check to ensure that the flight procedure design organisation has established formal records and procedures to ensure that:

- a) there are sufficient cross validations to detect erroneous calculations;
- b) the flight procedure has been verified by a designer other than the designer that created the flight procedure design;
- c) potential navigation database limitations are addressed before the procedure is coded and approved (for RNAV procedures);
- d) ANS has been informed and a reassessment of the flight procedure minimum altitudes undertaken when:
 - (i) There has been a potential obstacle infringement of the flight procedure protected surfaces; or
 - (ii) there is a potential breach of aerodrome protected surfaces stipulated through aerodrome safeguarding;

***Compliance Note:** In normal circumstances the aerodrome operator, as the entity responsible for detecting any infringement of the Obstacle Limitation Surface (OLS) will request an assessment of published flight procedures.*

- e) a NOTAM to suspend the flight procedure can be promulgated when a potential infringement or breach is confirmed.

5.5 Origin of Instrument Flight Procedure Source Data

5.5.1 Source data used in the development of instrument flight procedure designs must include, as applicable, the data stated in BCAR-11 and BCAR-IFPD. This includes relevant aerodrome, navigation aid, obstacle and terrain data as specified in ICAO Annex 14 (Aerodromes) and Annex 15 (Aeronautical Information Services).

5.5.2 When auditing the instrument flight procedure design report, ANS must check the origin or provenance of flight procedure source data, and in particular should check that:

1) all data used as the basis for flight procedure design is traceable to source

ANS should check that flight procedure design data is traceable to source, and has, as a minimum, the following metadata available, effectively as required by ICAO Annex 15:

- a) the name of the source or entity originating the data;
- b) the function performed by the source or entity; and

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c) the date at which the function was performed.

2) all source data is in WGS-84 format

ANS should check that all source data is in WGS-84 format as specified in ICAO Doc 9674 (World Geodetic System – 1984 (WGS-84) Manual) and compliant with the requirements of ICAO Doc 9613 (PBN Manual) Volume 1 Attachment 2. If source data is unavailable in WGS-84 format, then it should have been converted to WGS-84 prior to use. The source data and converted data should be made available.

3) third party survey data is ICAO compliant

ANS should ensure that where a third party has been contracted by the flight procedure designer for the purpose of obstacle survey, the survey data is consistent with the requirements of ICAO Annex 14 (Aerodromes) Volume 1 Appendix 5 and Volume 2 Appendix 1, ICAO Annex 11 (Air Traffic Services) Appendix 5 and ICAO Annex 15 (Aeronautical Information Services) Appendix 7.

5.6 Procedure Validation Requirements

5.6.1 The full validation process includes ground validation and/or flight validation in accordance with ICAO Doc 9906 – Vol 5. Ground validation must always be undertaken and verified during the audit. Ground validation consists of an independent design review and a preflight validation.

5.6.2 If the ANS audit process can verify the accuracy and completeness of all obstacle and navigation data considered in the design, and any other factors normally considered in the flight validation, then the flight validation requirements may be dispensed with, as per ICAO Doc 9906, Vol 5.

5.6.3 All Instrument Flight Procedures are subject to validation as required under the provisions of BCAR-11 and BCAR-IFPD including the validation requirements and procedures included in that document, and ICAO Doc 9906, Vol 5.

5.6.4 Flight Validation is required under the following circumstances:

- a) the flyability of the procedure cannot be determined by other means;
- b) the procedure requires mitigation for deviations from design criteria;
- c) the accuracy and/or integrity of obstacle and terrain data cannot be determined by other means;
- d) new procedures differ significantly from existing procedures; and
- e) for helicopter PinS procedures.

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5.6.5 When auditing the Instrument Flight Procedure design report, ANS must check that:

1) Ground validation report

The ground validation report must contain at least the items listed at para 5.3.2 (4). Should flight validation be necessary then the following steps must be complied with. Simulator validation is also a valid form of, and is included in flight validation.

2) flight validation aircraft/simulator and crew are appropriate

ANS must check that the flight validation has been conducted using aircraft/simulators and aircrew compliant with the requirements of BCAR-11 and BCAR-IFPD including the Flight Validation requirements and procedures.

3) flight validation is ICAO compliant

ANS must check that the flight validation has been conducted in accordance with the requirements of BCAR-11 and BCAR-IFPD including the Flight Validation requirements and procedures, and in accordance with ICAO Doc 9613 (Performance Based Navigation (PBN) Manual) Volume 1, Part B Chapter 1 and Doc 8071 (Manual on Testing of Radio Navigation Aids) Volume 2 (Testing of Satellite-based Radio Navigation Systems) Chapter 5 noting that the purpose of the flight validation is:

- a) to validate the obstacles as shown on the chart and used as the basis for computing minimum altitude;
- b) to ensure, in particular, the flyability of the procedure in maintaining safe operations for each category of aircraft; and
- c) to review the Instrument Flight Procedure for complexity of workload, correctness of information and ease of interpretation.

5.7 Instrument Flight Procedure Dissemination

5.7.1 Once the flight procedure design submission has been approved, and recorded, the instrument flight procedure and associated documentation can then be released to the designated Aeronautical Information Service (AIS) for publication. It is important, therefore, that the instrument flight procedure submission is appropriately formatted for dissemination.

5.7.2 When auditing the flight procedure design submission, ANS must check that:

1) the design and format of the flight procedure charts are in a standardized format

ANS must check that the design and format of the instrument flight procedure charts are in a standardized format in accordance with the requirements of ICAO Annex 4

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(Charts), ICAO Doc 8697 (Aeronautical Chart Manual) and ICAO Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) Volume 2.

2) PBN procedure is clear and unambiguous

ANS must check that where the Instrument Flight Procedure is a PBN procedure, it is described in a clear and unambiguous fashion as detailed in ICAO Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) Volume 2, ICAO Annex 15 (Aeronautical Information Services) and ICAO Doc 8697 (Aeronautical Charting Manual). The chart must display the PBN Navigation Specification in the PBN box.

3) the dataset is complete, coherent and correct

ANS must check that where the flight procedure is an RNAV procedure, prior to publication, it is validated to ensure that the dataset is complete, coherent and correct.

4) an error detection process is in place

ANS must check that the flight ANSP/procedure designer has in place a process to perform a final validation of the published data in the AIP/chart amendment when issued to ensure that no errors have been introduced during the data transfer process.

5.8 Technical Design Assessment

5.8.1 A technical design assessment will be conducted on each submitted instrument flight procedure. The intent is to ensure that all of the basic design requirements are met and that the design and associated charts are consistent with design rules and standards and do not contain obvious errors. It is not intended that every calculation or design factor be checked unless a specific error warrants further review.

5.8.2 Where an obvious error is detected, it is not necessary to completely reject the design submission; it may be possible to have the error(s) corrected as part of a collaborative process. If, however, there are a number of errors detected which indicate the possibility of faulty design, or misunderstanding of the rules, the submission should be rejected and returned to the designer for complete review and re-submission.

Compliance Note: *Where there is an exchange between ANS and a designer regarding an element of the design, any such exchange must be transmitted formally. Where there has been a verbal exchange to resolve an issue, a follow up formal note concerning that exchange must be transmitted.*

5.8.3 If ANS has any concerns about a particular flight procedure design, it should be referred back to the design organisation with an appropriate written explanation. The designer may choose to cancel the approval process – or schedule a meeting, at the request of the sponsor, to resolve any problem(s).

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5.8.4 A key issue for ANS is to determine if the design organisation has appropriate quality management and quality control processes in place. In many cases, simple errors – such as missing data on a chart – should have been picked up in the quality processes of the design organisation. If there are a number of ‘simple errors’, it may indicate that the designer’s quality control process is not functioning. This may be grounds for a more detailed audit of the design organisation, outside the audit of the instrument flight procedure submission.

5.9 Recommendation to Publish

5.9.1 If the approval audit of a flight procedure submission is satisfactory, the auditor(s) will make a recommendation to the HoA that the procedure be approved for publication by AIS.

5.9.2 This recommendation will comprise the signatures of the auditors who conducted the regulatory compliance assessment, the technical assessment, and the review of the flight validation report.

5.9.3 The recommendation will contain a proposed effective date, and associated AIRAC cut-off date. These dates should be coordinated with AIS to ensure alignment with other processes, including data coding, etc.


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APPENDIX-A: INSPECTOR JOB DESCRIPTIONS

Inspector Job Description	
<i>Job Title:</i>	Chief of ANAD
<i>Reporting to:</i>	HoA
<i>Supervising:</i>	Sr. ANS Inspector/ANS Inspector
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- Provide necessary guidance to develop rules and procedures required to regulate ANS in Bhutan in keeping with the global and national developments.
- Develop required operating regulations and implement standards where necessary, for the basic aviation legislation and for amending the existing regulations as may be necessary to maintain required safety, efficiency and regularity in ANS in Bhutan.
- Ensure relevant SARPs contained in ICAO annexes are implemented and updated as necessary.
- Ensure supplementary guidance materials and other necessary technical guidance materials issued by ICAO in respect of ANS are given effect and updated as necessary.
- To make recommendations to the BCAA in regard to the ANS Inspectorate staffing requirement.
- Maintain performance indicators, and statistics relating to important duties, functions or activities performed by the ANS Inspectorate.
- Provide the head of the authority with necessary inputs in regard to the work plan that the ANS Inspectorate is expected to perform so that the BCAA budget could be updated accordingly.
- To ensure that all inspectors attached to the ANS Inspectorate are provided with necessary empowerments, credentials and authorizations in order to enable them to perform the assigned tasks effectively.
- To ensure that a complete training plan is prepared for each position coming under the ANS Inspectorate so that the post holder will be able to discharge the assigned functions effectively.
- To provide the HoA with the training requirements of the ANS Inspectorate.

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- To prepare an annual training plan for each position in the ANS Inspectorate, with due regard to the priorities and resources available, and ensure that all inspectors are fully conversant with and are adequately trained to perform their job to the standards expected.
- To ensure availability of written office procedures in respect of each activity being performed.
- To ensure the required toolkits for efficient and effective oversight include checklists, audit forms, laptop computers, etc. and are readily available.
- To ensure all manuals, written procedures and handbooks issued by the ANS Inspectorate are reviewed and updated as and when required and prepare new guidance material when necessary.
- To ensure availability of relevant guidance and reference materials, documents, annexes and other useful publications relating to ANS both in printed and electronic format.
- To ensure that ANSPs are duly certified in accordance with the applicable regulations, written procedures and other relevant directives issued by the BCAA.
- To issue, renew, amend, suspend or cancel ANS certificates as the case may be and in accordance with the delegation of authority by the BCAA.
- To maintain complete, accurate and updated records and databases in respect of ANS certificates.
- To develop and implement a systematic annual oversight plan in respect of each ANS section.
- To maintain a complete, accurate and updated database containing data and information gathered during the implementation of the oversight plan.
- To analyze the data gathered during the safety oversight and adjust the oversight plan and conduct additional activities where necessary based on the trends and associated risks identified.
- To ensure necessary enforcement actions are taken in accordance with available regulations.
- To ensure proper organization and management of the airspace of Bhutan for the effective use of civil air operators in close coordination with the military forces and other ANSPs as appropriate.
- To represent the BCAA at forums pertinent to safety oversight in Bhutan and abroad.
- To organize and update information on the BCAA website pertaining to the division.

Minimum Knowledge/Skills/Experience requirements:

Entry Level:

- Bachelor Degree

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- Must have served as Sr. Officer/Inspector in relevant field


Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of regulatory processes in relation to ANSP delivery.
- Comprehensive knowledge of ATC procedures, ATS standards and industry best practices including, CNS, MET, SAR, AIS, Cartography and PANS-OPS.
- Comprehensive knowledge of ICAO rules and regulations pertaining to ANSPs, air traffic controllers and peripheral operational requirements.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the operations and delivery of ATS, CNS, MET, SAR, AIS, Cartography and PANS-OPS.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern ATC unit, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multicultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.

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- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information.
- Ability to collaborate effectively with cross functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with a high level personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence senior management and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience in the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in a senior managerial role in development, implementation and auditing procedures.
- Experience of working in a regulatory environment.
- Experience of working at a senior managerial level in an ANSP or other safety-critical organization.
- Operational aviation experience with a minimum of 15 years of practical experience.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- Experience in a multi-cultural environment is an asset.

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Job Description	
<i>Job Title:</i>	Senior ANS Inspector
<i>Reporting to:</i>	Chief of ANAD
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- Assist the Chief of ANAD in maintaining continued safety oversight on ANS in Bhutan in order to ensure that the safety standards are maintained as specified by the BCAA.
- Assist in providing necessary guidance to develop rules and procedures required to regulate ANS in Bhutan in keeping with the global and national developments.
- Assist in developing required operating regulations and implementing standards where necessary, for the basic aviation legislation and for amending the existing regulations as may be necessary to maintain required safety, efficiency and regularity in ANS in Bhutan.
- Assist in ensuring relevant SARPs contained in ICAO annexes are implemented and updated as necessary.
- Assist in ensuring supplementary guidance materials and other necessary technical guidance materials issued by ICAO in respect of ANS are given effect and updated as necessary.
- Make recommendations to the Chief of ANAD in regard to the ANS Inspectorate staffing requirement.
- Assist in maintaining performance indicators and statistics relating to all the important duties, functions or activities performed by the ANS Inspectorate.
- Provide the Chief of ANAD with necessary inputs in regard to the work plan that the ANS Inspectorate is expected to perform so that the BCAA budget could be updated accordingly.
- Provide the Chief of ANAD with input on the training requirements of the ANS Inspectorate.
- Assist in ensuring the availability of written office procedures in respect of each activity being performed.
- Assist in ensuring all manuals, written procedures and handbooks issued by the guidance material when necessary.
- Assist in ensuring that ANSPs are duly certified in accordance with the applicable regulations, written procedures and other relevant directives issued by the BCAA.

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- Assist in maintaining a complete, accurate and updated database containing data and information gathered during the implementation of the oversight plan.
- Assist in analyzing the data gathered during the safety oversight and adjust the oversight plan and conduct additional activities where necessary based on the trends and associated risks identified.
- Follow proper procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the ANSP.
- As required and directed by the Chief of ANAD, represent the ANS Inspectorate at forums pertinent to ANS in Bhutan and abroad.
- As directed by the Chief of ANAD, assist the BCAA accident & incident investigator and/or accident & incident investigation authorities of other states to carry out formal investigations/inquiries pertinent to aircraft accidents/incidents. Submit detailed reports to the HoA on the same as required.
- As directed by the Chief of ANAD, carry out formal investigations/inquiries pertinent to ANS occurrences.
- Organize and update information in the BCAA website pertaining to the ANS Inspectorate.
- Perform any other duties and functions as may be assigned by the Chief of ANAD.

Minimum Knowledge/Skills/Experience requirements:


Entry Level:

- Bachelor Degree
- Must have served as ANS officer/Inspector with prerequisite basic training and six months of on-the-job training under a qualified ANS Inspector.

Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of regulatory processes in relation to ANSP delivery.
- Comprehensive knowledge of ATC procedures, ATS standards and industry best practices ATS, CNS, MET, SAR, AIS, Cartography and PANS-OPS.
- Comprehensive knowledge of ICAO rules and regulations pertaining to ANSPs, air traffic controllers and peripheral operational requirements.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the operations and delivery of ATS, CNS, MET, SAR, AIS, Cartography and PANS-OPS.
- Must be computer literate and proficient in the use of current mainstream application

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software required for the management of a modern ATC unit, including word processing/desktop publishing, spreadsheet and graphic presentations.

- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multicultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and in a high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information.
- Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with a high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.

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- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience in the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures.
- Experience of working in a regulatory environment.
- Operational aviation experience with a minimum of 10 years of practical experience.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- Experience in a multi-cultural environment is an asset.

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Job Description	
<i>Job Title:</i>	AIS Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety Oversight and Overall Organizational Assessment

Responsibilities:

- Assist the ANS section to perform duties and functions as required and thus ensure that the AIS in Bhutan is operated in compliance with the requirements specified by the BCAA.
- Assist the ANS section to develop legislation to regulate AIS in Bhutan.
- Ensure relevant SARPs contained in ICAO annexes are implemented and updated as necessary.
- Assist in preparing written office procedures in respect of each activity being performed in the ANS section with regard to AIS.
- Assist in reviewing all manuals, written procedures and handbooks issued by the ANS section with regard to AIS and update when required.
- Identify and advise the Senior ANS Inspector of relevant guidance and reference materials, documents, annexes and other useful publications relating to AIS that should be available in the ANS Inspectorate.
- Take necessary action to certify AIS providers in Bhutan in accordance with applicable regulations, standards, written procedures and other relevant directives issued by the BCAA.
- Assist in taking necessary action to issue, renew, amend, suspend or cancel AIS certificates as the case may be.
- Assist in maintaining continued surveillance on certified AIS providers in Bhutan in order to ensure that they maintain required safety standards specified by the BCAA.
- Assist in following available procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the AIS provider.
- As required and directed by the Chief of ANAD, represent the ANS Inspectorate at forums pertinent to AIS in Bhutan and abroad.
- Perform any other duties and functions as may be assigned by the Senior ANS Inspector.

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Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree in Information Technology (IT)
- Completed AIS/AIM General Course (08 weeks)
- Completed AIS – Cartography Course (08 weeks)

AIS Inspector shall have the following qualifications:

- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed AIS/Cartography Inspector Course


Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the Aeronautical Information Service.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern Aeronautical Information Service unit, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills

- Demonstrable communication skills in a multi-cultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.

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- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information.
- Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills. Adapt well to changing priorities.
- An assertive finisher with a high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience on the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures. Experience of working in a regulatory environment.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- The AIS Inspector should have successfully completed AIS basic and advanced courses.
- At least 5 years of experience as an AIS Officer.
- Experience in a multicultural environment is an asset.

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Job Description	
<i>Job Title:</i>	ATS Inspector
<i>Reporting to:</i>	Sr. ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- Assist the division's safety oversight on air traffic services (ATS) in Bhutan in order to ensure that the safety standards are maintained as specified by the BCAA.
- Assist the division to develop rules and procedures required to regulate ANS in Bhutan in keeping with the global and national developments.
- Assist development of required operating regulations and implementing standards where necessary, for the basic aviation legislation and for amending the existing regulations as may be necessary to maintain required safety, efficiency and regularity in ANS in Bhutan.
- Assist in ensuring relevant SARPs contained in ICAO annexes are implemented and updated as necessary.
- Assist in ensuring supplementary guidance materials and other necessary technical guidance materials issued by ICAO in respect of ATS are given effect and updated as necessary.
- Assist in maintaining performance indicators, and statistics relating to important duties, functions or activities performed by the Sr. ANS inspector.
- Provide the Sr. ANS inspector with necessary inputs in regard to the work plan that the ATS Inspectorate is expected to perform so that the BCAA budget could be updated accordingly.
- To provide the Sr. ANS inspector with input to the training requirements of the ANS Inspectorate.
- Assist to maintain a complete, accurate and updated database containing data and information gathered during the implementation of the oversight plan.
- Assist in analyzing the data gathered during the safety oversight and adjust the oversight plan and conduct additional activities where necessary based on the trends and associated risks identified.
- Follow proper procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the ATS.

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- As required and directed by the Chief of ANAD, represent at forums pertinent to ATS in Bhutan and abroad.
- As directed by the Chief of ANAD, assist the BCAA accident & incident investigator and/or accident & incident investigator authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit detailed reports to the Chief of ANAD on the same as required.
- As directed by the Chief of ANAD, carry out formal investigations/enquires pertinent to ANS occurrences.
- Assist in organizing and updating information in the BCAA website pertaining to ANS Inspectorate.
- Perform any other duties and functions as may be assigned by the Chief of ANAD.

Minimum Knowledge/Skills/Experience requirements:

Entry Level:

- Bachelor Degree
- Completed Aerodrome Control (ADC) rating (17 weeks)
- Completed Approach control procedural (APP) rating training (10 weeks)
- Completed Unit Training in relevant ATC rating


ATS Inspector shall have the following qualifications:

- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed ATS Inspector Course

Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of regulatory processes in relation to ANSP delivery.
- Comprehensive knowledge of ATC procedures, ATS standards and industry best practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to ANSPs, air traffic controllers and peripheral operational requirements.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the operations and delivery of ATS.
- Must be computer literate and proficient in the use of current mainstream application

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software required for the management of a modern ATS unit, including word processing/desktop publishing, spreadsheet and graphic presentations.

- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multicultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information. Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with a high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.

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- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understandable format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience in the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures.
- Experience of working in a regulatory environment.
- Operational aviation experience with a minimum of 5 years of practical experience.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- Experience in a multi-cultural environment is an asset.

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Job Description	
<i>Job Title:</i>	Charts Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:


- To assist the ANS section to perform duties and functions as required and thus ensure that the AIS Cartography services in Bhutan are operated in compliance with the requirements specified by the BCAA.
- To assist the ANS section to develop legislation to regulate Cartography services in Bhutan.
- To ensure relevant SARPs contained in ICAO Annexes are implemented and updated as necessary.
- Prepare written office procedures in respect of each activity being performed in the ANS section with regard to Cartography services.
- Review all manuals, written procedures and handbooks issued by the ANS section with regard to Cartography Service and update when required.
- Identify and advise the Senior ANS Inspector of relevant guidance and reference materials, documents, annexes and other useful publications relating to Cartography services.
- Take necessary action to certify Cartography services in Bhutan in accordance with applicable regulations, standards, written procedures and other relevant directives issued by the BCAA.
- As required and directed by the Chief of ANAD, represent at forums pertinent to Cartography service in Bhutan and abroad.
- Perform any other duties and functions as may be assigned by the Senior ANS Inspector.

Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree in Information Technology (IT)
- Completed AIS/AIM General Course (08 weeks)

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- Completed AIS – Cartography Course (08 weeks)

Charts Inspector shall have the following qualifications:

- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed AIS/Cartography Inspector Course


Knowledge

- Comprehensive knowledge of both regulatory and corporate auditing practices
- Comprehensive knowledge of ICAO rules and regulations pertaining to the Cartography design.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern Cartography services, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multi-cultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.

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- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills, ability to work with complex issues and detailed information. Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience in the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures.
- Experience of working in a regulatory environment.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- The Cartography Inspector should have successfully completed Cartography Services basic and advanced courses.
- At least 5 years of experience as a Cartography Officer.
- Experience in a multicultural environment is an asset.

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Job Description	
<i>Job Title:</i>	CNS Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- Assist the ANS section to perform duties and functions as required and thus ensure that the Aeronautical Communication, Navigation & Surveillance aids in Bhutan are operated in compliance with the requirements specified by the BCAA.
- Assist the ANS section to develop legislation to regulate CNS services in Bhutan.
- Assist in ensuring relevant SARPs contained in ICAO Annexes are implemented and updated as necessary.
- Assist in preparing written office procedures in respect of each activity being performed in the ANS section with regard to CNS services.
- Assist in reviewing all manuals, written procedures and handbooks issued by the ANS section with regard to CNS services and update when required.
- Identify and advise the Senior ANS Inspector of relevant guidance and reference materials, documents, annexes and other useful publications relating to CNS Aids services.
- Take necessary action to certify CNS Aids services in Bhutan in accordance with applicable regulations, standards, written procedures and other relevant directives issued by the BCAA.
- Take necessary action to issue, renew, amend, suspend or cancel CNS Aids service certificates as the case may be.
- Maintain continued surveillance on Certified CNS Services in Bhutan in order to ensure that they maintain required safety standards specified by the BCAA.
- Follow available procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the CNS Services.
- As required and directed by the Chief of ANAD, represent at forums pertinent to CNS in Bhutan and abroad.
- Perform any other duties and functions as may be assigned by the Senior ANS inspector.

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Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree in Electronics and Communication
- Completed Air Traffic Safety Electronics Personnel (ATSEP) Basic Course (01 weeks)

CNS Inspector shall have the following qualifications:

- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed CNS Inspector Course


Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the CNS services.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern CNS unit, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multi-cultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an

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environment of regular change.

- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information.
- Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience on the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures. Experience of working in a regulatory environment
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- Bachelor of Science Degree in Electronics Engineering or equivalent qualifications. At least 5 years of experience in the maintenance of aeronautical aids used for CNS services.
- Experience in a multicultural environment is an asset.

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Job Description	
<i>Job Title:</i>	MET Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- Assist the AIS section to perform duties and functions as required and thus ensure that the aeronautical meteorology services in Bhutan are operated in compliance with the requirements specified by the BCAA.
- Assist the ANS section to develop legislation to regulate aeronautical meteorology services in Bhutan.
- Assist in ensuring relevant SARPs contained in ICAO Annexes are implemented and updated as necessary.
- Prepare written office procedures in respect of each activity being performed in the ANS section with regard to aeronautical meteorology services.
- Review all manuals, written procedures and handbooks issued by the AIS section with regard to aeronautical meteorology services and update when required.
- Identify and advise the Senior ANS Inspector of relevant guidance and reference materials, documents, annexes and other useful publications relating to aeronautical meteorology services.
- Take necessary action to certify aeronautical meteorology services in Bhutan in accordance with applicable regulations, standards, written procedures and other relevant directives issued by the BCAA.
- Take necessary action to issue, renew, amend, suspend or cancel aeronautical meteorology services certificates as the case may be.
- Maintain continued surveillance on certified aeronautical meteorology services in Bhutan in order to ensure that they maintain required safety standards specified by BCAA.
- Follow available procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the aeronautical meteorology services.
- As required and directed by the Chief of ANAD, represent at forums pertinent to aeronautical meteorology services in Bhutan and abroad.
- Perform any other duties and functions as may be assigned by the Senior ANS Inspector.

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Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree
- Completed Aeronautical Meteorological Observation (12 weeks)
- Completed Aeronautical meteorological forecaster course (36 weeks)

MET Inspector shall have the following qualifications:

- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed MET Inspector Course


Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the aeronautical meteorology service.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern aeronautical meteorology services, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multi-cultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem-solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.

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- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.
- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information. Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills. Adapt well to changing priorities.
- An assertive finisher with high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience on the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures. Experience of working in a regulatory environment.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- At least 5 years of experience as a Meteorological Forecaster at the National Meteorological Centre and/or Aviation Meteorological Office.
- Experience in a multi-cultural environment is an asset.

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Job Description	
<i>Job Title:</i>	PANS-OPS Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety Oversight and Overall Organizational Assessment

Responsibilities:

- Assist the ANS section to perform duties and functions as required and thus ensure that the PANS-OPS service in Bhutan is operated in compliance with the requirements specified by the BCAA.
- Assist the ANS section to develop legislation to regulate PANS-OPS services in Bhutan.
- Ensure relevant SARPs contained in ICAO Annexes are implemented and updated as necessary.
- Prepare written office procedures in respect of each activity being performed in the ANS section with regard to PANS-OPS.
- Review all manuals, written procedures and handbooks issued by the ANS section with regard to PANS-OPS and update when required.
- Identify and advise the Senior ANS Inspector of relevant guidance and reference materials, documents, annexes and other useful publications relating to PANS-OPS.
- Take necessary action to certify PANS-OPS services in Bhutan in accordance with applicable regulations, standards, written procedures and other relevant directives issued by the BCAA.
- As required and directed by the Chief of ANAD, represent at forums pertinent to PANS-OPS in Bhutan and abroad.
- Perform any other duties and functions as may be assigned by the Senior ANS Inspector.


Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree with IT background
- Completed ICAO PANS-OPS Basic Course (04 weeks)

PANS-OPS Inspector shall have the following qualifications:

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- Successfully completed Auditing Technique Course
- Successfully completed ANS Inspector Course
- Successfully completed PANS-OPS Inspector Course


Knowledge:

- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the PANS-OPS design.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern PANS-OPS service unit, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

Skills:

- Demonstrable communication skills in a multi-cultural environment.
- Ability to influence and manage people successfully.
- Ability to prepare reports and when required communicate the results.
- Possess excellent report writing skills.
- Ability to monitor deadlines and maintain performance in-line with required standards outlined.
- A proactive and responsible approach to work with initiative and problem solving capability.
- Ability to liaise in a professional and persuasive manner with staff at all levels in the organization.
- Ability to understand complex systems.
- Possess good IT skills.
- Flexibility, excellent attention to detail, ability to identify key issues and manage an environment of regular change.
- Ability to think strategically, execute quickly and adjust plans to meet organizational needs.
- Able to hold sensitive and confidential materials in strict confidence.
- Able to work independently under stringent deadlines and high-pressure environment.
- Function as a resourceful and proactive team member.

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- Strong organizational skills with attention to detail and the ability to prioritize and multi-task and meet deadlines and schedules.
- Strong analytical skills; ability to work with complex issues and detailed information.
- Ability to collaborate effectively with cross-functional teams.
- Good judgment and decision-making skills.
- Adapt well to changing priorities.
- An assertive finisher with high level of personal presence and credibility.
- Intuitive with outstanding interpersonal influencing and communication skills able to develop and motivate others.
- Ability to align strategic and operational needs with training programs and organizational development efforts.
- Ability to influence and establish and maintain collaborative partnerships.
- Ability to communicate effectively both in writing and in speaking and convey complex information in an easily understood format.
- In-depth ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Experience:

- Governmental experience in the processes of safety management and oversight over these, preferably by a state safety program.
- Experience in development, implementation and auditing procedures.
- Experience of working in a regulatory environment.
- Experience in the evaluation of performance and subsequent delivery of relevant reports.
- The PANS-OPS Inspector must have successfully completed basic and advanced PANS-OPS courses.
- At least 5 years of experience as a PANS-OPS Officer.
- Experience in a multicultural environment is an asset.

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Job Description	
<i>Job Title:</i>	SAR Inspector
<i>Reporting to:</i>	Senior ANS Inspector
<i>Supervising:</i>	
<i>Competency:</i>	Safety oversight and overall organizational assessment

Responsibilities:

- The holder of this position shall be responsible for performing Safety Oversight function of SAR service providers in Bhutan. The purpose of this position is to ensure the compliance of SAR services with relevant rules, regulations, manuals, documents, and directives.
- To amend the BCAA regulations and requirements from time to time to ensure compliance with ICAO Annexes on the subject and/or issue any other directions, if required.
- To file differences with ICAO, if required.
- Develop and amend Inspector Handbook/Checklist necessary for inspection.
- Formulate and implement SAR Safety Audit Surveillance Program.
- Prepare safety oversight inspection schedule to inspect the SAR services.
- Carry out safety oversight inspection and surveillance of SAR Coordinator and RCCs to ensure the proper implementation of regulations, requirements, related documents, manuals and directives issued by the BCAA as per the approved program of the department and report deficiencies noted for remedial action.
- Prepare inspection report and highlight the deficiencies, if any for appropriate remedial action by the concerned agencies
- To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
- Coordinate with concerned units to amend SAR-related documents to incorporate changes in ICAO SARPs and advise the Chief of ANAD and HoA.
- Review documents, and manuals related to SAR including amendments received from SAR service provider and submit for approval.
- As required and directed by the Chief of ANAD, represent at forums pertinent to SAR in Bhutan and abroad.
- Develop training program for SAR inspectors.

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Minimum Knowledge/Skills/Experience Requirements:

Entry Level:

- Minimum Bachelor Degree
- Completed Aeronautical SAR Operations (07 weeks)


SAR Inspector shall have the following qualifications:

- At least 05 years of job experience in ATS/SAR operations.
- Adequate knowledge of ICAO Annex-12 and Doc 7134, CAAB and other relevant BCAA rules and regulations.
- The inspector should have adequate knowledge of the State Safety Program, Safety Management System (SMS), and ICAO Safety Audit Program.
- The inspector should have successfully completed an audit/ inspection course.

Knowledge:


- Comprehensive knowledge of both regulatory and corporate auditing practices.
- Comprehensive knowledge of ICAO rules and regulations pertaining to the aeronautical meteorology service.
- Must be computer literate and proficient in the use of current mainstream application software required for the management of a modern aeronautical meteorology service unit, including word processing/desktop publishing, spreadsheet and graphic presentations.
- Development of training materials/manuals to meet the requirements of specific courses.

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APPENDIX-B: ANS STAFFING METHODOLOGY


ATS INSPECTORATE STAFFING METHODOLOGY						
Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	2	6	
	2	Drafting of new Regulation including expert consultation	147	2	294	
	3	Stakeholder consultation	3	2	6	
	4	Finalization, Promulgation/Publication	2	2	4	
	Total hours for the task					310
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	2	6	
	2	Drafting of new Manuals, Guidance materials and procedures	147	2	294	
	3	Stakeholder consultation	3	2	6	
	4	Finalization, Promulgation/Publication	2	2	4	
	Total hours for the task					310
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	2	6	
	2	Draft amendments to National Regulation, Requirements	35	2	70	
	3	Consultation with stakeholders	3	2	6	
	4	Finalization, Promulgation	2	2	4	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	2	56	
	Total hours for the task					142
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	2	6	
	2	Draft amendments Manuals, Guidance materials and procedures	35	2	70	
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	3	Consultation with stakeholders	3	2	6	
	4	Finalization, Promulgation	2	2	4	
	Total hours for the task				86	
Approval of ATS Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	70	1	70	
	7	Prepare and issue report	28	1	28	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	70	1	70	
	9	Prepare for On-site audit/inspections	21	1	21	
	10	Carry out on-site audit	35	1	35	
	11	Prepare and issue report of on-site audit	28	1	28	
	12	Review corrective action plans and issue report (approve/reject, provide comments to the applicant)	28	1	28	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	28	1	28	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				344	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					
	1	Audit Planning (document review, scope, schedule, team etc.)	14	4	56	Frequency of activity includes for

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	2	Notification and Pre-audit documentation (checklist etc.)	14	4	56	Paro international Airport and three domestic airports
Part II: Conduct Audit						
	3	Entry meeting	0.5	4	2	Frequency of activity includes for Paro international Airport and three domestic airports
	4	Physical Inspection, Interview, Evaluation and Verification	21	4	84	
	5	Draft Audit findings and exit meeting	4	4	16	
Part III: Post Audit						
	6	Review draft findings and prepare audit report	28	4	112	Frequency of activity includes for Paro international Airport and three domestic airports
	7	Assess the corrective action/plan and provide feedback	21	4	84	
Random/ Ad-hoc audits/inspections						
Part I: Pre-Audit						
	1	Audit Planning (document review, scope, schedule, team etc.)	7	2	14	Frequency includes Paro intl. Airport and remote sites
	2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit						
	3	Physical Inspection, Interview, Evaluation and Verification	14	2	28	Frequency includes Paro intl. Airport and remote sites
	4	Draft Audit findings and exit meeting				
Part III: Post Audit						
	5	Review draft findings and write audit report	28	2	56	Frequency includes Paro intl. Airport and remote sites
	6	Send Audit report and receive corrective action/plan				
	7	Follow up on Corrective action/plan and close findings				
Total hours for the task					508	

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Training, Workshops, Seminars, Meetings	1	Initial/Specialised/Refresher	49	1	49	
	2	Workshops/Seminars	49	1	49	
	3	ICAO meetings	49	1	49	
	Total hours for the task					147
Total working hours for ATS					1847	

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ANS INSPECTORATE STAFFING METHODOLOGY

Task	No	Sub-Task	Average time taken (in hour)	Frequency in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	2	6	
	2	Drafting of new Manuals, Guidance materials and procedures	98	2	196	
	3	Stakeholder consultation	3	2	6	
	4	Finalization, Promulgation/Publication	2	2	4	
	Total hours for the task					212
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
	Total hours for the task					71
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	
	3	Consultation with stakeholders	3	1	3	



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	4	Finalization, Promulgation	2	1	2	
	Total hours for the task				43	
Approval of AIS Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide –pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	28	1	28	
	7	Prepare and issue report	14	1	14	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	14	1	14	
	9	Prepare for On-site audit/inspections	7	1	7	
	10	Carry out on-site audit	14	1	14	
	11	Prepare and issue report of on-site audit	14	1	14	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	14	1	14	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	14	1	14	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				155	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					
	1	Audit Planning (document review, scope, schedule, team etc.)	7	4	28	Frequency of activity includes for




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2	Notification and Pre-audit documentation (checklist etc.)	14	4	56	Paro international airport and three domestic airports
Part II: Conduct Audit					
3	Entry meeting	0.5	4	2	Frequency of activity includes for Paro international airport and three domestic airports
4	Physical Inspection, Interview, Evaluation and Verification	14	4	56	
5	Draft Audit findings and exit meeting	3	4	12	
Part III: Post Audit					
6	Review draft findings and prepare audit report	21	4	84	Frequency of activity includes for Paro international airport and three domestic airports
7	Assess the corrective action/plan and provide feedback	14	4	56	
Random/ Ad-hoc audits/inspections					
Part I: Pre-Audit					
1	Audit Planning (document review, scope, schedule, team etc.)	7	2	14	Frequency includes two ad-hoc audits for Paro intl. Airport in a year
2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit					
3	Physical Inspection, Interview, Evaluation and Verification	7	2	14	Frequency includes two ad-hoc audits for Paro intl. Airport in a year
4	Draft Audit findings and exit meeting				
Part III: Post Audit					
5	Review draft findings and write audit report	14	2	28	Frequency includes two ad-hoc audits for Paro intl.
6	Send Audit report and receive corrective action/plan				

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	7	Follow up on Corrective action/plan and close findings				Airport in a year
	Total hours for the task				350	
Training, Workshops, Seminars, Meetings	1	Initial/Specialised /Refresher	49	1	49	This includes for Cartography and PANS-OPS areas
	2	Workshops/Seminars	49	1	49	
	3	ICAO meetings	49	1	49	
	Total hours for the task				147	
Total working hours for AIS					1084	



CARTOGRAPHY INSPECTORATE STAFFING METHODOLOGY

Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	1	3	
	2	Drafting of new Manuals, Guidance materials and procedures	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
	Total hours for the task					71
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	
	3	Consultation with stakeholders	3	1	3	



	4	Finalization, Promulgation	2	1	2	
	Total hours for the task				43	
Approval of Cartography Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide –pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	28	1	28	
	7	Prepare and issue report	14	1	14	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	14	1	14	
	9	Prepare for On-site audit/inspections	7	1	7	
	10	Carry out on-site audit	7	1	7	
	11	Prepare and issue report of on-site audit	7	1	7	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	7	1	7	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	7	1	7	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				127	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					
	1	Audit Planning (document review, scope, schedule, team etc.)	7	1	7	

	2	Notification and Pre-audit documentation (checklist etc.)	7	1	7	
Part II: Conduct Audit						
	3	Entry meeting	0.5	1	0.5	
	4	Physical Inspection, Interview, Evaluation and Verification	14	1	14	
	5	Draft Audit findings and exit meeting	3	1	3	
Part III: Post Audit						
	6	Review draft findings and prepare audit report	14	1	14	
	7	Assess the corrective action/plan and provide feedback	14	1	14	
Random/ Ad-hoc audits/inspections						
Part I: Pre-Audit						
	1	Audit Planning (document review, scope, schedule, team etc.)	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit						
	3	Physical Inspection, Interview, Evaluation and Verification	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	4	Draft Audit findings and exit meeting				
Part III: Post Audit						
	5	Review draft findings and write audit report	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	6	Send Audit report and receive corrective action/plan				
	7	Follow up on Corrective action/plan and close findings				
Total hours for the task					101.5	
Total working hours for Cartography					554.5	



CNS INSPECTORATE STAFFING METHODOLOGY

Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	147	1	147	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					155
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	2	6	
	2	Drafting of new Manuals, Guidance materials and procedures	147	2	294	
	3	Stakeholder consultation	3	2	6	
	4	Finalization, Promulgation/Publication	2	2	4	
	Total hours for the task					310
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
Total hours for the task					71	
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	



	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	Total hours for the task				43	
Approval of CNS Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	35	1	35	
	7	Prepare and issue report	21	1	21	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	35	1	35	
	9	Prepare for On-site audit/inspections	14	1	14	
	10	Carry out on-site audit	35	1	35	
	11	Prepare and issue report of on-site audit	21	1	21	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	14	1	14	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	21	1	21	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				232	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					




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1	Audit Planning (document review, scope, schedule, team etc.)	10	5	50	Frequency of activity includes for Paro International airport, three domestic airports and remote CNS site
2	Notification and Pre-audit documentation (checklist etc.)	14	5	70	
Part II: Conduct Audit					
3	Entry meeting	0.5	5	2.5	Frequency of activity includes for Paro International airport, three domestic airports and remote CNS site
4	Physical Inspection, Interview, Evaluation and Verification	14	5	70	
5	Draft Audit findings and exit meeting	3	5	15	
Part III: Post Audit					
6	Review draft findings and prepare audit report	21	5	105	Frequency includes Paro intl. Airport and CNS remote sites
7	Assess the corrective action/plan and provide feedback	14	5	70	
Random/ Ad-hoc audits/inspections					
Part I: Pre-Audit					
1	Audit Planning (document review, scope, schedule, team etc.)	7	4	28	Frequency of activity includes for Paro International airport and remote CNS site
2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit					
3	Physical Inspection, Interview, Evaluation and Verification	14	4	56	Frequency of activity includes for Paro International airport and remote CNS site
4	Draft Audit findings and exit meeting				
Part III: Post Audit					
5	Review draft findings and write audit report	28	4	112	Frequency of activity includes for Paro International airport and remote CNS site
6	Send Audit report and receive corrective action/plan				
7	Follow up on Corrective action/plan and close findings				
Total hours for the task				578.5	

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Training, Workshops, Seminars, Meetings	1	Initial/Specialised /Refresher	49	1	49	
	2	Workshops/Seminars	49	1	49	
	3	ICAO meetings	343	1	343	
	Total hours for the task				441	
Total working hours for CNS					1830.5	

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MET INSPECTORATE STAFFING METHODOLOGY


Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	2	6	
	2	Drafting of new Manuals, Guidance materials and procedures	98	2	196	
	3	Stakeholder consultation	3	2	6	
	4	Finalization, Promulgation/Publication	2	2	4	
	Total hours for the task					212
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
	Total hours for the task					71
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	Total hours for the task					43



Approval of MET Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide –pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	28	1	28	
	7	Prepare and issue report	14	1	14	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	14	1	14	
	9	Prepare for On-site audit/inspections	7	1	7	
	10	Carry out on-site audit	14	1	14	
	11	Prepare and issue report of on-site audit	14	1	14	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	14	1	14	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	14	1	14	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
Total hours for the task				155		
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					
	1	Audit Planning (document review, scope, schedule, team etc.)	7	4	28	Frequency of activity includes for Paro international airport and three domestic airports
2	Notification and Pre-audit documentation (checklist etc.)	14	4	56		
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Part II: Conduct Audit						
3	Entry meeting	0.5	4	2	Frequency of activity includes for Paro international airport and three domestics airports	
4	Physical Inspection, Interview, Evaluation and Verification	14	4	56		
5	Draft Audit findings and exit meeting	3	4	12		
Part III: Post Audit						
6	Review draft findings and prepare audit report	21	4	84	Frequency of activity includes for Paro international airport and three domestics airports	
7	Assess the corrective action/plan and provide feedback	14	4	56		
Random/ Ad-hoc audits/inspections						
Part I: Pre-Audit						
1	Audit Planning (document review, scope, schedule, team etc.)	7	2	14	Frequency includes two ad-hoc audits for Paro intl. Airport in a year	
2	Pre-audit documentation (checklist etc.)					
Part II: Conduct Audit						
3	Physical Inspection, Interview, Evaluation and Verification	7	2	14	Frequency includes two ad-hoc audits for Paro intl. Airport in a year	
4	Draft Audit findings and exit meeting					
Part III: Post Audit						
5	Review draft findings and write audit report	14	2	28	Frequency includes two ad-hoc audits for Paro intl. Airport in a year	
6	Send Audit report and receive corrective action/plan					
7	Follow up on Corrective action/plan and close findings					
Total hours for the task				350		
Training, Workshops, Seminars, Meetings	1	Initial/Specialised/Refresher	49	1	49	This includes for Cartography and PANS-OPS areas
	2	Workshops/Seminars	49	1	49	
	3	ICAO meetings	49	1	49	
	Total hours for the task				147	
Total working hours for MET				1084		

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PANS-OPS INSPECTORATE STAFFING METHODOLOGY

Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	1	3	
	2	Drafting of new Manuals, Guidance materials and procedures	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
	Total hours for the task					71
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	

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	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	Total hours for the task				43	
Approval of PANS-OPS Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide –pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	14	1	14	
	7	Prepare and issue report	14	1	14	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	14	1	14	
	9	Prepare for On-site audit/inspections	7	1	7	
	10	Carry out on-site audit	7	1	7	
	11	Prepare and issue report of on-site audit	7	1	7	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	7	1	7	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	7	1	7	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				113	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					

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1	Audit Planning (document review, scope, schedule, team etc.)	7	1	7	
2	Notification and Pre-audit documentation (checklist etc.)	7	1	7	
Part II: Conduct Audit					
3	Entry meeting	0.5	1	0.5	
4	Physical Inspection, Interview, Evaluation and Verification	14	1	14	
5	Draft Audit findings and exit meeting	3	1	3	
Part III: Post Audit					
6	Review draft findings and prepare audit report	14	1	14	
7	Assess the corrective action/plan and provide feedback	14	1	14	
Random/ Ad-hoc audits/inspections					
Part I: Pre-Audit					
1	Audit Planning (document review, scope, schedule, team etc.)	7	1	7	Since, the scope of PANS-OPS activities is limited, the frequency includes only one ad-hoc audit/inspection
2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit					
3	Physical Inspection, Interview, Evaluation and Verification	7	1	7	Since, the scope of PANS-OPS activities is limited, the frequency includes only one ad-hoc audit/inspection
4	Draft Audit findings and exit meeting				
Part III: Post Audit					
5	Review draft findings and write audit report	7	1	7	Since, the scope of PANS-OPS activities is limited, the frequency includes only one ad-hoc audit/inspection
6	Send Audit report and receive corrective action/plan				
7	Follow up on Corrective action/plan and close findings				
Total hours for the task				80.5	
Total working hours for PANS-OPS				519.5	


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SAR INSPECTORATE STAFFING METHODOLOGY						
Task	No	Sub-Task	Average time taken (in hour)	Number of Activity in year	Time Invested Per Year (in hour)	Remarks
Develop new Regulation	1	Assessment of need for new Regulation	3	1	3	
	2	Drafting of new Regulation including expert consultation	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Develop Manuals, Guidance materials and procedures	1	Assessment of need for new Manuals, Guidance materials and procedures	3	1	3	
	2	Drafting of new Manuals, Guidance materials and procedures	98	1	98	
	3	Stakeholder consultation	3	1	3	
	4	Finalization, Promulgation/Publication	2	1	2	
	Total hours for the task					106
Amend Regulation	1	Receive Annex amendment from ICAO and Evaluation of Impacts	3	1	3	
	2	Draft amendments to National Regulation, Requirements	35	1	35	
	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	5	Position about amendment and decision of adoption and identification/notification of differences	28	1	28	
	Total hours for the task					71
Amend/review Manuals, Guidance materials and procedures	1	Assessment of need for amendment /review Manuals, Guidance materials and procedures	3	1	3	
	2	Draft amendments Manuals, Guidance materials and procedures	35	1	35	

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	3	Consultation with stakeholders	3	1	3	
	4	Finalization, Promulgation	2	1	2	
	Total hours for the task				43	
Approval of SAR Services	Part I: Application & Preparation					
	1	Initial contact with prospective applicant	7	1	7	
	2	Provide –pre-application information	3	1	3	
	3	Receive, review and provide report on pre-application	7	1	7	
	4	Provide guidance on formal application	3	1	3	
	5	Receive and review formal application with all supporting documents.	7	1	7	
	Part II: Assessment of Compliance					
	6	Carry out detailed review of documents (off-site certification audit)	28	1	28	
	7	Prepare and issue report	14	1	14	
	8	Assessment of Corrective actions (CA) for the findings of document reviews and issue report	14	1	14	
	9	Prepare for on-site audit/inspections	7	1	7	
	10	Carry out on-site audit	7	1	7	
	11	Prepare and issue report of on-site audit	7	1	7	
	12	Review corrective action plans and issue report (approve/ reject, provide comments to the applicant)	7	1	7	
	13	Prepare certification audit/inspection report and decide on issuance of certificate or not	7	1	7	
14	Issue certificate	7	1	7		
15	List new certificate holder into master surveillance plan	2	1	2		
	Total hours for the task				127	
Safety Oversight	Schedule Audit/Inspections					
	Part I: Pre-Audit					


	1	Audit Planning (document review, scope, schedule, team etc.)	7	1	7	
	2	Notification and Pre-audit documentation (checklist etc.)	7	1	7	
Part II: Conduct Audit						
	3	Entry meeting	0.5	1	0.5	
	4	Physical Inspection, Interview, Evaluation and Verification	14	1	14	
	5	Draft Audit findings and exit meeting	3	1	3	
Part III: Post Audit						
	6	Review draft findings and prepare audit report	14	1	14	
	7	Assess the corrective action/plan and provide feedback	14	1	14	
Random/ Ad-hoc audits/inspections						
Part I: Pre-Audit						
	1	Audit Planning (document review, scope, schedule, team etc.)	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	2	Pre-audit documentation (checklist etc.)				
Part II: Conduct Audit						
	3	Physical Inspection, Interview, Evaluation and Verification	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	4	Draft Audit findings and exit meeting				
Part III: Post Audit						
	5	Review draft findings and write audit report	7	2	14	Frequency includes two ad-hoc audits for Paro international Airport in a year
	6	Send Audit report and receive corrective action/plan				
	7	Follow up on Corrective action/plan and close findings				
Total hours for the task					101.5	
Training, Workshops, Seminars, Meetings	1	Initial/Specialised /Refresher	49	1	49	This includes for Cartography and PANS-OPS areas
	2	Workshops/Seminars	49	1	49	
	3	ICAO meetings	49	1	49	
	Total hours for the task					
Total working hours for SAR					701.5	

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APPENDIX-C: ANS SURVEILLANCE PROGRAM


ANS SURVEILLANCE PROGRAM					
Regulatory requirement	ANS Service	ANS Station	Duration	Frequency	Remarks
Type of Audit/Inspection: Certification Audit/Inspection					
<i>Scope: The audit/inspection will cover ANS organization, facilities, services, documents and records including personnel requirements</i>					
BCAR ATM/ANS, BCAR-2, BCAR-3, BCAR-4, BCAR-10, BCAR-11, BCAR-15, BCAR-19, PANS-ATM	ATS CNS AIS Cartographic MET	Paro International Airport	3 Months	Once every 4 years	
Type of Audit/Inspection: Scheduled Audit/Inspection					
<i>Scope: The audit/inspection will involve follow-up of corrective actions taken following certification audits for Paro International Airport and will cover as appropriate, the service provider facilities, services, documents and records including personnel requirements.</i>					
<i>For domestic airports, the audit/inspection will cover as appropriate, the service provider facilities, services, documents and records including personnel requirements</i>					
BCAR-ATM/ANS, BCAR-2, BCAR-3, BCAR-4, BCAR-10, BCAR-11, BCAR-15, BCAR-19, PANS-ATM	ATS CNS AIS SAR Cartographic MET	Paro International Airport	1 week	Once year	
BCAR-2, BCAR-3, BCAR-10, BCAR-11, BCAR-15, BCAR-19, PANS-ATM	ATS AIS MET CNS	Bumthang Domestic Airport	2 days	Once year	
BCAR-2, BCAR-3, BCAR-10, BCAR-11, BCAR-15, BCAR-19, PANS-ATM	ATS AIS MET CNS	Gelephu Domestic Airport			
BCAR-2, BCAR-3, BCAR-10, BCAR-11, BCAR-15, BCAR-19, PANS-ATM	ATS AIS MET CNS	Yongphula Domestic Airport			
Type of Audit/Inspection: Ad-hoc (Random) Audits/Inspections					
<i>Scope: The audit/inspection will cover the relevant service provider organization, facilities, services, documents and records including personnel requirements</i>					

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ANS SURVEILLANCE PROGRAM					
Regulatory requirement	ANS Service	ANS Station	Duration	Frequency	Remarks
BCAR-2, BCAR-3, BCAR-4, BCAR-10, BCAR-11, BCAR-15, BCAR-12, BCAR-19, PANS-ATM	ATS SAR CNS AIS Cartographic MET	Paro International Airport	1 day	2	
Type of Audit/Inspection: Post Incident Audits/Inspections					
<i>Scope: The audit/inspection will cover the relevant service provider organization, facilities, services, documents and records including personnel requirements</i>					
BCAR ATM/ANS, BCAR-2, BCAR-3, BCAR-4, BCAR-10, BCAR-11, BCAR -12, BCAR-15, BCAR-19, PANS-ATM	ATS SAR CNS AIS Cartographic MET	Paro International Airport Bumthang Domestic Airport Gelephu Domestic Airport Yongphula Domestic Airport	As and when required		
Type of Audit/Inspection: Post introduction of changes to ATM/ANS system					
<i>Scope: The audit/inspection will cover the relevant service provider organization, facilities, services, documents and records including personnel requirements</i>					
BCAR ATM/ANS, BCAR-2, BCAR-3, BCAR-4, BCAR-10, BCAR-11, BCAR-12, BCAR-15, BCAR-19, PANS-ATM	ATS SAR CNS AIS Cartographic MET	Paro International Airport Bumthang Domestic Airport Gelephu Domestic Airport Yonphula Domestic Airport	As and when required		

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APPENDIX-D: INSPECTOR TRAINING POLICY AND PROGRAMME

1. General

This training policy and programme is intended to address the development of ANS inspectors from the time they are newly hired into the BCAA and to support their professional development throughout their career. The overall training policy and programme for BCAA inspectors are contained in “Manual on Training of Civil Aviation Inspectors.”

2. Training Policy

The HoA acknowledges that all inspectors must be appropriately qualified and trained to perform all duties and tasks required. The HoA will ensure that all such personnel are provided with the training necessary to carry out their duties, as set forth in this document.

The HoA also acknowledges that recurrent training is required for inspectors to be able to keep abreast of industry and the BCAA developments and thereby continue to be able to provide appropriate safety oversight. The HoA will ensure such recurrent training is provided, as set forth in this document.

3. Training Program

The ANS Safety Oversight activities include surveillance, inspections, audits, analysis to find the root cause of the deficiencies/findings, corrective actions, follow-up and enforcement actions. Effective implementation of these tasks requires the intervention of highly qualified personnel during the various stages of the process.

The BCAA, while ensuring the development of a training program, shall regularly, as necessary or every five years, revisit the criteria on the type and frequency of training provided (initial, recurrent and specialized) to determine whether it is sufficient to acquire/maintain the required level of knowledge, skill, qualification and competence in accordance with the duties and responsibilities assigned to the inspectors.


No inspector will be granted with the delegation of authority until all due training needs including the OJT have been satisfactorily completed.

4. Types of Training

The following are the types of training applicable to ANS inspectors:

- Indoctrination training;
 - Basic inspector training
 - On-the-job training (OJT)

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- Recurrent/Refresher training;
- Specialized training
 - Basic Specialized training
 - Advanced Specialized training

The first three types of training shall be applicable to all inspectors. The specialized/technical training shall apply to Inspectors without any previous experience or background in the relevant fields (ATS, AIS, PANS-OPS, Maps & Charts, SAR, CNS and MET) that they are responsible to provide safety oversight over. The detailed training programme for each ANS Inspectors, in the order of priority, are listed later in this chapter.

4.1 Indoctrination Training

All newly appointed ANS Inspectors shall undergo initial or an indoctrination training to familiarize themselves with the functioning of the BCAA and various divisions. This should include an introduction to the structure and purpose of the civil aviation act, BANRs, BCARs and other legal documents – especially those related to ANS. If the inspector is already familiar with the Act, the BCAA regulations and the functions of the BCAA, this is not necessary. The initial training will also include briefings on their roles and responsibilities and programming for specialized training for inspectors with no prior background in the relevant fields.

4.1.1 Basic inspector training

All inspectors must attend an audit techniques course (generic) and ANS-specific safety oversight inspector course to ensure a systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements and audit criteria are fulfilled. This is required to observe and assess the ANSP’s adherence to standards and recommended practices related to ANS equipment, facilities and services.


4.1.2 On-the-job training

The objective of an OJT is to provide direct experience in the work environment in which the inspector is performing or will be performing on their job.

OJT entails the completion of three levels of training for each technical job function. The three levels encompass the study and understanding of reference materials, task observation, and task performance, as further defined below. Newly appointed inspectors, and inspectors transitioning to a position for which they have not previously received OJT, will be assigned an experienced and qualified inspector (OJT Instructor) who will be responsible for validation of all levels of OJT requirements in the OJT record. The sample form is provided in Appendix P of this manual.

a) OJT Level I (Knowledge)

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Level I training is related to that body of knowledge associated with a specific job task. This knowledge is contained in orders, rules, guidance, and standards. Level I training typically involve a review of all reference materials applicable to the job tasks for which training has been identified. Level I training may be satisfied through classroom training or other delivery methods.

b) OJT Level II (*Task Observation*)

Level II training involves observation of the performance of specific job tasks. This training typically involves the trainee observing and/or assisting the OJT trainer in the performance of those specific job tasks for which the trainee will be held accountable. Level II training may be satisfied through appropriate training that provides the opportunity for the trainee to observe and/or assist the trainer performing the task.

c) OJT Level III (*Task Performance*)

Level III training involves the application of knowledge and skills to the performance of specific job tasks. Typically, the trainee performs the job task under the observation of a qualified OJT trainer.

4.2 Recurrent/Refresher Training

Since the responsibility of Inspectors is to ensure the implementation of the civil aviation requirement and various rules and orders mainly based on international standards and requirements, their subject knowledge must be current. Periodic recurrent/refresher training courses in all relevant disciplines are required for the continuing development of the knowledge and skills of the Inspectors, improvement of the inspector’s decision-making capability and to develop the maturity to share more responsibilities in elevated positions.

The Recurrent Training course may share content with the Initial Training and OJT, but varies in emphasis. The Recurrent Training course focuses on changes from year to year in regulations, guidance material as well as significant events occurring in the industry, both internationally or in the local environment.


All ANS Inspectors shall be required to undertake recurrent training as and when necessary or at least once every three years.

An Inspector who has not been part of the program for more than two years shall fulfill the requirements of OJT Level III and attend one Refresher Audit Techniques course.

4.3 Specialized Training

ANS inspectors are required to provide safety oversight which includes both regulatory as well as over operations. The ANS inspectors should be equipped with theoretical and practical knowledge of the relevant technical areas (ATM, AIS, PANS-OPS, Maps & Charts, SAR, CNS and MET) that they are responsible for. ANS inspectors should therefore be provided with specialized/technical

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training in the relevant areas to acquire a high level of knowledge and expertise to undertake their duties and responsibilities.

Specialized/Technical training shall be provided under two categories:

- Basic specialized training; and
- Advanced specialized training.

4.3.1 Basic Specialized training

A newly appointed ANS inspector without any prior experience or training in the relevant field shall undergo basic technical training on par with or better than the new recruits of the service provider over which they are responsible to provide safety oversight. The types of training, including basic technical training, for all the inspectors, are detailed later in this chapter.

4.3.2 Advanced Specialized training

ANS inspectors shall be provided with advanced specialized/technical training in the relevant areas to acquire a high level of knowledge and expertise to effectively undertake their duties and responsibilities. The advanced training shall ensure the development of the knowledge and skills of the Inspectors to support their professional development throughout their career to be on par with any International Inspector.

Advanced Specialized/Technical training shall also include supervisory courses common to all ANS Inspectors, such as but not limited to the following:

- Human Factors course
- ICAO State Safety Programme (SSP) course
- Safety Management System (SMS) course
- Quality Management Systems (QMS) course

The trainings, including Advanced Specialized/Technical training, for each individual inspector is detailed later in this chapter.


5. Training Plan

The HoA will ensure appropriate training by directing the Chief of ANAD to establish and maintain Individual Training Plans, based on the training programme, that sets out the training to be provided to each inspector for at least a 12-month period. Each inspector's plan will be updated by the Chief of ANAD as necessary to adjust the timing of the planned courses and activities or to amend the list of planned courses and activities to meet a newly identified need.

6. Training Files and Records

The ANS section shall establish a system for the maintenance of training records for its inspectors, that is congruent with the training programme and training plan. The training records will be

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systematically retained in the training files and these files shall be maintained and secured at the office.

An electronic copy of the training records shall also be maintained.

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ANS Inspector Training Programme 1			
Position: Chief of ANAD			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination	Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
3.	Specialized	Basic Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Advanced Specialized training	
		Air Traffic Management Safety Investigation and Analysis	01 week
		Safety Oversight Managers Course	01 week
		Air Navigation Services Leadership and Management	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 2			
Position: Sr. ANS Inspector			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination	Basic Inspector training	
		Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
		OJT – Level I	
		Civil Aviation Act of Bhutan (CAAB)	01 Week
		ICAO Doc. 7300	01 Week
		BANRs	02 days
		ANS Safety Oversight Manual / Inspector Handbook	01 week
		BCAR /ICAO Annex (relevant to ANS)	02 weeks
		ICAO Doc. 4444	01 week
		ICAO Doc. 8126	01 week
		ICAO Doc. 8168	01 week
		ICAO Doc. 4444	01 week
		ICAO Doc. 8697	01 week
		ICAO Doc. 8896	01 week
		OJT – Level II	
		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
Documentation/Report	02 days		
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day

		Updates/Revision of BCAA Regulations	01 day
3.	Specialized	Basic Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Advanced Specialized training	
		Air Traffic Management Safety Investigation and Analysis	01 week
		Safety Oversight Managers Course	01 week
		Air Navigation Services Leadership and Management	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 4			
Position: AIS Inspector			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination training	Basic Inspector training	
		Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
		AIS Inspector Course	01 week
		OJT – Level I	
		Civil Aviation Act of Bhutan (CAAB)	01 week
		ICAO Doc. 7300	01 week
		BANRs	03 days
		BCAR - ATS / ICAO Annex 11	02 weeks
		ICAO Doc. 4444	02 weeks
		ANS Safety Oversight Inspector manual / Handbook	01 week
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week
		BCAR - Units / ICAO Annex 5	01 week
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week
		BCAR - SMS / ICAO Annex 19	01 week
		ICAO Doc. 9859	01 week
		OJT – Level II	

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		AIS Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
3.	Specialized	Basic Specialized training	
		AIS/AIM General Course	8 weeks
		AIS – Cartography Course	8 weeks
		Advanced Specialized training	
		Human Factors Course	1 week
		ICAO State Safety Programme (SSP)	5 days
		Safety Management System (SMS)	5 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	1 week
		Civil Aviation Management	2 Weeks
ANS Inspector Training Programme 4			
Position: AIS Inspector			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination	Basic Inspector training	
		Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
		AIS Inspector Course	01 week
		OJT – Level I	

		Civil Aviation Act of Bhutan (CAAB)	01 week	
		ICAO Doc. 7300	01 week	
		BANRs	03 days	
		BCAR - ATS / ICAO Annex 11	02 weeks	
		ICAO Doc. 4444	02 weeks	
		ANS Safety Oversight Manual / Inspector Handbook	01 week	
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week	
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week	
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week	
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week	
		BCAR - Units / ICAO Annex 5	01 week	
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week	
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week	
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week	
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week	
		BCAR - SMS / ICAO Annex 19	01 week	
		ICAO Doc. 9859	01 week	
		OJT – Level II		
		Observation	01 day	
		OJT – Level III		
		Preparation	01 day	
Performance	01 day			
Documentation/Report	02 days			
2.	Recurrent/ Refresher	ANS Inspector Course	01 week	
		AIS Inspector Course	01 week	
		Updates/Revision of ICAO Annexes	01 day	
		Updates/Revision of BCAA Regulations	01 day	

		Emerging AIS courses	-
3.	Specialized	Basic Specialized training	
		AIS/AIM General Course	08 weeks
		Advanced Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 3				
Position: ATS Inspector				
Sl. No	Type of Training	Course	Duration	
1.	Indoctrination	Basic Inspector training		
		Auditing Techniques Course	01 week	
		ANS Inspector Course	01 week	
		ATM Inspector Course	01 week	
		OJT – Level I		
		Civil Aviation Act of Bhutan (CAAB)	01 week	
		ICAO Doc. 7300	01 week	
		BANRs	03 days	
		BCAR - ATS / ICAO Annex 11	02 weeks	
		ICAO Doc. 4444	02 weeks	
		ANS Safety Oversight Manual / Inspector Handbook	01 week	
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week	
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week	
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week	
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week	
		BCAR - Units / ICAO Annex 5	01 week	
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week	
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week	
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week	
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week	
		BCAR - SMS / ICAO Annex 19	01 week	
		ICAO Doc. 9859	01 week	
		OJT – Level II		

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		ATS Inspector Course	01 week
		ATC Refresher Course	02 weeks per rating
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
		Emerging ATS courses	-
3.	Specialized	Basic Specialized training	
		Aerodrome Control (ADC) rating training	17 weeks
		Approach control procedural (APP) rating training	10 weeks
		Unit Training in relevant ATC rating	12 weeks per rating
		Advanced Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 5				
Position: Charts Inspector				
Sl. No	Type of Training	Course	Duration	
1.	Indoctrination	Basic Inspector training		
		Auditing Techniques Course	01 week	
		ANS Inspector Course	01 week	
		AIS Inspector Course	01 week	
		OJT – Level I		
		Civil Aviation Act of Bhutan (CAAB)	01 week	
		ICAO Doc. 7300	01 week	
		BANRs	03 days	
		BCAR - ATS / ICAO Annex 11	02 weeks	
		ICAO Doc. 4444	02 weeks	
		ANS Safety Oversight Manual / Inspector Handbook	01 week	
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week	
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week	
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week	
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week	
		BCAR - Units / ICAO Annex 5	01 week	
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week	
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week	
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week	
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week	
		BCAR - SMS / ICAO Annex 19	01 week	
		ICAO Doc. 9859	01 week	
		OJT – Level II		

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		AIS/Cartography Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
3.	Specialized	Basic Specialized training	
		AIS – Cartography Course	08 weeks
		Advanced Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 6				
Position: CNS Inspector				
Sl. No	Type of Training	Course	Duration	
1.	Indoctrination	Basic Inspector training		
		Auditing Techniques Course	01 week	
		ANS Inspector Course	01 week	
		CNS Inspector Course	01 week	
		OJT – Level I		
		Civil Aviation Act of Bhutan (CAAB)	01 week	
		ICAO Doc. 7300	01 week	
		BANRs	03 days	
		BCAR - ATS / ICAO Annex 11	02 weeks	
		ICAO Doc. 4444	02 weeks	
		ANS Safety Oversight Manual / Inspector Handbook	01 week	
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week	
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week	
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week	
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week	
		BCAR - Units / ICAO Annex 5	01 week	
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week	
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week	
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week	
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week	
		BCAR - SMS / ICAO Annex 19	01 week	
		ICAO Doc. 9859	01 week	
		OJT – Level II		

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		CNS Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
		Emerging CNS courses	-
3.	Specialized	Basic Specialized training	
		ATSEP- COM	02 weeks
		ATSEP – NAV	02 weeks
		ATSEP – SURV	02 weeks
		Advanced Specialized training	
		ATSEP - System Monitoring and Control	02 weeks
		ATSEP - Data processing	05 days
		ATSEP - ATM	02 weeks
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
Civil Aviation Management Course	02 Weeks		

ANS Inspector Training Programme 7				
Position: MET Inspector				
Sl. No	Type of Training	Course	Duration	
1.	Indoctrination	Basic Inspector training		
		Auditing Techniques Course	01 week	
		ANS Inspector Course	01 week	
		MET Inspector Course	01 week	
		OJT – Level I		
		Civil Aviation Act of Bhutan (CAAB)	01 week	
		ICAO Doc. 7300	01 week	
		BANRs	03 days	
		BCAR - ATS / ICAO Annex 11	02 weeks	
		ICAO Doc. 4444	02 weeks	
		ANS Safety Oversight Manual / Inspector Handbook	01 week	
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week	
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week	
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week	
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week	
		BCAR - Units / ICAO Annex 5	01 week	
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week	
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week	
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week	
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week	
		BCAR - SMS / ICAO Annex 19	01 week	
		ICAO Doc. 9859	01 week	
		OJT – Level II		


		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		MET Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
		Aeronautical Meteorological Observation - Refresher	03 hours
		Emerging MET courses	-
3.	Specialized	Basic Specialized training	
		Aeronautical Meteorological Observation Course	12 weeks
		Aeronautical Meteorological Forecaster Course	36 weeks
		Advanced Specialized training	
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks

ANS Inspector Training Programme 8			
Position: PANS-OPS Inspector			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination	Basic Inspector training	
		Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
		PANS-OPS Inspector Course	01 week
		OJT – Level I	
		Civil Aviation Act of Bhutan (CAAB)	01 week
		ICAO Doc. 7300	01 week
		BANRs	03 days
		BCAR - ATS / ICAO Annex 11	02 weeks
		ICAO Doc. 4444	02 weeks
		ANS Safety Oversight Manual / Inspector Handbook	01 week
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week
		BCAR - Units / ICAO Annex 5	01 week
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week
		BCAR - SMS / ICAO Annex 19	01 week
		ICAO Doc. 9859	01 week
		OJT – Level II	

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		PANS-OPS Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
		PANS-OPS Refresher Course	01 week
		Emerging PANS-OPS courses	-
3.	Specialized	Basic Specialized training	
		ICAO PANS-OPS Basic Course	04 weeks
		Advanced Specialized training	
		ICAO PANS-OPS Instrument procedure design/PBN Course	03 weeks
		Human Factors Course	01 week
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks


ANS Inspector Training Programme 9			
Position: SAR Inspector			
Sl. No	Type of Training	Course	Duration
1.	Indoctrination	Basic Inspector training	
		Auditing Techniques Course	01 week
		ANS Inspector Course	01 week
		SAR Inspector Course	01 week
		OJT – Level I	
		Civil Aviation Act of Bhutan (CAAB)	01 week
		ICAO Doc. 7300	01 week
		BANRs	03 days
		BCAR - ATS / ICAO Annex 11	02 weeks
		ICAO Doc. 4444	02 weeks
		ANS Safety Oversight Manual / Inspector Handbook	01 week
		BCAR - PEL / ICAO Annex 1 (Selected)	01 week
		BCAR - RoA/ICAO Annex 2 (Selected)	01 week
		BCAR - MET/ ICAO Annex 3 (Selected)	01 week
		BCAR - CHARTs / ICAO Annex 4 (Selected)	01 week
		BCAR - Units / ICAO Annex 5	01 week
		BCAR - Tele/ ICAO Annex 10 (Selected)	02 week
		BCAR - SAR/ICAO Annex 12 (Selected)	01 week
		BCAR - Aerodromes/ ICAO Annex 14 (Selected)	01 week
		BCAR - AIS / ICAO Annex 15 (Selected)	01 week
		BCAR - SMS / ICAO Annex 19	01 week
		ICAO Doc. 9859	01 week
		OJT – Level II	

		Observation	01 day
		OJT – Level III	
		Preparation	01 day
		Performance	01 day
		Documentation/Report	02 days
2.	Recurrent/ Refresher	ANS Inspector Course	01 week
		SAR Inspector Course	01 week
		Updates/Revision of ICAO Annexes	01 day
		Updates/Revision of BCAA Regulations	01 day
		Emerging SAR courses	-
3.	Specialized	Basic Specialized training	
		Aeronautical SAR Operations Course	07 weeks
		Advanced Specialized training	
		Aeronautical SAR Administration Course	02 weeks
		ICAO State Safety Programme (SSP)	05 days
		Safety Management System (SMS)	05 days
		Quality Management System (QMS)	05 days
		Safety Oversight Managers Course	01 week
		Civil Aviation Management Course	02 Weeks

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	Audit/Inspection Observation Form	Appendix: E	Page: E-1


APPENDIX-E: AUDIT/INSPECTION OBSERVATION FORM

OBN No.:	Date:
Audited/Inspected Party (Unit):	
Name/Post of Individual(s) interviewed:	
Observations and Recommendations:	
Name/Post of Auditor/Inspector:	
Signature of Auditor/Inspector	
.....	Date:

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	Audit/Inspection Response to Observation Form	Appendix: F	Page: F-1


APPENDIX-F: AUDIT/INSPECTION RESPONSE TO OBSERVATION FORM

Response No:	Date:
Response to Observation No:	Dated:
 Action(s) taken/planned: 	
Name/Post of the Responding Officer:	
Signature of the Responding Officer	
	Date:
.....	
Verification <i>(For use by the Regulatory Authority):</i>	
Comment(s):	
Name/Post of Auditor/Inspector:	
	Date:
Signature of Auditor/Inspector:	
.....	

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	Audit/Inspection RCA Form	Appendix: G	Page: G-1


APPENDIX-G: AUDIT/INSPECTION REQUEST FOR CORRECTIVE ACTION (RCA) FORM

RCA No.:	Date:
Audited/Inspected Party:	
Name/Post of Responsible Officer:	
Non-Compliance Item:	
Document Reference:	
Details of Non-Compliance:	
Name/Post of Auditor/Inspector:	
Signature of Auditor/Inspector	
Date:

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	Audit/Inspection Response to RCA Form	Appendix: H	Page: H-1

APPENDIX-H: AUDIT/INSPECTION RESPONSE TO RCA FORM

Response No.:	Date:
Responding to RCA No.:	Dated:
 Remedial Action(s): <i>(Short-term Fix)</i>	
 Corrective Action(s): <i>(Long-term Solution)</i>	
 Action Due Date(s):	
Name/Post of Responding Officer:	
Signature Responding Officer:	
.....	Date:
Verification <i>(For use by the Regulatory Authority)</i>	
Comment(s):	
Name of Auditor/Inspector:	
Signature of Auditor/Inspector:	Date:
.....	

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	Audit/Inspection Safety Notification (SAN) Form	Appendix: I	Page: I-1

APPENDIX-I: AUDIT/INSPECTION SAFETY NOTIFICATION(SAN) FORM

SAN No.:	Date:
Audited/Inspected Party:	
Name/Post of Responsible Officer:	
Non-Compliance Item:	
Document Reference:	
Detail of Non-Compliance:	
Action Due Date (<i>Immediate action required</i>):	
Action Due Date(s):	
Name/Post of Responding Officer:	
Name of Auditor/Inspector:	
Signature of Auditor/Inspector:	Date:
.....	

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	Audit/Inspection response to Safety Notification (SAN) Form	Appendix: J	Page: J-1

APPENDIX-J: AUDIT/INSPECTION RESPONSE TO SAFETY NOTIFICATION(SAN) FORM

Response No.:	Date:
Responding to SAN No.:	Dated:
Remedial Action(s) (Short-term fix):	
Corrective Action(s) (Long-term Solution):	
Name/Post of Responding Officer:	
Signature of Auditor/Inspector:	
Date:	
.....	
Verification (For use by Regulatory Office)	
Comment(s):	
Name of Auditor/Inspector:	
Signature of Auditor/Inspector	
Date:	
.....	

APPENDIX-K: AUDIT/INSPECTION FINDING FROM

1. File No. BCAA/FSR/ANS.....	Date:
2. Airport/Station audited/inspected:	
3. Date of audit/inspection:	
4. Audit/Inspection No:	
5. Field of audit/inspection:	
6. Area of audit/inspection:	
7. Sub-area:	
8. Finding No:	
9. Document Reference and detail of non-compliance:	
10. ANSP's Corrective Action Plan: <input type="checkbox"/> Immediate <input type="checkbox"/> Short term <input type="checkbox"/> Long term	
Target date:	
Date:	
Signature with official seal of ANSP	
11. ANS Inspector(s) response:	
<input type="checkbox"/> Corrective Action Plan Is approved as it is.	
<input type="checkbox"/> Corrective action Plan to be completed by Date.....	
Comment(s):	
Name of Auditor/Inspector:	
Signature of the Auditor/Inspector:	
Date.....	
.....	

12. Completion/Progress Report by the ANSP:

Comment(s):

Revised Target Date:

Signature with official seal of ANSP


..... Date:

13. Audit Follow-up: Finding is closed Finding is not closed

Comment(s):

Actual date of completion: Inspector's Sign. & Date:

If required extra paper should be used

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	CAP Unacceptable Letter	Appendix: L	Page: L-1

APPENDIX-L: CAP UNACCEPTABLE LETTER

Date:

Name/Designation of auditee

Address:

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM,

A review of your proposed corrective action plan to the findings generated during the regulatory Audit/inspection of NAME OF AUDITEE on DATE has been carried out by this office. Attached is a copy of the corrective action forms with our response.

Each/some corrective action is determined to be unacceptable and requires a new response. Please submit your revised corrective action plan for these findings to the Audit/Inspection Manager address noted below no later than DATE.

Responses that require changes or development of new/additional policy and procedures will also require a completion date. This date can be discussed with the undersigned. Should you require clarification or further information, please contact me on e-mail or telephone.

Yours Sincerely,

Signature of Audit Manager


Date:

E-mail:

Telephone number:

Enclosure:

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	CAP Acceptable Letter to Close an Audit	Appendix: M	Page: M-1

APPENDIX-M: CAP ACCEPTABLE LETTER TO CLOSE AN AUDIT

Date:

Name/Designation of Auditee

Address

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM,

Further to the BCAA regulatory audit/inspection of NAME OF AUDITEE on DATE, all corrective action and follow-up in response to the findings is complete and the audit/inspection is now closed.

I would like to take this opportunity to thank you and your staff for your co-operation during this process.

Yours sincerely,


Signature of Audit Manager

Date:

E-mail:

Telephone number:

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	CAP Acceptable Letter	Appendix: N	Page: N-1

APPENDIX-N: CAP ACCEPTABLE LETTER

Date:

Name/Designation of Auditee:

Address:

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM,

Further to the BCAA regulatory audit/inspection of NAME OF AUDITEE on DATE, your corrective action plan in response to the audit/inspection findings has been received and accepted.

The BCAA will continue to monitor the progress of your corrective action plan by completing an ADMINISTRATIVE OR ON-SITE follow-up. The ADMINISTRATIVE OR ON-SITE follow-up will ensure that your proposed corrective action plan has addressed all audit/inspection findings. I will be in contact with you to discuss the follow-up in more detail. Should you require clarification or further information, please contact me on e-mail or telephone.

Yours sincerely,

Signature of Audit Manager


Date:

E-mail:

Telephone number:

Enclosure:

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	Audit Close No Findings Letter	Appendix: O	Page: O-1

APPENDIX-O: NO FINDINGS LETTER TO CLOSE AN AUDIT

Date:

Name/Designation of Auditee:

Address:

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

Further to the BCAA regulatory audit/inspection of NAME OF THE AUDITEE on DATE, all areas observed met BCAA regulatory audit/inspection requirements and the audit/inspection is now closed.

I would like to take this opportunity to thank you and your staff for your co-operation during this process.

Yours sincerely,

Signature of Audit Manager

Date:

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APPENDIX-P: PARALLEL REPORT FORM

<p>1. File No. BCAA/FSR/ANS/.....</p> <p>2. Airport/ Station audited/ inspected:</p> <p>3. Date of Audit:</p> <p>4. Audit/Inspection No.</p> <p>5. Field of Audit/Inspection:</p> <p>6. Area of Audit/Inspection:</p> <p>7. Sub-area:</p> <p>8. Finding No:</p> <p>9. Document ref. and Details of Deficiencies/Misapplication/Non-conformance:</p> <p style="margin-left: 40px;">Name of Auditor/Inspector:</p> <p style="margin-left: 40px;">Signature of Auditor/Inspector:</p> <p style="margin-left: 80px;">.....</p>	<p>Date:</p> <p>10. Assignment of responsibility for response and follow-up (when applicable): Person(s) detailed:</p> <p style="margin-left: 40px;">Task assigned:</p> <p style="margin-left: 40px;">Target date of completion: _____</p> <p style="margin-left: 40px;">Signature with official seal of ANSP Date: _____</p> <p style="margin-left: 40px;">.....</p>
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11. Completion/Progress Report by the responsible officer:
 Completed Partially completed

Comments:

Revised Target Date:

Signature with official seal of the responsible officer

.....

12. Audit Follow-up: Finding is closed Finding is not closed

Comment(s):

Actual date of completion: Inspector's Sign. & Date:

Use overleaf of the Form or extra paper, if required

APPENDIX-Q: INSPECTOR'S OJT RECORD FORM

1. Inspector information				
Name.....		Division	Air Navigation and Aerodrome	
Position.....		Section	Air Navigation Services	
2. On the Job Training				
Description of Subject Matter/ Skills to be acquired	Date of Completion			Remarks
	Level I <i>(Knowledge)</i>	Level II <i>(Demonstration)</i>	Level III <i>(Performance)</i>	
Observation of Auditing/Inspection demonstration by OJT Instructor				
Performing a mock-up audit/inspection				
Preparation				
Performance				
Documentation				
3. Certification				
a) By appending my signature, I certify that the trainee has completed the specified OJT documented above and he/she is competent to perform the task without supervision.				
..... Signature of the OJT Instructor	 Date		
b) I hereby confirm that I have completed the specified OJT documented above with the OJT Instructor.				
..... Signature of the head of the section	 Date		