রেজিস্টার্ড নং ডি এ-১

# বাংলাদেশ গেজেট

অতিরিক্ত সংখ্যা
কর্তৃপক্ষ কর্তৃক প্রকাশিত

মঙ্গলবার, জুলাই ১৬, ২০২৪

[বেসরকারি ব্যক্তি এবং কর্পোরেশন কর্তৃক অর্থের বিনিময়ে জারীকৃত বিজ্ঞাপন ও নোটিশসমূহ]

## Civil Aviation Authority of Bangladesh

## Gazette

Dhaka, ২৬ বৈশাখ ১ ৪ ৩১/09 May 2024

**No. CAAB 30.31.0000.111.37.019.23** – In exercise of the power conferred by Section 47, read with Section 14 of the Civil Aviation Act, 2017 (Act No. 18 of 2017), hereinafter referred to as the "Act", the Chairman of the Civil Aviation Authority of Bangladesh is pleased to issue this Air Navigation Order (ANO) "ANO 19 on Safety Management".

2. This ANO shall come into force with immediate effect.

**Air Vice Marshal M Mafidur Rahman**
BBP, BSP, BUP, ndu, afwc, psc
Chairman
Civil Aviation Authority of Bangladesh.


**মূল্য :** টাকা ৬৪.০০

## CHAPTER 1. GENERAL

### 1.1 Short Title and Commencement

This Air Navigation Order (ANO) will be called as ANO 19 on Safety Management, issued in accordance with Annex 19 to the Convention on International Civil Aviation and referred to herein as the "ANO 19". This ANO 19 shall be effective immediately upon publication in the official gazette.

### 1.2 Introduction

With the increase in air traffic and the complexity of the aviation system, it became necessary to address safety management dedicatedly and explicitly to ensure safe journeys and the protection of people, properties, and the environment through the management of safety risks in aviation.

Safety management is commonly understood as applying a set of principles, frameworks, processes, and measures to prevent accidents, injuries, and other adverse consequences that may be caused while delivering service or producing a product. It is the function that exists to assist managers in better discharging their responsibilities for operational system design and implementation through either the prediction of system deficiencies before errors occur or the identification and correction of system deficiencies by professional analysis of safety deficiencies within the processes of the organization.

Safety management implies a systematic approach to managing safety, including the necessary organizational structure, accountabilities, policies, and procedures. The objective of safety management in the aviation industry is to prevent human injury or loss of life and to avoid damage to the property and the environment.

As a member of ICAO, Bangladesh has committed to comply with ICAO safety management standards. These standards include requirements for States as regulators and SMS, applicable to product/service provider organizations.

To fulfill the obligation to the Convention on International Civil Aviation and national legislation as well as meeting our safety policy for ensuring safe air and preventing injury to persons, damage to property, and protection of the environment, this ANO on Safety Management is being promulgated. This ANO 19 (Issue #01, May 2024) has been developed based on edition 2 of Annex 19 to the Convention on International Civil Aviation.

The Provisions in this ANO are intended to assist CAAB including all stakeholders in managing aviation safety risks. Given the increasing complexity of the global air transportation system and its interrelated aviation activities required to assure the safe operation of aircraft, this ANO supports the continued evolution of a proactive strategy to improve safety performance. The foundation of this proactive safety strategy is based on the implementation of a State Safety Programme (SSP) that systematically addresses safety risks.

Effective SSP implementation is a gradual process, requiring time to mature fully. Factors that affect the time required to establish an SSP include the complexity of the air transportation system as well as the maturity of the aviation safety oversight capabilities of the State.

This ANO describes the requirements of SSP and Safety Management Systems (SMSs), as well as related elements including the collection and use of safety data and State safety oversight activities. The Critical Elements (CEs) of a State Safety Oversight (SSO) system constitute the foundation of an SSP. Chapter 3 integrates the eight CEs of the SSO system with the SSP framework elements into a streamlined set of provisions to facilitate implementation.

This ANO is a living document and will be reviewed and revised at periodic intervals to take into account changes in legislation, laws, regulations, ICAO Standards, and feedback from the organization and the industry.

**1.3 Oversight of Product/Service Providers/Operators.**

**a)** This document refers to aviation products and services over which CAAB has regulatory authority and safety oversight responsibility. Entities that provide products and services include airports, manufacturers, airlines, operators, maintenance organizations, training organizations, air traffic service providers, and others. Entities may be organizations or individuals. Aviation product/service providers are responsible for the safety of their products and services; they must comply with safety regulations and standards established by the CAAB. CAAB is responsible for establishing the safety regulations and standards that provide requirements for aviation product/service providers' systems. These regulations and standards are founded upon the CAA Act 2017, CAR 84 and amendment thereto, ICAO Annexes, and safety data and analysis.

**b)** With SMS, CAAB is better able to allocate resources and conduct safety oversight using safety management principles. CAAB establishes safety management requirements for, and promotes SMS implementation in, product/service provider/operator organizations, as appropriate. CAAB verifies compliance with regulations using a variety of means such as audits, evaluations, and inspections. CAAB also confirms the implementation and effectiveness of the aviation product/service provider's systems. In this way, CAAB personnel are used more efficiently, and there is a higher level of confidence that an aviation product/service provider/operator will meet safety standards.

**c)** With SMS, CAAB will assure product/service compliance in accordance with the regulations. Therefore, direct observation and surveillance are still required in the CAAB oversight activities. CAAB is assessing compliance with the regulations. In addition to that, CAAB will assess the effectiveness of service providers' safety management capabilities and performance.

**d)** With SMS, CAAB will ensure that regulations are in place to control safety risks. CAAB will use available data to monitor the level of safety risk that exists in the areas of CAAB's regulatory authority and ensure that safety risk is controlled. Additional/modified regulations may be developed based upon risk assessments conducted by service providers/operators and/or the CAAB, as needed.

**e)** CAAB uses SRM throughout the aviation system to manage safety risks with regulations, standards, and policy. CAAB typically conducts SRM in an oversight capacity to address safety issues that affect multiple product/service providers. CAAB Departments with oversight responsibility must ensure that service providers/operators have processes and methods in place to control safety risks.

**f)** CAAB is never responsible for performing SRM or primary Safety Assurance on behalf of an individual aviation service provider/operator that it oversees. Aviation service providers/operators are responsible for managing safety for their operations, including conducting SRM and Safety Assurance for their operations. Aviation service providers/operators can directly control risk related to the hazards in their operations because they control the resources and activities of people directly exposed to hazards.

**1.4 Status of ANO Components**

This ANO 19 is made up of the following component parts:

1.— *Material comprising the ANO proper*

a) Provisions include Standards and Recommended Practices adopted from ICAO Annex 19 and Industry best practices. They are defined as follows:

Standard: Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which applicable authority or agencies or service providers or operators will conform in accordance with the provisions;

Recommended Practice: Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interest of safety, regularity or efficiency of international air navigation, and to which applicable authority or agencies or service provider or operator will endeavor to conform in accordance with the provisions.

b) Appendices comprising material grouped separately for convenience but forming part of the provisions.

c) Definitions of terms used in the Provisions which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Provision in which the term is used since a change in the meaning of the term would affect the specification.

d) Tables and Figures which add to or illustrate a Provision and which are referred to therein, form part of the associated Provisions and have the same status.

2.— Material approved by the CAAB for publication in association with the Provisions

a) *Introduction* comprising historical background of the requirement of this ANO including an explanation of the obligations of Bangladesh with regard to the application of the Standards and Recommended Practices ensuing from the Chicago Convention;

b) *Notes* included in the text, where appropriate, to give factual information or references bearing on the Provision in question but not constituting part of the Standards or Recommended Practices;

c) *Appendices* comprising material of Implementation Standards supplementary to the Standards and Recommended Practices stated in the provisions of the ANO.

**1.5 Explanation**

The whole document contains the Provisions which include Standards and Recommended Practices on Safety Management in accordance with ICAO Annex 19.

Standards are denoted by "Shall" which are treated as mandatory requirements. The Standards are reflected in the ANO in the normal fonts and the recipients are required to conform to such requirements invariably and the Chairman, CAAB, will take appropriate enforcement action when those requirements are not complied with.

Recommended Practices are denoted by "should" and are reflected in the ANO in italic fonts. The recipients are encouraged to implement them to the greatest extent possible. However, Chairman CAAB will not take enforcement action when a Recommended Practice is not satisfied by the recipient.

Notes are reflected in italic fonts, the status is indicated by the prefix note.

**1.6 Control of ANO 19 and its Review Process**

(a) This document is the property of the Civil Aviation Authority of Bangladesh.

(b) This ANO 19 is under the full authority of the Chairman, Civil Aviation Authority of Bangladesh. Member (Flight Standard & Regulations) of CAAB is the custodian of the ANO 19.

(c) Member (Flight Standard & Regulations) is responsible for revision, distribution, retention, and processing of the approval of the ANO 19.

(d) This ANO will be reviewed every three years interval considering ICAO Annex 19, other ICAO Annexes, and their amendments and regulations of other regulatory authorities.

(e) Responsible Inspector(s) of FSR Division of CAAB having revision responsibility of this ANO performs schedule reviews at least every three years. If the review process does not lead to any change to the document, ANO is not updated/amended; but the review record is preserved.

(f) Other than the scheduled review, the document will be reviewed:

- after changes of Act, Laws etc relating to aviation;
- after changes in regulations relating to aviation;
- after changes or amendment of ICAO Annex 19;
- after changes of other Annexes which dictate to change ANO 19;
- after changes of regulations of other authorities such as FAA, EASA, etc which will require to change ANO 19;
- after changes in any documents of CAAB which will call for revising this document;
- if service providers/operators or the users of the document ask for reasonable and objective changes;
- if there are any mistakes/errors in the document and perform reviews as and when it deems necessary;

(g) After reviewing, if it becomes necessary to review the existing provision or any portion of a provision of this ANO, it will be reflected through the issuance of revision.

(h) If the revision requires more than 50% of pages to be updated/changed, it is recommended that a complete issue of the document be published, with new issue number and issue date, with the issue number incremented by 1 (one) with the previous issue number.

(i) After approval and gazette notification, ANO will be published in the CAAB website for the use of the stakeholders.

**1.7 Dispute Resolution**

(a) Should there be any confusion of understanding of the content(s) of this ANO 19, the matter should be brought to the attention of the Member (Flight Standard & Regulations) of CAAB for clarification.

(b) In the circumstances, when any dispute or contradiction arises which cannot be resolved with the provisions of the ANO, the final decision is under the discretion of the Member (Flight Standard & Regulations) of CAAB. Member (Flight Standard & Regulations) of CAAB may produce the issue before the Chairman, CAAB, if deemed necessary.

**1.8 DEFINITIONS**

When the following terms are used in this ANO on Safety Management, they have the following meanings unless the context otherwise requires:

**A**

**Accident**: An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of:

— being in the aircraft, or
— direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
— direct exposure to jet blast,

*Except* when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

— Adversely affects the structural strength, performance or flight characteristics of the aircraft, and
— would normally require major repair or replacement of the affected component,

*except* for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

c) the aircraft is missing or is completely inaccessible.

*Note 1.— For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.*

*Note 2. — An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.*

*Note 3. — The type of unmanned aircraft system to be investigated is addressed in 5.1 of Annex 13.*

*Note 4. — Guidance for the determination of aircraft damage can be found in Attachment E of Annex13.*

**Accountabilities:** This term refers to obligations that may not be delegated.

**Accountable Manager**: A single key person of an organization who is accountable and fully responsible for the organization's SMS by accepting ultimate authority for the safe operation of the organization.

**Aeroplane:** A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

**Aircraft:** Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

**Aircraft Accident Investigation Committee of Bangladesh (AAIC-BD):** The permanent national civil aviation safety investigation committee of Bangladesh conducting or supervising safety investigations in accordance with Annex 13 and Aircraft Accident & Serious Incident Investigation Rules (AASIIR),

**Air Navigation Order"** or **"ANO":** means an order issued under Act No. 18 of 2017 for regulating aeronautical and non-aeronautical activities.

**Air Operator:** The holder of an Air Operator Certificate (AOC) issued by the CAAB. Air Operator means any person or organization which is, directly or indirectly, or by itself or by lease or under any other arrangement, engaged in commercial air transportation and operation;

*Examples; Airline, Air Carrier,*

**Air Operator Certificate (AOC):** A certificate authorizing an air operator by CAAB to carry out specified commercial air transport operations.

**Anonymisation :** The removal from safety reports of all personal details relating to the reporter and to the persons mentioned in occurrence reports and any details, including the name of the organization involved in the occurrence, which may reveal the identity of the reporter or a third party or lead to that information being inferred from the occurrence report;

**B**

**Best Practice:** A strategy, process, approach, method, tool, or technique that is generally recognized as being effective in helping an operator to achieve operational objectives.

**C**

**Change Management:** A systematic approach to identify and analyze internal and external changes with the potential to affect the functionality of an organization, and for assessing and controlling the risks associated with such changes.

**Competency:** A combination of skills, knowledge, and attitudes required to perform a task to the prescribed standard.

**Competency-based Training:** Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

**Competent Authority:** An entity within a state that has the legally delegated or invested authority, capacity, or power to perform a designated function.

**COMPLEX MOTOR-POWERED AIRCRAFT** shall mean:

(i) an aeroplane:
- — with a maximum certificated take-off mass exceeding 5700 kg, or
- — certificated for a maximum passenger seating configuration of more than nineteen, or
- — certificated for operation with a minimum crew of at least two pilots, or
- — equipped with turbojet engine(s) or more than one turboprop engine, or

(ii) a helicopter certificated:
— for a maximum take-off mass exceeding 3175 kg, or
— for a maximum passenger seating configuration of more than nine, or
— for operation with a minimum crew of at least two pilots, or

(iii) a tilt rotor aircraft;

**Compliance:** The state of being in accordance with rules or requirements specified in standards or regulations.

**Compliance-Based Regulatory Oversight:** The conventional and prescriptive method used by a state's Civil Aviation Authority to ensure safety; requires operators or service providers to be in strict compliance with pre-established non-variable regulations.

**Compliance Obligation:** A mandatory compliance obligation or a voluntary compliance obligation. Mandatory compliance obligations include laws and regulations while voluntary compliance obligations include contractual commitments, community and industry standards, ethical codes of conduct, and good governance guidelines. A voluntary obligation becomes a mandatory compliance obligation once the operator decides to comply with it.
**Consequence**: Outcome or impact of an event.

***Notes:***
*1. There can be more than one consequence from one event.*
*2. Consequences can range from positive to negative.*
*3. Consequences can be expressed qualitatively or quantitatively.*
*4. Consequences are considered in relation to the achievement of objectives*

**Crew member:** means any person who is, at the time of flight or while flying, assigned with any duty of an aircraft by any operator.

**D**
**Disidentified Information:** information arising from safety reports from which all personal data such as names or addresses of natural persons have been removed;

**F**
**Flight Data Analysis (FDA) Program:** A non-punitive program for gathering and analyzing data recorded during routine flights to improve flight crew performance, operating procedures, flight training, air traffic control procedures, air navigation services, or aircraft maintenance and design.

**G**

**General Aviation:** means operating any general aircraft for any purpose other than commercial aviation or aerial work.

**H**

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

**Helicopter**: A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

**I**

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

*Note. – The types of incidents which are of interest for safety-related studies include the incidents listed in Annex 13, Attachment C.*

**Industry codes of practice:** Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization's Standards and Recommended Practices (SARPs), other aviation safety requirements, and the best practices deemed appropriate.

**Interested Party:** Any natural or legal person or any official body, whether or not having its own legal personality, that is in a position to participate in the improvement of aviation safety by having access to information on occurrences within and outside Bangladesh;

**J**

**Just Culture:** A culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, wilful violations, and destructive acts are not tolerated;

**N**

**NON-COMPLEX ORGANIZATION**:

(a) An operator should be considered as non-complex when it has a workforce of 20 or less time equivalents (FTEs).

(b) Notwithstanding (a) above, the operators with up to 20 FTEs involved may be considered complex based on an assessment of the following factors:

(1) in terms of complexity, the extent and scope of contracted activities subject to the approval;

(2) in terms of risk criteria, the extent of the following:

(i) operations requiring a specific approval;

(ii) operations with different types of aircraft used; and

(iii) operations in challenging environment (offshore, mountainous area, etc.).

(c) Maintenance organizations with 10 FTEs or less are considered non-complex organizations.

(d) An approved training organization should be considered as non-complex when it has a workforce of 20 or less time equivalents (FTEs).

(e) Notwithstanding (d) above, approved training organization with up to 20 FTEs involved may be considered complex based on an assessment of the following factors:

(1) in terms of complexity, the extent and scope of contracted activities subject to the approval;

(2) in terms of risk criteria, whether any of the following are present:

(i) operations requiring the following specific approval:

(A) Performance based navigation (PBN);

(B) Low Visibility Operation (LVO);

(C) Extended Range Operations with two-engine aeroplanes (ETOPS)/ EDTO (Extended Diversion Time Operations);

(D) Helicopter Emergency Medical Service (HEMS);

(E) Dangerous Goods (DG);

(ii) different types of aircraft used; and

(iii) the environment (offshore, mountainous area, etc.).

(f) Regardless of the criteria mentioned in (d) and (e), approved training organizations only providing training for Private Pilot Licence (PPL), and the associated ratings and certificates are always non-complex.

**O**

**Occurrence:** Any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident;

**Operational Personnel**: Personnel involved in aviation activities who are in a position to report safety information. Such personnel include, but are not limited to: flight crews; persons working in aerodrome, air traffic controllers; aeronautical station operators; maintenance personnel; personnel of aircraft design and manufacturing organizations; cabin crews; flight dispatchers, apron personnel and ground handling personnel etc.

**Organization:** Any organization providing aviation products or services and/or which employs, contracts or uses the services of persons required to report occurrences.

**P**

**Performance-based Compliance:** A safety risk-based approach to regulatory compliance that involves the setting or application of target levels of system or process safety performance, which in turn facilitates the implementation of variable regulations or operational variations from existing prescriptive regulations.

***Note:*** *Performance-based compliance is supported by proactive operator processes that constantly monitor the real-time performance, hazards, and safety risks of a system.*

**Point of Contact** means:

i. where a request for information is made by an interested party established in Bangladesh;

ii. where a request for information is made by an interested party established outside Bangladesh

**Procedure:** An organized series of actions accomplished in a prescribed or step-by-step manner to achieve a defined result.

**Process:** One or more actions or procedures implemented in a coordinated manner to achieve a goal, or a defined result or to satisfy a requirement.

**Program:** An organized set of processes directed toward a common purpose, goal or objective.

**R**

**Regulatory Authority:** An organization designated or otherwise recognized by the government of a state for regulatory purposes, which issues rules and regulations in connection with protection and safety.

**Reporter:** a natural person who reports an occurrence or other safety-related information.

**Responsibilities:** This term refers to functions and activities that may be delegated.

**Risk**: The predicted probability and severity of the consequences or outcomes of a hazard.

**Risk Assessment:** The overall process of hazard identification, risk analysis, and risk evaluation.

**Root Cause:** The initiating cause in a causal chain that leads to an undesirable situation or condition; the point in the causal chain where corrective action could reasonably be implemented and expected to correct and prevent the recurrence of the undesirable situation or condition.

**S**

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

**Safety Assurance:** The component of a safety management system that comprises processes for:

- Safety performance monitoring and measurement;
- The management of change;
- Continual improvement of the SMS.

**Safety Audit:** An independent and documented examination of activities, records, systems, programs, processes, procedures, resources and/or other elements of operations to verify an operator's/provider's safety performance and validate the effectiveness of existing risk controls.

**Safety Data:** A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety. Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

a) accident or incident investigations;
b) safety reporting;
c) continuing airworthiness reporting;
d) operational performance monitoring;
e) inspections, audits, surveys; or
f) safety studies and reviews.

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

**Service Provider:** means any institution which provides aviation service.

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

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

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

**Safety Performance Indicator**: A data-based parameter used for monitoring and assessing safety performance.

**Safety Performance Target:** The State or service provider's planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

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

**Serious incident**: An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

*Note 1. — The difference between an accident and a serious incident lies only in the result.*

*Note 2. — Examples of serious incidents can be found in Attachment C of ICAO Annex 13 and AASIIR 2023*

**Serious Injury**: An injury which is sustained by a person in an accident and which:

a) Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or

b) Results in a fracture of any bone (except simple fractures of fingers, toes or nose); or

c) involves lacerations which cause severe haemorrhage, nerve, muscle or ten don damage; or

d) involves injury to any internal organ; or

e) Involves second- or third-degree burns, or any burns affecting more than 5 per cent of the body surface; or

f) Involves verified exposure to infectious substances or injurious radiation.

**State of Design**: The State having jurisdiction over the organization responsible for the type design.

**State of Manufacture**: The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

**State of the Operator**: The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

**State Safety Programme (SSP):** An integrated set of legal acts, regulations and activities aimed at improving civil aviation safety in Bangladesh.

**Surveillance:** The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

**1.9 ABBREVIATIONS** *(used in this ANO)*

| | |
|---|---|
| AAIC-BD | Aircraft Accident Investigation Committee Bangladesh |
| AAIO | Aircraft Accident Investigation Order |
| ADREP | Accident/incident Data Reporting |
| ALoSP | Acceptable Level of Safety Performance |
| ANO | Air Navigation Order |
| ATS | Air Traffic Services |
| CAAB | Civil Aviation Authority of Bangladesh |
| CPD | Civil Aviation Procedure Document |
| CVR | Cockpit Voice Recorder |
| EDTO | Extended Diversion Time Operations |
| FSR | Flight Standard & Regulations |
| FTEs | Full Time Employees |
| I.S | Implementing Standards |
| NASP | National Aviation Safety Plan |
| RAIO | Regional Accident and Incident Investigation Organization |
| RSOO | Regional Safety Oversight Organization |
| SARPs | Standards and Recommended Practices |
| SDCPS | Safety Data Collection and Processing Systems |
| SMM | Safety Management Manual |
| SMP | Safety Management Panel |
| SMS | Safety Management System |
| SPI | Safety Performance Indicator |
| SPT | Safety Performance Target |
| SSO | State Safety Oversight |
| SSP | State Safety Programme |

## CHAPTER 2

## APPLICABILITY

2.1 The provisions contained in this ANO shall be applicable to safety management functions related to, or in direct support of, the safe operation of aircraft.

2.2 Except where otherwise specified, these Regulations shall not apply to, such areas including, but not limited to environmental protection, customer services, or product quality.

2.3 Any order, instruction, directive, procedure, or guidance material related to safety management to be issued by the CAAB shall be treated as an integral part of this ANO 19.

*Note 1. —Safety management provisions for Bangladesh, CAAB, AAIC-BD, and other agencies of aviation are contained in Chapter 3 and relate to the State Safety Programme (SSP) of Bangladesh.*

*Note 2. —Within the context of this ANO, the term "service provider" refers to those organizations listed in Chapter 3, Paragraph 3.3.2.1, and does not include international general aviation operators.*

*Note 3. —Safety management provisions for the Service Providers and the Air Operators (also called Operators) are contained in Chapter 4 and relate to the Safety Management System (SMS).*

*Note 4. — Provisions for Safety Data and Safety Information Collection, Analysis, Protection, Sharing, and Exchange between CAAB, AAIC-BD, and any other organization related to aviation or any person operating an aircraft registered in Bangladesh or providing aviation services or working in any of the approved organizations are contained in Chapter 5.*

*Note 5.— No provision of this ANO is intended to transfer to the State the responsibilities of the aviation service provider or operator. This includes functions related to, or in direct support of, the safe operation of aircraft.*

*Note 6.— In the context of this ANO, "responsibility" (singular) refers to "State responsibility" with respect to international obligations under the Convention on International Civil Aviation, while "responsibilities" (plural) should be given its ordinary meaning (i.e., when referring to functions and activities that may be delegated).*

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## CHAPTER 3

## SAFETY MANAGEMENT RESPONSIBILITIES OF BANGLADESH

**3.0 Purpose and Applicability**:

The purpose of this chapter is to outline the safety management responsibilities of Bangladesh, CAAB, AAIC-BD, and other agencies in aviation to perform their safety management functions as well as to conduct the surveillance of SMS implemented by the service providers and the operators in accordance with the provisions in this ANO. This chapter (State Safety Management responsibilities) is applicable to Bangladesh, CAAB, AAIC-BD, and other authorities or agencies related to aviation safety functions on behalf of Bangladesh.

*Note 1.—The State Safety Oversight (SSO) system Critical Elements (CEs) constitute the foundation of an SSP. Eight CEs of SSO are incorporated in this chapter.*

*Note 2.—Safety management provisions pertaining to specific types of aviation activities are addressed in the relevant ANOs.*

*Note 3.—Basic safety management principles applicable to the medical assessment process of licence holders are contained in ANO-1. Guidance is available in the* Manual of Civil Aviation Medicine (Doc 8984).

*Note 4.—Guidance on the critical elements (CEs) of a system that enables a State to discharge its responsibility for safety oversight is contained in the* Safety Oversight Manual, *Part A*, The Establishment and Management of a State's Safety Oversight System *(Doc 9734).*

*Note 5.—The term "relevant authorities or agencies" is used in a generic sense to include all authorities with aviation safety management and oversight responsibility which may be established by States as separate entities, such as: Civil Aviation Authorities, Airport Authorities, ATS Authorities, Accident Investigation Authority, and Meteorological Authority.*

*Note 6. — The SSO system CEs are applied to CAAB performing safety oversight functions as well as to AAIC-BD performing investigation of accidents and incidents or to other safety management activities of Bangladesh.*

*Note 7.— See Appendix 5 to ANO 6-1, and Appendix 1 to ANO 6-3, for provisions specific to the safety oversight of air operators.*

*Note 8.—Refer to SSP of Bangladesh for CEs.*

**3.1 State Safety Programme (SSP)**

**3.1.1** On behalf of Bangladesh, the Civil Aviation Authority of Bangladesh (CAAB) shall establish and maintain an SSP that is commensurate with the size and complexity of the civil aviation system of Bangladesh. The SSP shall include the following components:

a) State safety policy, objectives, and resources;
b) State safety risk management;
c) State safety assurance; and
d) State safety promotion.

**3.1.2** The SSP established under provision 3.1.1 shall be founded on the State Safety Oversight (SSO) system which shall be implemented in accordance with the following eight Critical Elements (CEs):

a. The provisions of the Civil Aviation Act 2017, Civil Aviation Authority Act 2017, Civil Aviation Rules-1984, and their amendment thereafter (CE-1);
b. The regulations (ANOs) made under the Act and as periodically reviewed (CE-2);
c. State system and functions (CE-3);
d. Qualified technical personnel CE-4);
e. Technical guidance, tools, and provision of safety-critical information (CE-5) ;
f. Licensing, certification, authorization, and approval obligations (CE-6);
g. Surveillance obligations (CE-7); and
h. Resolution of safety issues (CE-8).

**3.2 State Safety Policy, Objectives, and Resources**

**3.2.1 Primary Aviation Legislation**

3.2.1.1 Bangladesh has promulgated the primary aviation legislation Civil Aviation Act 2017 (CA Act 2017). Whenever it becomes necessary to amend this Act or promulgate a new issue of the Act, CAAB shall ensure that amendment of CA Act 2017 or a new issue of CA Act is promulgated in accordance with the following provisions 3.2.1.1.1 & 3.2.1.1.2 :

**3.2.1.1.1** There shall be a comprehensive and effective aviation law in Bangladesh. The aviation law shall be commensurate with the size and complexity of aviation activity in Bangladesh and consistent with the requirements contained in the Convention on International Civil Aviation, to enable the oversight and management of civil aviation safety and the enforcement of regulations through CAAB and/or other the relevant authorities or agencies established for that purpose.

*Note.- This includes ensuring that the aviation law remains relevant and appropriate to Bangladesh.*

**3.2.1.1.2** The aviation law shall provide personnel performing safety oversight functions access to the aircraft, operations, facilities, personnel, and associated records, as applicable, of individuals and organizations performing an aviation activity.

***3.2.1.2*** *Member FSR of CAAB should establish an enforcement policy that specifies the conditions and circumstances under which service providers and operators with an SMS are allowed to deal with, and resolve, events involving certain safety issues, internally, within the context of their SMS and to the satisfaction of the CAAB.*

**3.2.2 Specific Operating Regulations**

3.2.2.1 CAAB shall establish specific operating regulations in accordance with the following provision 3.2.2.1.1:

3.2.2.1.1 Head of depts. concern of CAAB shall develop a process to promulgate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation, for standardized operational procedures, products, services, equipment, and infrastructures in conformity with the Annexes to the Convention on International Civil Aviation and in accordance with Civil Aviation Act 2017.

*Note.- The term "regulations" is used in a generic sense and includes but is not limited to orders, instructions, directives, requirements, and policies.*

3.2.2.2 Head of depts. concern of CAAB shall periodically review specific operating regulations, guidance materials, and implementation policies to ensure they remain relevant and appropriate.

**3.2.3 State System and Functions**

3.2.3.1 Bangladesh has established the Civil Aviation Authority of Bangladesh (CAAB), the Aircraft Accident Investigation Committee of Bangladesh (AAIC-BD), and the Bangladesh Meteorological Department (BMD) for the management of safety responsibilities in their areas.

3.2.3.2 CAAB, AAIC-BD, and other authorities/agencies involved with aviation safety shall be supported by sufficient and qualified personnel and provided with adequate financial resources for the management of safety.

3.2.3.3 CAAB, AAIC-BD, and other authorities/agencies involved with aviation safety shall have stated safety functions and objectives to fulfill their safety management responsibility.

*Note.— This includes the participation of the State aviation organizations in specific activities related to the management of safety in the State, and the establishment of the roles, responsibilities, and relationships of such organizations.*

*3.2.3.4 Member FSR in conjunction with Member Admin and Member Finance of CAAB should take necessary measures, such as remuneration and conditions of service, to ensure that qualified technical personnel performing safety oversight functions are recruited and retained.*

3.2.3.5 Member FSR of CAAB shall ensure that personnel performing safety oversight functions are provided with guidance that addresses ethics, personal conduct, and the avoidance of actual or perceived conflicts of interest in the performance of official duties.

*3.2.3.6 Member FSR of CAAB should use a methodology to determine its staffing requirements for personnel performing safety oversight functions.*

*Note.— In addition, Appendix 5 to ANO 6-1, and Appendix 1 to ANO-3, require the State of the Operator to use such a methodology to determine its inspector staffing requirements. Inspectors are a subset of personnel performing safety oversight functions.*

3.2.3.7 *Head of depts. concern of CAAB should identify, define, and document the requirements, obligations, functions, and activities regarding the establishment and maintenance of the SSP, including the directives to plan, organize, develop, maintain, control, and continuously improve the SSP in a manner that meets safety objectives of Bangladesh.*

3.2.3.8 *The Chairman of CAAB should establish a safety policy and safety objectives that reflect his/her commitment to safety and facilitate the promotion of a positive safety culture in the aviation community.*

3.2.3.9 *The safety policy and safety objectives should be published and periodically reviewed to ensure that they remain relevant and appropriate to Bangladesh.*

### 3.2.4 Qualified Technical Personnel

3.2.4.1 Head of depts. concern of CAAB, Head of AAIC-BD, and other authorities/agencies involved with aviation safety shall establish processes to ensure that the requirements for the qualification of technical personnel in accordance with the following provisions 3.2.4.2 through 3.2.4.5 are met:

3.2.4.2 Head of depts. concern of CAAB, Head of AAIC-BD, and other authorities/agencies involved with aviation safety shall establish minimum qualification requirements for the technical personnel performing safety-related functions and provide them with appropriate initial and recurrent training to maintain and enhance their competence at the desired level.

3.2.4.3 Head of depts. concern of CAAB, Head of AAIC-BD, and other authorities/ agencies involved with aviation safety shall ensure that a sufficient number of personnel to perform their tasks and discharge their safety responsibilities are available. Such personnel shall be qualified and competent to perform their allocated tasks and shall have adequate knowledge, experience, and necessary training (both initial and recurrent training) to ensure continuing competence. A system should be in place to plan the availability of personnel to ensure the proper completion of all tasks efficiently and effectively.

3.2.4.4 agencies involved with SSP shall ensure that sufficient qualified and competent personnel performing safety-related functions for or on behalf of Bangladesh are available.

3.2.4.5 Head of depts. concern of CAAB, Head of AAIC-BD, and other agencies in aviation safety shall implement a system for the maintenance of training records for technical personnel.

*Note.— The term "technical personnel" refers to those persons performing safety-related functions for or on behalf of Bangladesh.*

### 3.2.5 Technical Guidance, Tools, and Provision of Safety-critical Information

3.2.5.1 CAAB, AAIC-BD, and other authorities/agencies involved with aviation safety shall establish technical guidance and tools and provide safety-critical information in accordance with the following provisions:

3.2.5.1.1 Head of depts. concern of CAAB shall develop a process to ensure that appropriate facilities, comprehensive and up-to-date technical guidance material, and procedures, safety-critical information, tools, equipment, and transportation means are provided to the technical personnel to enable them to perform their safety oversight functions effectively and in accordance with established procedures in a standardized manner. Logistics support includes the following resources, at a minimum but not limited to:

(a) appropriate facilities such as suitable office accommodation with required furniture, air-conditioning etc.

(b) logistics support such as computers/laptops/notebooks, photocopiers, printing facilities, telephone/mobile, internet, etc.

(c) tools, equipment, and investigators' kit,

(d) transportation means; and

(e) microfiche/microfilm reader, if needed.

3.2.5.1.2 Head of depts. concern of CAAB, Head of AAIC-BD, and other authorities/agencies involved with aviation safety shall establish a process or procedure to ensure that all technical personnel shall have a current copy of or access to all legislative acts, standards, rules, ANOs, AAIO, directives, procedures, circulars, orders guidance materials, technical publications, and related documents to allow them to perform their tasks and to discharge their responsibilities.

3.2.5.1.3 Head of depts. concern of CAAB, Head of AAIC-BD, and other authorities/agencies involved with aviation safety shall establish a process or procedure to ensure that safety-critical information is provided timely to all technical personnel.

3.2.5.1.4 Head of depts. concern of CAAB shall develop a process to ensure that related ANOs and technical guidance are provided to the aviation industry on the implementation of relevant regulations.

## 3.3 State Safety Risk Management

### 3.3.1 Licensing, Certification, Authorization and Approval Obligations

3.3.1.1 CAAB shall meet the licensing, certification, authorization, and approval obligations in accordance with the following provision 3.3.1.1.1:

3.3.1.1.1 Head of depts. concern of CAAB shall implement documented processes and procedures to ensure that individuals and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorization, or approval to conduct the relevant aviation activity.

### 3.3.2 Safety Management System Obligations

3.3.2.1 The following service providers and operators are required to implement an effective SMS:

a) Approved Training Organizations (ATO) that are exposed to safety risks related to aircraft operations during the provision of their services;
b) Holders of Air Operator Certificate (AOC);
c) Approved Maintenance Organizations (AMO);
d) Air Traffic Services (ATS) Providers;
e) Operators of Certified/Licensed Aerodromes for public operation;
f) Ground Handling Services Providers; and
g) Any other aviation entity as deemed necessary by the Chairman, CAAB.

3.3.2.2 SMS of the Service Providers and the Operators listed above shall be made acceptable to the Chairman of CAAB.

*Note.— Further provisions related to the implementation of SMS by service providers can be found in Chapter 4.*

3.3.2.3 Member FSR of CAAB shall, as far as practicable, ensure that Safety Performance Indicators (SPIs) and Safety Performance Targets (SPTs) established by the service providers and the operators are acceptable to the Chairman of CAAB.

*Note 1.-SPIs and SPTs of Bangladesh can be found in NASP document which is published in CAAB website.*

*Note 2.-Futher Guidance on the identification of appropriate safety performance indicators and targets is contained in the* Safety Management Manual (SMM) *(Doc 9859).*

3.3.2.4 Member FSR of CAAB shall ensure that International General Aviation Operators meeting criteria as stated in provision 4.2 of this ANO shall implement an SMS addressing the SMS framework and elements contained in Appendix 1 and other applicable provisions of this ANO.

*Note.- Further provisions related to the implementation of SMS by international general aviation operators can be found in Chapter 4.*

3.3.2.5 Member FSR of CAAB shall monitor and inspect the operations of the SMS periodically.

**3.3.3 Accident and Incident Investigation**

3.3.3.1 To investigate into aircraft accidents and incidents in accordance with ICAO Annex 13 and Aircraft Accident & Serious Incident Investigation Rules (AASIIR) 2023, Bangladesh has established an independent, "Aircraft Accident Investigation Committee of Bangladesh (AAIC-BD)" pursuant to the CA Act 2017. Head of AAIC-BD shall establish a process to investigate into aircraft accidents, serious incidents, and investigable incidents in accordance with Aircraft Accident & Serious Incident Investigation Rules (AASIIR) 2023, and the Aircraft Accident Investigation Order (AAIO), in support of the management of safety in Bangladesh.

3.3.3.2 Member FSR of CAAB shall ensure that process(es) to investigate into the incidents, serious incidents, and accidents involving aircraft operation in support of the management of safety in Bangladesh, is(are) established and maintained.

3.3.3.3 CAAB may conduct safety investigations into the incidents, serious incidents, and accidents involving aircraft operations for the purpose of accident prevention and enhancement of safety in civil aviation.

3.3.3.4 The Service Provider and the Operator shall establish and maintain a process for conducting safety investigation into incidents, serious incidents, and accidents relating to aviation, including reporting of events in accordance with the requirements of the CAAB ( Ref. provision 5.1.2.2 of this ANO). Safety investigations shall be carried out by appropriately trained personnel to identify root causes and contributing factors with proper analysis (why it happened, not just what happened).

3.3.3.5 The Service Provider and the Operator shall establish and maintain a procedure to forward a copy of the safety investigation report into incidents, serious incidents, and accidents to the CAAB as soon as the investigation is completed.

3.3.3.6 The Service Provider and the Operator shall establish and maintain a process to ensure that all the safety recommendations from the investigation conducted by AAIC-BD, CAAB, other state regulatory authorities, and the Service Provider and Operator itself are implemented.

3.3.3.7 The Service Provider and the Operator shall establish and maintain a procedure to inform CAAB about the status of the safety recommendations within 60 (sixty days) of the date of receipt of the investigation report from AAIC-BD, aircraft accident investigation bureau/committee of other states, CAAB and other regulatory authorities, of the preventative action taken or under consideration or the reasons why no action will be taken.

3.3.3.8 If it is not possible or practicable to implement any safety recommendation provided by the investigation committee, the service provider or the operator shall provide proper justification as to why the safety recommendation has not been possible to implement. The justification is to be acceptable to the CAAB.

3.3.3.9 Member FSR of CAAB shall inform the proposing entity of the safety recommendations of the investigation into an aircraft accident or incident within 90 (ninety days) of the date of receipt of the investigation report from AAIC-BD, aircraft accident investigation bureau/committee of other states, and other regulatory authorities, of the preventative action taken or under consideration or the reasons why no action will be taken.

3.3.3.10 The Service Provider and the Operator shall establish and maintain a procedure to inform CAAB with the evidences about the implementation status of the safety recommendations from the investigation conducted by the service provider and the operator itself.

3.3.3.11 Member FSR of CAAB shall establish a mechanism to monitor that all the safety recommendations from the investigation conducted by AAIC-BD, aircraft accident investigation bureau/committee of other states, CAAB, regulatory authorities of other states, and the service provider and operator itself are implemented properly.

### 3.3.4 Hazard Identification and Safety Risk Assessment

3.3.4.1 Member FSR of CAAB shall establish and maintain a process to identify hazards from collected safety data.

*Note 1. —Further information regarding safety data collection, analysis, and the sharing and exchange of safety information can be found in Chapter 5.*

*Note 2.—Additional information to identify hazards and safety issues on which to base preventive actions may be contained in the Final Reports of accidents and incidents.*

3.3.4.2 Member FSR of CAAB shall develop and maintain a process that ensures the assessment of safety risks associated with identified hazards.

### 3.3.5 Management of Safety Risks

3.3.5.1 Member FSR of CAAB shall establish mechanisms for the resolution of safety issues in accordance with the following provisions 3.3.5.1.1.& 3.3.5.1.2:

3.3.5.1.1 Head of depts. concern of CAAB shall use a documented process to take appropriate actions, up to and including enforcement measures, to resolve identified safety issues.

3.3.5.1.2 Head of depts. concern of CAAB shall ensure that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by individuals and organizations performing an aviation activity in resolving such issues.

*3.3.5.2 Member FSR of CAAB should develop and maintain a process to manage safety risks.*

*Note 1: Actions taken to manage safety risks may include: acceptance, mitigation, avoidance, or transfer.*

*Note 2: Safety risks and safety issues often have underlying factors which need to be carefully assessed.*

## 3.4 State Safety Assurance

### 3.4.1 Surveillance Obligations

3.4.1.1 CAAB shall meet the surveillance obligation in accordance with the following provision 3.4.1.1.1:

3.4.1.1.1 Member FSR of CAAB shall implement documented surveillance processes, by defining and planning inspections, audits, and monitoring activities on a continuous basis, to proactively assure that aviation licence, certificate, authorization, and approval holders continue to meet the established requirements. This includes the surveillance of personnel designated by the Authority to perform safety oversight functions on its behalf.

*Note.— The surveillance of the service provider or the operator takes into consideration the safety performance as well as the size and complexity of its aviation products or services.*

3.4.1.2 *Member FSR of CAAB should establish procedures to prioritize inspections, audits, and surveys toward those areas of greater safety concern or need.*

*Note.— Organizational risk profiles, outcomes of hazard identification and risk assessment, and surveillance outcomes may provide information for the prioritization of inspections, audits, and surveys.*

3.4.1.3 *Member FSR of CAAB should periodically review the safety performance of an individual service provider and operator.*

**3.4.2 State Safety Performance**

3.4.2.1 The Chairman of CAAB shall establish the Acceptable Level of Safety Performance (ALoSP) to be achieved through its SSP.

*Note 1.— An acceptable level of safety performance for Bangladesh can be achieved through the implementation and maintenance of the SSP as well as safety performance indicators and targets showing that safety is effectively managed and built on the foundation of implementation of existing safety-related SARPs and provisions.*

*Note 2.— Guidance on establishing safety performance indicators and targets, as well as an acceptable level of safety performance, is contained in the Safety Management Manual (SMM) (Doc 9859).*

*Note 3.—Refer to NASP for ALoSP for Bangladesh.*

*3.4.2.2 Member FSR of CAAB should develop and maintain a process to evaluate the effectiveness of actions taken to manage safety risks and resolve safety issues.*

*Note.— Safety assessment results may be used to support the prioritization of actions to manage safety risks.*

3.4.2.3 The Chairman of CAAB *should evaluate the effectiveness of the SSP of Bangladesh to maintain or continuously improve the overall level of safety performance of Bangladesh.*

**3.5 State Safety Promotion**

**3.5.0** *As part of SSP, CAAB should develop a state safety promotion by means of -*

*a) Internal Communication and Dissemination of Safety Information;*
b) *External Communication and Dissemination of Safety Information.*

**3.5.1 Internal Communication and Dissemination of Safety Information**

3.5.1.1 *CAAB should promote safety awareness and the sharing and exchange of safety information to support, within Bangladesh aviation organizations, the development of a positive safety culture that fosters an effective SSP.*

**3.5.2 External Communication and Dissemination of Safety Information**

3.5.2.1 *CAAB should promote safety awareness and the sharing and exchange of safety information with the aviation community to foster the maintenance and improvement of safety and to support the development of a positive safety culture.*

*Note 1.— Refer to Chapter 5, para 5.4, for further details regarding safety information sharing and exchange.*

*Note 2.— Promoting safety awareness could include identifying accessible safety training for the aviation community.*

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## CHAPTER 4. SAFETY MANAGEMENT SYSTEM (SMS)

### 4.0 Purpose:

The purpose of this chapter is to prescribe provisions applicable to safety management functions related to, or in direct support of, the safe operation of aircraft by:

a) Specified aviation safety service providers; and

b) Operator

*Note 1.— Guidance on implementation of an SMS is contained in the* CAAB Guidance Material on Safety Management System and ICAO Safety Management Manual (SMM) (Doc 9859).

*Note 2. — An organization may elect to extend one SMS across multiple service provider activities.*

### 4.1 APPLICABILITY:

4.1.1 The following service providers and operators shall implement an effective SMS:

a) Approved Training Organizations (ATO) that are exposed to safety risks related to aircraft operations during the provision of their services;
b) Holders of Air Operator Certificate (AOC);
c) Approved Maintenance Organizations (AMO);
d) Air Traffic Services (ATS) Providers;
e) Operators of Certified/Licensed Aerodromes for public operation;
f) Ground Handling Service Providers; and
g) Any other aviation entity as deemed necessary by the Chairman, CAAB.

4.1.2 The service providers and the operators listed in paragraph 4.1.1 of this subsection shall implement an SMS meeting the requirements of this ANO and be approved by CAAB that as a minimum shall:

a) contain the components and elements prescribed in Appendix 1 & other applicable provisions of this ANO; and

b) be commensurate with the size of the service provider and the complexity of its aviation products or services.

4.1.3 The service providers and the operators shall develop a plan to facilitate the implementation of their SMS. The Service Providers and the Operators shall submit an SMS implementation plan and shall also provide the Member FSR of CAAB with the status of their SMS implementation regularly. Member FSR of CAAB shall ensure that the service providers and the operators listed in para 4.1.1 comply with this requirement. The implementation plan shall be accepted by CAAB. The implementation plan should include any of its existing programs, policies, or procedures that it intends to use to meet the requirements of this ANO, including components of an existing SMS.

**4.2 Safety Management System –International General Aviation Operators**

4.2.1 The International General Aviation Operator that meets the following criteria shall implement an SMS:

a) has an aeroplane with a maximum certificated take-off mass exceeding 5700 kg; or

b) has an aeroplane equipped with one or more turbojet engines; or

c) has an aeroplane with a seating configuration of more than nine passenger seats; or

d) authorized to operate international flights.

4.2.2 The SMS of International General Aviation Operators mentioned in above provision 4.2.1 shall be approved by the Authority and shall:

a) address the SMS framework and elements prescribed in Appendix-1 and other applicable provisions of this ANO; and

b) be commensurate with the size and complexity of the operation.

*Note 1.— Guidance on the implementation of an SMS for international general aviation is contained in Guidance Materials on Safety Management issued by CAAB and in the ICAO Doc 9859, Safety Management Manual (SMM), and in industry codes of practice.*

*Note 2.— Guidance concerning the responsibilities of the State of Registry in connection with lease, charter, and interchange operations is contained in ICAO Doc 8335, Manual of Procedures for Operations Inspection, Certification, and Continued Surveillance. Guidance concerning the transfer of State of Registry responsibilities to the State where the aircraft operator has its principal place of business or, if it has no such place of business, its permanent address in accordance with the Chicago Convention, Article 83 bis, is contained in ICAO Doc 10059, Manual on the Implementation of Article 83 bis of the Convention on International Civil Aviation.*

**4.3 General Requirements:**

4.3.1 Any service provider or operator required to have a Safety Management System (SMS) under this ANO shall submit the Safety Management System to the Authority for approval. The SMS must include at least the components and elements in the SMS Framework as prescribed in Appendix 1 and other applicable provisions in this ANO.

4.3.2 The SMS shall be maintained in accordance with the recordkeeping requirements mentioned in this ANO.

4.3.3 The SMS shall ensure compliance with the national law and regulatory standards.

## CHAPTER 5. SAFETY DATA AND SAFETY INFORMATION COLLECTION, ANALYSIS, PROTECTION, SHARING AND EXCHANGE

**5.0 Purpose:**

The purpose of this chapter is to ensure the continued availability of safety data and safety information to support safety management activities.

**5.1 Safety Data Collection and Processing Systems (SDCPS)**

5.1.1 Member FSR of CAAB and Accountable Manager of the Service Provider, or the Operator shall establish safety data collection and processing systems (SDCPS) to capture, store, aggregate, and enable the analysis of safety data and safety information. SDCPS developed by the CAAB, the service provider, and the operator may be integrated, if possible, to get better results.

*Note 1.- SDCPS refers to processing and reporting systems, safety databases, schemes for the exchange of information, and recorded information including but not limited to:*

a) *data and information pertaining to accident and incident investigations;*
b) *data and information related to safety investigations by AAIC-BD, CAAB, investigation committee by other states or CAAs, aviation service providers or operators;*
c) *mandatory safety reporting systems as indicated in 5.1.2;*
d) *voluntary safety reporting systems as indicated in 5.1.3; and*
e) *self-disclosure reporting systems, including automatic data capture systems, as described in ANO 6-1, Chapter 3, as well as manual data capture systems.*

*Note 2.— Guidance related to SDCPS is contained in the Safety Management Manual (SMM) (Doc 9859).*

*Note 3.— The term "safety database" may refer to a single or multiple database(s).*

*Note 4.— SDCPS may include inputs from State, industry and public sources, and may be based on reactive and proactive methods of safety data and safety information collection.*

*Note 5.— Sector-specific safety reporting provisions are contained in other Annexes, PANS, and SUPPs. There is a recognized benefit to the effective implementation of an SSP in having an integrated approach for the collection and analysis of the safety data and safety information from all sources.*

### 5.1.2 Mandatory Safety Reporting System

5.1.2.1 Member FSR of CAAB shall establish a mandatory safety reporting system that includes the reporting of incidents.

5.1.2.2 The Service Provider and the Operator shall establish a mandatory safety reporting system that includes notifying and making mandatory safety reports on accidents, serious incidents, incidents, and other safety-related occurrences to the CAAB and AAIC-BD within the timelines given below:

| | Notification to CAAB and AAIC-BD by telephone followed by email. | Mandatory Safety Report submission to CAAB and AAIC-BD by formal means. |
|---|---|---|
| Accident | Immediate | Within 24 hours |
| Serious incident | Immediate/ASAP* | Within 48 hours |
| Incident | As soon as practicable | Within 72 hours |

*Note 1.- Formal means of submission of Mandatory Safety Report through the appropriate form.*

*As Soon as Possible.

**5.1.3 Voluntary Safety Reporting System**

5.1.3.1 The Service Provider and the Operator shall establish a voluntary safety reporting system to collect safety data and safety information not captured by mandatory safety reporting systems.

5.1.3.2 Member FSR of CAAB shall establish a voluntary safety reporting system to collect safety data and safety information not captured by mandatory safety reporting systems.

5.1.3.3 The voluntary reporting system established by CAAB, the Service Provider, and the Operator shall be non-punitive and shall afford protection to the source of information.

*5.1.4 CAAB and Aircraft Accident Investigation Committee (AAIC-BD) responsible for the implementation of the SSP should have access to the SDCPS as referenced in 5.1.1 to support their safety responsibilities, in accordance with the principles in Appendix 2.*

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5.1.5 *The safety database should use standardized taxonomy to facilitate safety information sharing and exchange.*

*Note.— CAAB may use an ADREP-compatible system. More information on ADREP can be found in Annex 13, Chapter 7.*

5.1.6 If AAIC-BD develops an accident and incident database, the Designated person of CAAB shall have access to the accident and incident database.

5.1.7 The person of CAAB as designated by the Member (FSR) shall have access to the accident and incident database to be developed and maintained by the service provider and the operator.

**5.2 Safety Data and Safety Information Analysis**

5.2.1 Member FSR of CAAB shall establish and maintain a process to analyze the safety data and safety information from the SDCPS and associated safety databases.

5.2.2 The Service Provider and the Operator shall develop and maintain a process to analyze the safety data and safety information from the SDCPS and associated safety databases.

*Note 1.— Specific State provisions for the identification of hazards as part of their safety risk management and safety assurance processes can be found in Chapter 3.*
*Note 2.— The purpose of the safety data and safety information analysis performed by the State is to identify systemic and cross-cutting hazards that might not otherwise be identified by the safety data analysis processes of individual service providers and operators.*

*Note 3.— The process may include predictive methods of safety data analysis.*

5.2.3 *The Operator of an aeroplane of a certificated take-off mass in excess of 15,000 kgs should establish and maintain a* Flight Data Analysis Program (*FDAP) as part of its safety management system*.

5.2.4 An Operator of an aeroplane of a maximum certificated take-off mass in excess of 27,000 kgs shall establish and maintain a Flight Data Analysis Program (FDAP) as part of its safety management system.

5.2.5 A flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data in accordance with Appendix 2.

*Note 1. — An operator may contract the operation of a FDAP to another party while retaining overall responsibility for the maintenance of such a programme.*

*Note 2.— Establishment of FDAP shall be in accordance with Appendix 14 of CAAB ANO 6-1 and Guidance Materials related to FDAP.*

**5.3 Safety Data and Safety Information Protection**

5.3.1 CAAB, the Service Provider, and the Operator shall accord protection to safety data captured by, and safety information derived from, voluntary safety reporting systems and related sources in accordance with Appendix 2.

*Note. — Sources include individuals and organizations.*

5.3.2 *CAAB, Service Provider, and Operator should extend the protection referred to in 5.3.1 to safety data captured by, and safety information derived from, mandatory safety reporting system and related sources.*

*Note 1. — A reporting environment where employees and operational personnel may trust their actions or omissions that are commensurate with their training and experience will not be punished is fundamental to safety reporting*.

*Note 2. — Guidance related to both mandatory and voluntary safety reporting systems is contained in the* Safety Management Manual (SMM) *(Doc 9859).*

5.3.3 Subject to 5.3.1 and 5.3.2, CAAB, Service Provider, and Operator shall not make available or use safety data or safety information collected, stored or analyzed in accordance with 5.1 or 5.2 for purposes other than maintaining or improving safety, unless the competent authority determines, in accordance with Appendix 2, that a principle of exception applies.

5.3.4 Notwithstanding 5.3.3, CAAB, Service Provider, and Operator shall not be prevented from using safety data or safety information to take any preventive, corrective, or remedial action that is necessary to maintain or improve aviation safety.

*Note.— Specific provision aimed at ensuring that there is no overlap with the protection of investigation records in Annex 13 and AASIIR 2023 is contained in Appendix 2, 1.2.*

5.3.5 CAAB, Service Provider, and Operator shall take necessary measures, including the promotion of a positive safety culture, to encourage safety reporting through the systems referred to in 5.1.2 and 5.1.3.

*Note. — Guidance related to positive safety culture is contained in the Guidance Materials on Safety Management published by CAAB and ICAO* Safety Management Manual (SMM) *(Doc 9859.)*

5.3.6 CAAB should facilitate and promote safety reporting by adjusting their applicable laws, regulations, and policies, as necessary.

5.3.7 *Reserved.*

**5.4 Safety Information Sharing and Exchange**

*Note.— Sharing refers to giving, while exchange refers to giving and receiving in return.*

5.4.1 If CAAB, in the analysis of the information contained in its SDCPS, identifies safety matters considered to be of interest to other CAAs/States, that CAAB shall forward such safety information to them as soon as possible. Prior to sharing such information, CAAB and other CAAs/States shall agree on the level of protection and conditions on which safety information will be shared. The level of protection and conditions shall be in line with Appendix 2.

5.4.2 CAAB and other agencies shall promote the establishment of safety information sharing or exchange networks among users of the aviation system, and facilitate the sharing and exchange of safety information, unless national law provides otherwise.

*Note.— Information on the sharing of safety information can be found in the ICAO Code of Conduct on the Sharing and Use of Safety Information in the* Global Aviation Safety Plan *(Doc 10004).*

## CHAPTER 6. ADMINISTRATIVE PROVISIONS

6.1 Any order, instruction, directives, procedures, or guidance material related to safety management to be issued by the CAAB shall be treated as an integral part of this ANO 19.

6.2 A service provider or an operator who fails to comply with the provision of this ANO, may have his or her license, certificate, authorization, or approval suspended or revoked, in addition to any other administrative sanction as may be prescribed in the Civil Aviation Act 2017.

6.3 All acceptances, approvals, authorizations, licenses, or certificates issued or granted by the CAAB before the commencement of this ANO shall continue to be in force to the extent that the terms and conditions thereof are not inconsistent with the provisions of these regulations or until expiry or are revoked, annulled, or replaced.

*Note 1. — Orders, Instructions, and Directives are binding for the service providers and the operators.*

*Note 2. —Procedures and Guidance Materials are non-binding for the service providers and the operators.*

## CHAPTER 7. REPEAL AND SAVINGS

7.1 As soon as may be after the commencement of this ANO, Issue-one of ANO (SMS) A.1 issued 17th May 2009 shall stand repealed.

7.2 Despite such repeal under sub-section (7.1),

a) any act done, measures taken, any order, ANO, circular, or notice issued, certificate, licence or permit given, or any agreement entered into or document signed under the said ANO shall be deemed to have done, taken, entered, issued, given, made or signed under this ANO;

b) any proceeding, going on or pending, shall, in so far as possible, be disposed of under this ANO; and

c) any suit and other legal proceedings instituted before any court shall, if pending, be disposed of in such a way as if the said ANO had not been repealed.

**APPENDIX 1**

**APP 1 SMS FRAMEWORK FOR A SAFETY MANAGEMENT SYSTEM (SMS)-SERVICE PROVIDERS AND OPERATORS**

(Chapter 4, section 4.1.2 & 4.2.2 refers)

*Note 1.— CAAB Guidance Materials on safety management and ICAO Doc 9859,* Safety Management Manual (SMM)*, contains guidance on the implementation of the framework for an SMS.*

*Note 2.— The service provider's interfaces with other organizations can make a significant contribution to the safety of its products or services. Guidance on interface management as it relates to SMS is provided in the* Guidance Materials on Safety Management issued by CAAB and in the ICAO Safety Management Manual (SMM) (Doc 9859).

*Note 3.—In the context of this appendix as it relates to service providers/operators, an "accountability" refers to an "obligation" that may not be delegated, and "responsibilities" refers to functions and activities that may be delegated.*

The Service Provider and the Operator shall establish and maintain their SMS in accordance with the framework specified in this appendix and other related provisions of the ANO. The framework comprises four components and twelve elements as the minimum requirements for SMS implementation by the service providers and the operators:

| Components | Elements |
|---|---|
| **1.** Safety Policy and Objectives | 1.1 Safety Policy & Management Commitment;<br>1.2 Safety Accountability and Responsibilities;<br>1.3 Appointment of Key Safety Personnel;<br>1.4 Emergency Response Planning & its Coordination.<br>1.5 SMS Documentation. |
| **2.** Safety Risk Management | 2.1 Hazard Identification;<br>2.2 Safety Risk Assessment and Mitigation. |
| **3.** Safety Assurance | 3.1 Safety Performance Monitoring and Measurement<br>3.2 The Management of Change<br>3.3 Continuous Improvement of the SMS |
| **4.** Safety Promotion | 4.1 Competencies, Training and Education<br>4.2 Safety Communication. |

## 1. Safety Policy and Objectives

### 1.1 Safety Policy & Management Commitment

1.1.1 The Service Provider and the Operator shall define and demonstrate its safety policy in accordance with international and national requirements. The safety policy shall have at least the following:

a) reflect organizational commitment regarding safety, including the promotion of a positive safety culture;

b) shall be in accordance with the applicable legal requirements, national and international standards and industry best practices;

c) include a clear statement about the provision of the necessary resources for the implementation of the safety policy as well as the SMS;

d) include safety reporting procedures;

e) clearly indicate which types of behaviours are unacceptable related to the service provider's aviation activities and include the circumstances under which disciplinary action would not apply;

f) be signed by the Accountable Manager of the organization;

g) be documented and communicated, with visible endorsement, throughout the organization; and

h) be periodically reviewed to ensure it remains relevant and appropriate to the service provider and the operator.

1.1.2 Taking due account of its safety policy, the Service Provider and the Operator shall define safety objectives. The safety objectives shall:

a) form the basis for safety performance monitoring and measurement as required by 3.1.2;

b) reflect the service provider's commitment to maintain or continuously improve the overall effectiveness of the SMS;

c) be communicated throughout the organization; and

d) be periodically reviewed to ensure they remain relevant and appropriate to the service provider.

*Note.—Guidance on setting safety objectives is provided in the* Safety Management Manual (SMM) *(Doc 9859) published by ICAO.*

1.1.3 Accountable Manager and Senior Management Team of the service provider and the operator shall:

a) continually promote a positive safety/just culture and demonstrate their commitment to the safety policy through active and visible participation in the safety management system;
b) provide necessary human and financial resources for the implementation of SMS;
c) establish safety objectives and performance standards;
d) be fully aware of their SMS roles and responsibilities in respect of the safety policy, safety standards, and safety culture of the organization.

1.1.4 The service provider and the operator shall have a means in place for the communication of the safety policy and safety objectives throughout the organization.

**1.2 Safety Accountability and Responsibilities**

The Service Provider and the Operator shall:

a) Appoint/designate an Accountable Manager who, irrespective of other functions, is accountable on behalf of the organization for the implementation and maintenance of an effective SMS and satisfies the following:

i. has authority over operations authorized to be conducted under the AOC or approval or license or certificate;
ii. has control over the financial resources required for the operations to be conducted;
iii. has authority to provide human resources required for the operations authorized to be conducted;
iv. retains ultimate accountability and responsibility for the safety performance of the operations conducted under the AOC or approval or license or certificate;
v. has ultimate responsibility and accountability for the establishment, implementation, and maintenance of the SMS; safety policies, processes, and the resolution of all safety issues.;

b) ensure that the Accountable Manager accomplishes at least the following:
   i. ensure that the SMS is properly implemented and performing effectively in all areas of the organization;
   ii. direct responsibility for the conduct of the organization's affairs;
   iii. develop and sign safety policy;
   iv. communicate the safety policy throughout the organization;
   v. regularly review the safety policy to ensure it remains relevant and appropriate to the organization;
   vi. regularly review the safety performance of the organization and direct actions necessary to address substandard safety performance;
   vii. provision and allocation of human, technical, financial or other resources necessary for the effective and efficient performance of SMS;
   viii. promotion of the safety policy;
   ix. establishment of the organization's safety objectives and safety targets;
   x. acting as the organization's safety champion;
   xi. having final responsibility for the resolution of all safety issues; and
   xii. establishing and maintaining the organization's competence to learn from the analysis of data collected through its safety reporting system.

c) clearly define lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management. Define accountability for safety for the following individuals:
   (1) Accountable Manager;
   (2) All members of management in regard to developing, implementing, and maintaining SMS processes within their area of responsibility, including, but not limited to:
      (i) Hazard identification and safety risk assessment.
      (ii) Assuring the effectiveness of safety risk controls.

(iii) Promoting safety.

(iv) Advising the Accountable Manager on the performance of the SMS and on any need for improvement.

(3) Employees relative to the certificate/license/approval holder's safety performance.

d) identify the responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organization;

e) document and communicate safety accountability, responsibilities, and authorities throughout the organization;

f) define the levels of management with authority to make decisions regarding safety risk tolerability; and

g) ensure that management and staff have understood their safety responsibilities.

## 1.3 Appointment of Key Safety Personnel

1.3.1 The Service Provider and the Operator shall appoint a properly educated, trained, and experienced person who is competent and fulfills the role of safety manager, (head of SMS), for the development, implementation, maintenance, and day-to-day administration of an effective Safety Management System throughout the organization on behalf of the Accountable Manager and Senior Management. The head of SMS shall be approved by the CAAB. A safety manager shall have:

a) sufficient relevant safety management experience to capably lead, manage, and set standards to enable the operator/service provider to implement the safety management system of the operator/service provider in accordance with national and international standards and their manual;

b) a satisfactory record in the conduct or management of operational/safety/quality functions;

c) sufficient knowledge on safety and regulatory requirements related to the provisions of the services.

1.3.2 The appointed safety manager (head of SMS) shall be in a senior management position and have a direct reporting line to the Accountable Manager. He/She shall be independent of operational areas and shall not hold other positions that may conflict with or impair his/her role as the safety manager. The appointed safety manager shall have direct access to the Accountable Manager, the senior management personnel, the heads of all disciplines, and other areas of the organization to ensure that they are kept properly informed on safety matters. The Safety Manager of a large and complex organization should be able to provide full-time on his/her job.

*Note.- Where safety management, quality management, security management or environment management are integrated, and if a single manager manages the integrated function, this will not be a conflict of interest.*

1.3.3 Qualifications of Safety Manager (head of SMS)

Competencies of the Safety Manager include as a minimum, but not limited to:

a) broad operational knowledge and experience in the functions of the organization (e.g. training management, aircraft operations, air traffic management, aerodrome operations, and maintenance organization management etc);

b) safety/quality management experience;

c) minimum 10 years practical experience in the aviation industry for large and complex organization of which 5 years experience in safety management;

d) minimum 7 years practical experiences in aviation industry for small and non-complex organization;

e) sound knowledge of organization's operations, procedures, and activities;

f) an extensive knowledge of safety management systems (SMS);

g) completed appropriate SMS training; (e.g. basic SMS course, risk analysis course, training on SPIs, incident/accident investigator's course, safety auditing course, root cause analysis course, human factors training etc );

h) an understanding of human factors and human performance principles;

i) preferable experience and qualifications in conducting safety/quality audits and inspections;

j) sound knowledge of aviation regulatory frameworks, CAAB ANOs including ICAO Standards and Recommended Practices (SARPs),

k) good written and verbal communication skills;

l) computer literacy;

Attributes of the Safety Manager include as a minimum, but not limited to

m) the ability to be firm in conviction, promote a fair culture, and yet advance an open and non-punitive atmosphere for reporting;

n) the ability and confidence to communicate directly to the Accountable Manager as his advisor and confidante;

o) well-developed communication skills and demonstrated interpersonal skills, with the ability to liaise with a variety of individuals and organizational representatives, including those from differing cultural backgrounds;

p) demonstrated analytical skills

q) tact, diplomacy and a high degree of integrity are prerequisites;

r) ability to relate to people at all levels, both inside and outside the organisation;

s) ability to cope with changing circumstances and situations with little supervision.

t) good analytical skills;

u) leadership skills

v) being worthy of respect from peers and management.

1.3.4 Safety Manager—responsibilities

a) The safety manager (head of SMS) required under this ANO shall implement, maintain and day-to-day administer the SMS throughout the organization on behalf of the Accountable Manager.

b) Without limiting sub-provision, a), the responsibilities of the safety manager include the following as a minimum, but not limited to:

(i) ensures that processes needed for the SMS are established, implemented and maintained.;

(ii) monitor the operation of the safety management system including managing corrective, remedial and preventative action in relation to the system;

(iii) performing/facilitating hazard identification and safety risk analysis;

(iv) monitoring corrective actions and evaluating their results;

(v) regularly reporting to the Accountable Manager on the effectiveness of the safety management system;

(vi) providing periodic reports on the organization's safety performance;

(vii) ensure that the staff are trained on SMS;

(vii) providing independent advice to the Accountable Manager, management team and line managers on safety matters;

(viii) monitoring safety concerns in the aviation industry and their perceived impact on the organization's operations aimed at service delivery;

(ix) taking actions for continuous improvement of the safety management system;

(x) coordinating and communicating (on behalf of the Accountable Manager) with the CAAB, other State agencies and international organizations as necessary on issues related to SMS;

(xi) promoting positive safety culture;

(xii) regularly evaluating and improving the SMS; and

(xiii) focal point for the development and maintenance of an effective SMS

1.3.5 The Service Provider and the Operator shall have an appropriate organizational structure for managing safety. The office responsible for SMS shall be allocated adequate supporting manpower depending on the size and complexity of the organization. The supporting manpower shall be adequately trained and competent to perform their duties of SMS.

1.3.6 The office responsible for SMS shall be allocated sufficient resources to manage the SMS including, but not limited to, have access to competent personnel able to perform safety investigation, analysis, auditing, and promotion.

*Note.— (1) Depending on the size of the service provider and the complexity of its aviation products or services, the responsibilities for the implementation and maintenance of the SMS may be assigned to one or more persons, fulfilling the role of the safety manager, as their sole function or combined with other duties, provided these do not result in any conflicts of interest.*

*(2) The number, type, skills, composition, and appointment of key safety personnel will differ greatly depending on the size, nature, and complexity of the operation. A large company shall have a dedicated safety department, led by the safety manager, supported by a team of safety specialists.*

*(3) If an organization's scope includes AOC, AMO, GHSP, Training or AMTO, they may have a centralized or partially centralized or separate safety management system.*

## 1.4 Emergency Response Planning and its Coordination

1.4.1 The Service Provider and the Operator required to establish and maintain an emergency response plan for accidents and incidents in aircraft operations and other aviation emergencies shall ensure that the emergency response plan is properly established and coordinated with the emergency response plans of those organizations it must interface with during the provision of its products and services. The Emergency Response Plan (ERP) shall ensure:

a) Orderly and efficient transition from normal to emergency operations;

b) Delegation of emergency authority throughout the organization;

c) Designation of emergency entities;

d) Assignment of emergency responsibilities during an emergency;

e) Coordination of efforts to cope with the emergency;

f) Coordination of the service provider's emergency response plans with the emergency response plans of the other organizations it must interface with during the provision of its services, and

g) Safe continuation of operations, or return to normal operations as soon as possible.

1.4.2 The Service Provider and the Operator required to establish and maintain an emergency response plan for accidents and incidents in aircraft operations and other aviation emergencies shall designate a manager who will be responsible for implementing and maintaining emergency response plan.

*Note.- Service Provider/Operator may outsource its emergency response plan. In that case, Service Provider/Operator shall retain the ultimate responsibility for the effectiveness of the emergency response plan.*

## 1.5 SMS Documentation

### 1.5.1 SMS Documentation

1.5.1.1 The Service Provider and the Operator shall establish and maintain a process for the management of safety documentation and /or data used directly in support of the safety management system.

1.5.1.2 The Service Provider and the Operator shall develop and maintain an SMS manual endorsed by the Accountable Manager and approved by the CAAB to demonstrate how the organization will comply with this ANO, other relevant national and international regulations, as applicable. SMS manual shall describe the following as a minimum, but not limited to:

a) Safety policy and objectives;

b) Senior management commitment to safety;
c) SMS requirements;
d) SMS Organization structure;
e) SMS processes and procedures;
f) accountability, responsibilities and authorities for SMS processes and procedures;
g) SMS output; and
h) document and records management;

1.5.1.3 The Service Provider and the Operator shall have a means to ensure that SMSM or its parts is readily available to all relevant personnel.

1.5.1.4 The Service Provider and the Operator shall have a process to ensure that the SMS manual, including SMS-related records, is regularly reviewed and updated with appropriate version control in place.

**1.5.2 SMS Records**

1.5.2.1 The Service Provider and the Operator shall develop and maintain safety operational records as part of its SMS documentation.

1.5.2.2 The Service Provider and the Operator shall establish and maintain a system for the management and control of safety records to ensure safety records are subjected to standardized processes for:

a) Identification;
b) Legibility;
c) Maintenance;
d) Retrieval;
e) Protection, integrity and security;
f) Disposal, deletion (electronic records) and archiving.

1.5.3 If the Service Provider or the Operator uses an electronic system for the management and control of safety records, the service provider/operator shall ensure the system provides for a scheduled generation of backup record files.

1.5.4 The Service Provider and the Operator shall maintain and retain the following SMS records as a minimum, but not limited to;

a) records of hazards log/register/database and retain for as long as the control remains relevant to the operation.

b) outputs of safety risk management processes and retain for as long as the control remains relevant to the operation.

c) records of incidents, serious incidents and accidents and their investigations reports and its output for entire operation.

d) records of implementations of safety investigations reports for entire operation.

e) records of outputs of safety assurance processes and retain for a minimum of 5 years.

f) SPIs and related charts for a minimum of 5 years.

g) SMS internal review or audit records for a minimum of 5 years.

h) SMS/safety committee meeting minutes for a minimum of 5 years.

i) records of all safety training provided for each individual and retain for as long as the individual is employed by the organization.

j) records of all communications provided under provision 4.2 for a minimum of 24 consecutive calendar months.

k) Any other SMS records relevant to the service provider/operator and retain for as long as the control remains relevant to the operation.

## 2. Safety Risk Management

2.0 Safety risk management shall include hazard identification, safety risk assessment, and mitigation processes.

## 2.1 Hazard Identification

2.1.1 The Service Provider and the Operator shall develop, implement, and maintain a process that is integrated throughout the organization to identify hazards associated with its aviation products or services.

2.1.2 Hazard identification shall be based on a combination of reactive and proactive methods. Hazard identification process defines how hazards are identified from multiple sources through reactive and proactive methods (internal and external).

2.1.3 Operational Safety Reporting System

The Service Provider and the Operator shall have an operational safety reporting system that is implemented throughout the organization in a manner that:

a) Encourages and facilitates personnel to submit reports that identify safety hazards, expose safety deficiencies and raise safety concerns;

b) Ensures mandatory reporting in accordance with applicable regulations;

c) Includes analysis and management action as necessary to address safety issues identified through the reporting system.

## 2.2 Safety Risk Assessment and Mitigation

2.2.1 The Service Provider and the Operator shall develop and maintain a process that ensures analysis, assessment, and control of the safety risks associated with identified hazards. The process may include predictive methods of safety data analysis.

2.2.2 The Service Provider and the Operator shall apply safety risk management (safety risk assessment & mitigation) at least to the following, but not limited to:

a) Implementation of new systems or processes or procedures;
b) Revision of existing systems or processes;
c) Development of operational procedures;
d) Identification of hazards or ineffective risk controls through the safety assurance processes;

2.2.3 The Service Provider and the Operator shall define a process for conducting safety risk assessment that allows for the determination of acceptable safety risk.

2.2.4 The Service Provider and the Operator shall develop and maintain processes to develop safety risk controls that are necessary as a result of the safety risk assessment process.

2.2.5 The Service Provider and the Operator shall define and document the levels of the management with authority to make decision of safety risk tolerability.

2.2.6 The Service Provider and the Operator shall evaluate whether risk will be acceptable with the proposed safety risk control applied, before the safety risk control is implemented.

2.2.7 The Service Provider and the Operator shall develop and maintain an investigation process for safety concern, occurrences and ineffective risk control.

2.2.8 The applicable Service Provider and the Operator shall have a process to conduct safety risk assessment (SRM) and mitigation and to submit SRM with the mitigation actions/plan along with application to the Member FSR of CAAB for seeking specific approval required for the following operation, as a minimum, but not limited to:

a) RVSM;
b) EDTO;
c) Low Visibility Operation (LVO);
d) NAT HLA;
e) MNPS;

f) PBN authorization required (AR);
g) EFB;
h) Transport of Dangerous Goods by air; and
i) Others as deemed necessary by CAAB.

*Note.- For details, refer to CAAB ANO Part SPA on Specific Approvals.*

2.2.9 *The Service Provider and the Operator should develop a procedure for periodic review of completed risk mitigation records.*

## 3. Safety Assurance

### 3.1 Safety Performance Monitoring and Measurement

3.1.1 The Service Provider and the Operator shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risk controls.

*Note.— An internal audit process is one means to monitor compliance with safety regulations, the foundation upon which SMS is built, and assess the effectiveness of these safety risk controls and the SMS. Guidance on the scope of the internal audit process is contained in the* Safety Management Manual (SMM) *(Doc 9859).*

3.1.2 Safety performance of the service provider and the operator shall be verified in reference to the safety performance indicators and safety performance targets of the SMS in support of the organization's safety objectives.

3.1.3 The Service Provider and the Operator shall have process(es) for setting safety performance indicators (SPIs) and Safety Performance Targets (SPTs), as means to monitor its safety performance, the achievement of its safety objectives and to validate the effectiveness of safety risk controls.

3.1.4 The Service Provider's and the Operator's Safety Performance Indicators (SPIs) and Safety Performance Targets (SPTs) of the SMS in support of the organization's safety objectives shall be acceptable to CAAB.

3.1.5 The Service Provider and the Operator shall provide CAAB with the actual SPIs, SPTs, and alert level, as applicable, every six-month period.

3.1.6 The Service Provider and the Operator shall periodically review each SPI, alert level, and target level to ensure they remain effective, relevant, and appropriate.

3.1.7 The Service Provider and the Operator shall develop and maintain processes to acquire data with respect to its operations and services to monitor the safety performance of the organization. These processes and systems shall include, at a minimum, the following:

a) Monitoring of operational processes;

b) Monitoring of the operational environment to detect changes;

c) Auditing of operational processes and systems;

d) Evaluations of the SMS and operational processes and systems;

e) Investigations of incidents and accidents;

f) Investigations of reports regarding potential non-compliance with regulatory standards or other safety risk controls established by the certificate holder through the safety risk management process;

g) A confidential employee reporting system in which employees can report hazards, issues, concerns, occurrences, and incidents, as well as propose solutions and safety improvements.

3.1.8 The Service Provider and the Operator shall develop and maintain processes that analyze the data acquired through the processes and systems identified under paragraph 3.1.7 of this section and any other relevant data with respect to its operations, products, and services.

**3.1.10 Safety Performance Assessment.**

3.1.10.1 The Service Provider and the Operator shall conduct assessments of its safety performance against its safety objectives, which include reviews by the Accountable Manager and Senior Management Personnel, to:

a) Ensure compliance with the safety risk controls established by the service provider and the operator.

b) Evaluate the performance of the SMS.

c) Evaluate the effectiveness of the safety risk controls and identify any ineffective controls.

d) Identify changes in the operational environment that may introduce new hazards.

e) Identify new hazards.

3.1.10.2 Upon completion of the assessment, if ineffective controls or new hazards are identified under paragraphs 3.1.10.1 (b) through (e) of this section, the service provider's and the operator shall use the safety risk management process described in this ANO.

**3.1.11 Internal Safety Audit**

3.1.11.1 The Service Provider and the Operator shall conduct periodic internal audits at least once a year. The internal audit shall be focussed to determine:

a) compliance with regulations;

b) compliance with policies, processes and procedures;

c) the effectiveness of safety risk controls;

d) the effectiveness of corrective actions; and

e) the effectiveness of the SMS.

3.1.11.2 After an audit, there shall have appropriate analysis of causal factors, and processes of taking corrective/preventive actions.

*Note.- The above internal audit may be carried out by the Safety/SMS office. If an organization establishes quality assurance program or quality system, this internal audit may be carried out under quality assurance program or quality system. In that case, quality assurance or quality system auditor is required to complete training on safety management principles, processes & procedures and risk analysis and mitigation process of the organization.*

3.1.11.3 Where a service provider or an operator sub-contract any operational services, the service provider or the operator shall ensure that the sub-contractor(s) has(have) fulfilled the safety requirements of the service provider or oprerator. As per IS: 1.2.2.3 of ANO (AOC), a written agreement should exist between the AOC holder and the sub-contractor clearly defining the safety related activities. The sub-contractor's safety related activities relevant to the agreement should be included in their quality assurance program.

**3.2 The Management of Change**

3.2.2 The Service Provider and the Operator shall develop and maintain a process to identify changes, within or external to the organization, which may affect the level of safety risk associated with its aviation products or services and to identify and manage the safety risks that may arise from those changes.

**3.3 Continuous Improvement of the SMS**

3.3.1 The Service Provider and the Operator shall have a process to monitor and assess its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.

3.3.2 The Service Provider and the Operator shall establish and maintain processes to correct safety performance deficiencies identified in the assessment conducted under paragraph 3.1.10.

3.3.3 The Service Provider and the Operator shall have an appropriate safety committee or safety review board to review the safety management system at intervals not exceeding six months period to ensure its continuing suitability, adequacy and effectiveness in the management and control of operations and associated risks. A review shall include assessing opportunities for improvement and the need for changes to the system affecting SMS of the organization, including, but not limited to:

(i) Defined safety policy and objectives;

(ii) Effectiveness of the SMS;

(iii) Timely response in implementing necessary safety risk control actions;

(iv) Safety performance against the organization's safety policy and objectives;

(v) Overall effectiveness of safety risk mitigation strategy;

(vi) Allocation of resources for effective implementation of SMS;

(vii) Identification of training needs relating to safety**;**

(viii) Status of safety reports & safety risk management;

(ix) Findings from operational inspections and investigations;

(x) Operational feedback;

(xi) Incidents and near miss reports;

(xii) Changes in regulatory policy or civil aviation legislation, ANOs and its implementation;

(xiii) Status of safety risk controls and their ineffectiveness;

(xiv) Results from implementation or rehearsal of the emergency response plan (ERP);

(xv) Regulatory violations,

(xvi) Follow-up actions from previous management reviews.

*Note.- Review of System Management System may be performed by Safety Review Board or Senior Management Safety Review Committee to be chaired by the Accountable Manager or the Chairman or a Director of the Board or the Owner of the organization. All the heads of functional areas should be member of this safety committee.*

## 4. Safety Promotion

### 4.1 Competencies, Training, and Education

4.1.1 The Service Provider and the Operator shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform their SMS duties.

4.1.2 The scope of the safety training programme shall be appropriate to each individual's involvement in the SMS.

4.1.3 The SMS training programme shall include initial & recurrent training and shall describe types of SMS training depending on SMS responsibilities, their syllabi, duration, etc. to be accepted by CAAB. The SMS training shall be provided by trained, qualified and experienced SMS Instructor approved/accepted by CAAB. Instructors of international organization like ICAO, IATA etc, renowned aviation institute/academy like SAA, faculty member of a university does not require acceptance or approval from CAAB. In that case, service provider/operator shall inform CAAB. Company Facilitators for conducting SMS awareness seminar, training on company SMS Manual, Safety Reporting System awareness training and safety promotion does not require any approval from CAAB. Head of SMS/Head of Safety or qualified person authorized by the Safety Manager (head of SMS) may conduct these seminar/workshops/training.

4.1.4 Safety training and education curricula consists of the following as a minimum, but not limited to:

(i) organizational safety policies, goals and objectives;

(ii) organizational safety roles and responsibilities related to safety;

(iii) safety authorities and accountabilities;

(iv) basic safety risk management principles;

(v) SMS Framework;

(vi) safety reporting systems;

(vii) hazard identification, safety risk assessment and mitigation process;

(viii) the organization's SMS processes and procedures;

(ix) line of communication for dissemination of safety information;

(x) human factors;

(xi) ICAO Annex 19 and related Doc;

(xii) CAA Act, CAR, ANO 19 and related other ANOs,

(xiii) SMS manual;

(xiv) individual safety duties (roles, responsibilities, and accountabilities); and

(xv) how the organization's SMS operates.

**4.2 Safety Communication**

4.2.1 The Service Provider and the Operator shall develop and maintain a system that enables effective communication of safety information throughout the management system and in all areas where operations are conducted. Such system shall include:

a) ensures personnel are aware of the SMS to a degree commensurate with their positions;

b) ensures safety-critical information are conveyed effectively;

c) explains why particular actions are taken to improve safety;

d) explains why safety procedures are introduced or changed; and

e) ensures external service providers are provided with information of safety relevant to operations conducted.

**APPENDIX 2**

## APP 2 PRINCIPLES FOR THE PROTECTION OF SAFETY DATA, SAFETY INFORMATION AND RELATED SOURCES

(Chapter 5, sub-section 5.1.4, sub-section 5.2.5, & section 5.3 refers)

*Note 1.— The protection of safety data, safety information and related sources is essential to ensure their continued availability, since the use of safety data and safety information for purposes other than maintaining or improving safety may inhibit the future availability of such data and information, with a significant adverse effect on safety.*

*Note 2.— In view of their different legal systems, States have the flexibility to draft their laws and regulations in accordance with their policies and practices.*

*Note 3.— The principles contained in this appendix are aimed at assisting States to enact and adopt national laws, regulations and policies to protect safety data and safety information gathered from safety data collection and processing systems (SDCPS), as well as related sources, while allowing for the proper administration of justice and necessary actions for maintaining or improving aviation safety.*

*Note 4.— The objective is to ensure the continued availability of safety data and safety information by restricting their use for purposes other than maintaining or improving aviation safety.*

### 1. General Principles

1.1 Bangladesh establishes, through national laws, regulations and policies protecting safety data, safety information and related sources, ensure that

a) a balance is struck between the need for the protection of safety data, safety information and related sources to maintain or improve aviation safety, and the need for the proper administration of justice;

b) safety data, safety information and related sources are protected in accordance with this appendix;

c) the conditions under which safety data, safety information, and related sources qualify for protection are specified; and

d) safety data and safety information remain available for the purpose of maintaining or improving aviation safety.

*Note.—The protection of safety data, safety information and related sources is not intended to interfere with the proper administration of justice or with maintaining or improving safety.*

1.2 When an investigation is instituted and conducted under Annex 13 and AASIIR 2023, accident and incident investigation records listed in 5.12 of Annex 13 shall be subject to the protections accorded therein instead of the protections accorded by this ANO.

**2. Principles of Protection**

2.1 Safety data or safety information shall not :

a) be used in disciplinary, civil, administrative, and criminal proceedings against employees, operational personnel, or organizations;

b) be disclosed to the public; or

c) be used for any purposes other than maintaining or improving safety;

unless a principle of exception applies.

2.2 Protection to safety data, safety information, and related sources shall be accorded by ensuring that:

a) the protection is specified based on the nature of safety data and safety information;

b) a formal procedure to provide protection to safety data, safety information, and related sources is established;

c) safety data and safety information will not be used in a way different from the purposes for which they were collected, unless a principle of exception applies; and

d) to the extent that a principle of exception applies, the use of safety data and safety information in disciplinary, civil, administrative, and criminal proceedings will be carried out only under authoritative safeguards.

*Note 1.— The formal procedure may include that any person seeking disclosure of safety data or safety information will provide the justification for its release.*

*Note 2.— Authoritative safeguards include legal limitations or restrictions such as protective orders, closed proceedings, in-camera review, and de-identification of data for the use or disclosure of safety information in judicial or administrative proceedings.*

**3. Principles of Exception**

3.1 Exceptions to the protection of safety data, safety information and related sources shall only be granted when the competent authority:

a) determines that there are facts and circumstances reasonably indicating that the occurrence may have been caused by an act or omission considered, in accordance with national laws, to be conduct constituting gross negligence, willful misconduct or criminal activity;

b) after reviewing the safety data or safety information, determines that its release is necessary for the proper administration of justice, and that the benefits of its release outweigh the adverse domestic and international impact such release is likely to have on the future collection and availability of safety data and safety information; or

c) after reviewing the safety data or safety information, determines that its release is necessary for maintaining or improving safety, and that the benefits of its release outweigh the adverse domestic and international impact such release is likely to have on the future collection and availability of safety data and safety information.

*Note 1.— In administering the decision, the competent authority takes into account the consent of the source of the safety data and safety information.*

*Note 2.— Different competent authorities may be designated for different circumstances. The competent authority could include, but is not limited to, judicial authorities or those otherwise entrusted with aviation responsibilities designated in accordance with national law.*

**4. Public Disclosure**

4.1 In the event of right-to-know laws, in the context of requests made for public disclosure, exceptions shall be created from public disclosure to ensure the continued confidentiality of voluntarily supplied safety data and safety information.

*Note.— Laws, regulations and policies commonly referred to as right-to-know laws (freedom-of-information, open records, or sunshine laws) allow for public access to information held by the State.*

4.2 Where disclosure is made in accordance with section 3, it shall be ensured that:

a) public disclosure of relevant personal information included in the safety data or safety information complies with applicable privacy laws; or

b) public disclosure of the safety data or safety information is made in a de-identified, summarized or aggregate form.

**5. Responsibility of the Custodian of Safety Data and Safety Information**

5.1 Member FSR of CAAB shall develop a mechanism to ensure that each SDCPS has a designated custodian to apply the protection to safety data and safety information in accordance with applicable provisions of this appendix.

5.2 The service provider and the operator shall have a designated custodian for their SDCPS to apply the protection to safety data and safety information in accordance with applicable provisions of this appendix.

*Note.— The "custodian" may refer to an individual or organization.*

**6. Protection of Recorded Data**

6.1 Through national laws and regulations, specific measures of protection shall be provided regarding the confidentiality and access by the public to ambient workplace recordings.

6.2 Through national laws and regulations, ambient workplace recordings required by national laws and regulations shall be treated as privileged protected data subject to the principles of protection and exception as provided for in this appendix of this appendix.

*Note 1.— Ambient workplace recordings required by national laws, for example, cockpit voice recorders (CVRs) or recordings of background communication and the aural environment at air traffic controller work stations, may be perceived as constituting an invasion of privacy for operational personnel that other professions are not exposed to.*

*Note 2.— Provisions on the protection of flight recorder recordings and recordings from air traffic control units during investigations instituted under AASIIR 2023 are contained therein. Provisions on the protection of flight recorder recordings during normal operations are contained in ANO 6.*

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