



## **Foreword**

This Malaysian Safety Programme (MSP) document spells out Malaysia's implementation of the State Safety Programme (SSP), which is an integrated set of regulations and activities aimed at improving safety. The International Civil Aviation Organisation (ICAO) requires a State that is a signatory to the Convention on International Civil Aviation (also known as the Chicago Convention) to have an SSP.

ICAO's SSP framework comprises of four important components: State safety policy, objectives and resources; State safety risk management; State safety assurance; and State safety promotion. In Malaysia, these four aspects are within the purview of Ministry of Transport through the Civil Aviation Authority of Malaysia (CAAM) and the Air Accident Investigation Bureau (AAIB).

This document describes how the various SSP elements work together to improve safety and is published to facilitate a common understanding of Malaysia Safety Programme by all relevant personnel.

Malaysia fully supports the effort of the ICAO to mandate the SSP as a basis for a Malaysia to manage aviation safety activities that Malaysia is responsible for. The ICAO has in 2006 adopted a Safety Management System (SMS) approach in ensuring aviation safety. It is only logical that the SMS approach be extended to the State level, in the form of the SSP.

The SSP approach enables Malaysia to proactively assess safety risks and to formulate strategies and devise tactics to best mitigate such risks. Aviation safety is paramount to the sustainability of international aviation. In this era of complex civil aviation operations, it is crucial for Malaysia to address current and emerging safety risks proactively and effectively. In developing aviation safety strategies and tactics, Malaysia will work with the stakeholders of our aviation industry and our international partners.

This document will be regularly reviewed to ensure that it reflects evolving aviation safety standards and practices.

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# **Acronyms/ Abbreviations**

AAIB Air Accident Investigation Bureau

AARMS ASEAN Aviation Regulatory Monitoring System

AE SSP Accountable Executive

AFOSA ASEAN Foreign Operator Safety Assessment

AGA Aerodrome and Ground Aids

Al Advisory Information

AIC Aeronautical Information Circular

AIG Aircraft Accident and Incident Investigation

AIP Aeronautical Information Publication

AIR Airworthiness of Aircraft

ALoSP Acceptable Level of Safety Performance

AMO Approved Maintenance Organization

AN Airworthiness Notices

ANS Air Navigation Services

ANSP Air Navigation Services Provider

AOC Air Operator Certificate

ASD Aerodrome Standard Directives

ASEAN Association of Southeast Asian Nations

ATO Approved Training Organisation

ATS Air Traffic Services

CAAM Civil Aviation Authority of Malaysia

CAD Civil Aviation Directives

CAGM Civil Aviation Guidance Materials

CAN Civil Aviation Notices

CAC Civil Aviation Circulars

CE Critical Element

CSI CAAM Safety Inspector

EDTO Extended Diversion Time Operations

ECCAIRS European Co-ordination centre for Accident and Incident Reporting Systems

GASP Global Aviation Safety Plan

ICAO International Civil Aviation Organization

IGM Internal Guidance Material

LEG Primary Aviation Legislation and Civil Aviation Regulations

MetMalaysia Malaysia Meteorological Department

MINDEF Ministry of Defence

MOH Ministry of Health

MOHA Ministry of Home Affairs

MOT Ministry of Transport

MSP Malaysian Safety Programme

MYCAIRS Malaysia Aviation Confidential Accidents/Incidents Reporting System

NCMC National Continuous Monitoring Coordinator

OPS Aircraft Operations

ORG Civil Aviation Organization

PEL Personnel Licensing and Training

PQ Protocol Questionnaires

RASG-APAC Asia Pacific Regional Aviation Safety Group

SARP Standards and Recommended Practice

SCG SSP Coordination Group

SD Safety Directives

SI Safety Information

SIG Safety Implementation Group

SMS Safety Management System

SRG Safety and Security Regulator Group

SSC Significant Safety Concern

SSP State Safety Programme

USOAP Universal Safety Oversight Audit Programme

USOAP CMA Universal Safety Oversight Audit Programme Continuous Monitoring Approach

## Introduction

Malaysia's aviation system has been growing and becoming more complex. Behind the high aircraft movements at Kuala Lumpur International Airport (KLIA), the vibrant aviation industry is driven by skilled aviation professionals who work seamlessly to carry out air operations, ground operations, maintenance and repair, design and production, training, air traffic control and other functions. Aviation infrastructure is constantly being renewed or expanded to cope with new operations and increasing air traffic. New technologies and standards are being adopted to facilitate safe and efficient air travel, and challenges to aviation are always emerging and being addressed.

Amidst the on-going operations and ceaseless transformation of the aviation system, the management of aviation safety has to evolve beyond ensuring compliance with regulations. The industry should develop their SMS to pro-actively identify, assess and manage risk. The ICAO expects Contracting States to integrate various aviation safety activities such as policy development, safety oversight, enforcement and safety promotion into a coherent framework.

Annex 19 to the Convention on International Civil Aviation contains the requirement for Contracting States to establish an SSP, in order to achieve an acceptable level of safety in civil aviation. ICAO defines the SSP as an integrated set of regulations and activities aimed at improving safety. In other words, the SSP goes beyond the conventional safety oversight regime, to include various aspects of safety management, such as top-level objectives, accident and incident investigation, legislation and regulations, risk management and safety promotion. The SSP also describes how the safety performance of the State as a whole interacts with service providers' safety performance under their SMS.

As a signatory to the Convention on International Civil Aviation (also known as the Chicago Convention), Malaysia undertakes to regulate civil aviation safety in accordance with international standards. CAAM and AAIB are tasked to carry out the Chicago Convention and implement the applicable Standard and Recommended Practices (SARPs) of the Annexes to the Convention with respect to aviation safety.

Malaysia has implemented its SSP commensurate with the complexity of its aviation system. This document describes the policies, processes and practices that are put in place by Malaysia, in line with the following ICAO SSP framework components:

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

The content of this document, relevant policies and processes are reviewed regularly for alignment with evolving international practices and consistency with ICAO SARPs, found primarily in the following ICAO publications:

- a. Annex 19 Safety Management;
- b. ICAO Doc 9859 Safety Management Manual; and
- c. ICAO Doc 9734 Safety Oversight Manual.



While there may be multiple public agencies that contribute to the implementation of the SSP, CAAM and AAIB are the main agencies tasked with civil aviation safety matters in Malaysia. Therefore, this MSP document focuses on the roles, responsibilities and programmes of CAAM and AAIB.

# **Malaysia Safety Policy Statement**



# Malaysia Safety Policy Statement

The Malaysia Safety Policy Statement encapsulates the commitments of the Government of Malaysia through its aviation agencies namely, Ministry of Transport (MOT), the Civil Aviation Authority of Malaysia (CAAM) and the Air Accident Investigation Bureau (AAIB) to the aviation industry and the international community towards achieving the highest practicable level of aviation safety. It also reflects how we will approach the management of aviation safety.

CAAM promotes and regulates the safety of civil aviation in Malaysia, while AAIB is responsible for the investigation of air accidents/ serious incidents and the subsequent issuance of safety recommendations in order to enhance aviation safety and to prevent such accidents/ serious incidents from recurring. Malaysia is committed in developing and implementing effective strategies, regulatory frameworks and processes to ensure that civil aviation activities under our responsibility achieve the highest practicable level of safety.

The Government of Malaysia shall set the policy and ensure the provision of necessary resources which includes, financial, human resources, and the relevant trainings in aviation safety, for the effective implementation and maintenance of the State Safety Programme (SSP). To attain these end, CAAM and AAIB will:

- a. closely align national safety standards with ICAO's Standards and Recommended Practices and procedures;
- b. adopt a data-driven and performance-based approach to safety regulation and safety regulatory oversight where appropriate;
- monitor and measure the safety performance and trends of Malaysia's aviation system and address areas of safety concerns;
- d. collaborate and consult with the industry to address safety matters, promote good safety practices and build a strong and proactive safety culture based on sound safety management principles;
- e. encourage the use of safety data and information collection, analysis and exchange;
- f. support international initiatives to improve aviation safety and investigatory capability;
- g. maintain independence of AAIB in the course of accident and incident investigation; and

h. conduct impartial investigation without fear or favour.

Datuk Isham bin Ishak

Secretary General

Ministry of Transport Malaysia

# **Safety Objectives**

Within 10 years, Malaysia will put in place increasingly effective, robust and eventually more sophisticated safety oversight system to achieve zero fatalities in scheduled commercial operations. The safety priorities support this aspirational goal which identifies safety related challenges and the prioritisation of areas that require action to enhance safety in Malaysia.

The aviation safety priorities are grouped into five areas:

- a) Reduction in Operational Risks
- b) Improvements in Safety Oversight and Compliance
- c) Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)
- d) Predictive risk management and advanced regulatory oversight
- e) Enhanced aviation infrastructure

## Safety priorities and targets for Malaysia

- a) Priority Reduction of operational risks
  - Target Maintain a decreasing trend of fatal accidents per million departures, with a view to achieve an aspirational target of zero fatalities by 2030.
- b) Priority Improvements in Safety Oversight and Compliance
  - Target Malaysia to progressively enhance safety oversight capability to achieve at least 85% EI in USOAP CMA by 2026 and 95% EI by 2030.
  - Target Endeavour to have no Significant Safety Concerns (SSCs) under the USOAP Continuous Monitoring Approach (CMA), and to resolve any safety issues within the time frame agreed with ICAO.
- c) Priority Consistent and effective Safety Management Systems (SMS) and State Safety Programmes (SSP)
  - Target Malaysia to implement the full ICAO SSP by 2025.
  - Target Malaysia to develop National Aviation Safety Plan by 2022.
  - Target Promote safety through publications, workshops and seminars.
- d) Priority Predictive risk management and advanced regulatory oversight
  - Target Malaysia to increase EI in AIG of USOAP CMA and to maintain score higher or equal to the global average.

- e) Priority Enhanced aviation infrastructure
  - Target Malaysia to achieve at least 75% EI in AGA of USOAP CMA by 2022.
  - Target Certify all aerodromes in Malaysia that are used for international operations by 2023.

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# 1 State Safety Policy, Objectives and Resources

The application of international legal systems is often explained in terms of the doctrines of incorporation (monism) and transformation (dualism). Based on the constitutional framework of Malaysia, the doctrine of "dualism" is applicable in Malaysia where a rule of international law can only become part of domestic law if and when it is transformed into domestic law by the passing of local legislation.

Malaysia has a national safety legislative framework supported by the necessary domestic aviation laws to implement the Chicago Convention, any Annexes to it and any amendments of such Chicago Convention and Annexes.

Malaysia's aviation legislative framework consists of:

- a) Act of Parliament, a piece of primary aviation legislation passed by the Parliament of Malaysia.
- b) Subsidiary legislations refer to regulations made by the Minister of Transport on the basis of the power delegated to him by Parliament through the Civil Aviation Act 1969.
- c) Notice, Circular, Directive and Information are made by the Chief Executive Officer on the basis of the power given by the Civil Aviation Act 1969 and subsidiary legislations.

All those pieces of legislation have the same legal force and they are legally enforceable against and binding on everybody throughout Malaysia.

## 1.1 Primary Aviation Legislation (CE-1)

The promulgation of a comprehensive and effective aviation law will enable the oversight and management of civil aviation safety and the enforcement of regulations. The primary aviation legislation in Malaysia is stated in the Act of Parliament and subsidiary legislations as follows:

#### 1.1.1 Act of Parliament

Civil Aviation Act 1969 [Act 3] – Malaysia as a Contracting State to the Chicago Convention is duty bound to comply with the Articles of the Chicago Convention and the Standards in the Annexes. In order to ensure compliance with its obligations enunciated in both the Chicago Convention and the Standards in the Annexes, Act 3 has been enacted in 1969 and in force ever since.

Civil Aviation Authority of Malaysia Act 2017 [Act 788] – An Act to incorporate the Department of Civil Aviation (DCA), which is a Government department, to be a statutory body by the name of Civil Aviation Authority of Malaysia (CAAM) of which the primary function is to regulate the safety and security civil aviation. This is in line with the requirement of the ICAO which has called upon the contracting states to the Chicago Convention to establish an autonomous civil aviation authority to ensure efficient management of the safety and security of the civil aviation.

Carriage by Air Act 1974 [Act 148] – An Act to give effect to the provisions of the Warsaw Convention and Montreal Convention concerning international carriage by air and for purposes connected therewith.

Civil Aviation Offences Act 1984 [Act 307] – An Act to give effect to the Convention on Offences and Certain other Acts Committed on Board Aircraft signed at Tokyo on 14 September 1963, the Convention for the Suppression of Unlawful Seizure of Aircraft signed at The Hague on 16 December 1970, the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation signed at Montreal on 23 September 1971, and its Protocol and for purposes connected therewith.

Airport and Aviation Services (Operating Company) Act 1991 [Act 467] – An Act to provide for the vesting of property, rights and liabilities of the Government of Malaysia relating to civil aviation in a company, to make financial arrangements for that company, to provide for matters relating to staff and for other matters connected therewith.

International Interests in Mobile Equipment (Aircraft) Act 2006 [Act 659] – An Act to give effect to the provisions of the Convention on International Interests in Mobile Equipment, its Protocol and for purposes connected therewith.

## 1.1.2 Subsidiary Legislations

Act 3 does not provide detailed provisions of the obligations as stipulated in the Chicago Convention and its Annexes. Be that as it may, section 3(1) of Act 3 intended by Parliament of Malaysia to be the enabling provisions which gives the power making regulation to the Minister to make regulations to give effect to the Chicago Convention, its Annexes and any amendments of such Chicago Convention and Annexes.

Pursuant to this power as vested by Parliament vide section 3 of Act 3 in its present form, the Minister made the subsidiary legislations as follows:

- a) Civil Aviation Regulations 2016 The Civil Aviation Regulations 2016 codify the safety requirements of civil aviation.
- b) Civil Aviation (Aerodrome Operations) Regulations 2016 The Civil Aviation (Aerodrome Operations) Regulation 2016 codify the control and regulation of aerodrome operations.
- c) Civil Aviation (Security) Regulations 2019 The Civil Aviation (Security) Regulations 2019 codify the control and regulation of aviation security.
- d) Civil Aviation (Fees and Charges) Regulations 2016 The Civil Aviation (Fees and Charges) Regulations 2016 codify the fees and charges related to civil aviation.

## 1.2 Specific Operating Regulations (CE-2)

The promulgation of the specific operating regulations as the national requirements emanating from the primary aviation legislation for standardised operational procedures, products, services, equipment and infrastructures in conformity with the Annexes to the Convention on International Civil Aviation. Due to the dynamic nature of the civil aviation requirements as determined by the ICAO which are subjected to amendments from time to time, section 24O of Act 3 empowers the Chief Executive Officer to issue any notice, circular directive, and information. There are numbers of notice, circular, directive and information which were issued by the Chief Executive Officer. The specific operating regulations are available on this link:

https://www.caam.gov.my/resources/publications/

#### 1.2.1 Civil Aviation Directives (CAD)

CAD are documents published by CAAM that contains the standards, requirements and procedures based mainly upon the standards and recommended practices (SARPs) stipulated in International Civil Aviation Organisation (ICAO) Annexes. The CADs expand the requirements outlined in the MCAR 2016.

## 1.2.2 Civil Aviation Circulars (CAC)

CAC are legally binding documents issued by CAAM that may supersede current published standards, requirements, procedures, or guidelines in the CADs/CAGMs. A circular will be valid until it is incorporated into CADs/CAGMs in the next planned revision cycles.

## 1.2.3 Civil Aviation Notices (CAN)

CAN are legally binding documents issued by CAAM of which its contents are not permanent in nature.

## 1.2.4 Safety Directives (SD)

SD are legally binding documents issued by CAAM in relation to any aspect of safety or security in civil aviation.

## 1.2.5 Safety Information (SI)

SI is issued to the public which are informative in nature which relates to aviation safety, for example – in-flight loss of control safety awareness or safety promotion.

## 1.2.6 Advisory Information (AI)

Al is issued to the public which are informative in nature and are non-regulatory.

#### 1.3 State System and Functions (CE-3)

CAAM is the primary agency responsible for regulating the safety of civil aviation activities in Malaysia, while AAIB is responsible for accident and incident investigations. Both agencies are under the responsibility of the MOT. The subsequent paragraphs will describe the various organisations and their corresponding responsibilities and accountabilities.

## 1.3.1 Ministry of Transport (MOT)

The Ministry of Transport (MOT) undertake the following functions:

- a) To formulate and implement land transport, logistics, maritime and aviation policies.
- b) To plan and execute land transport, logistics, maritime and aviation infrastructure projects.
- c) To spearhead the integration of a holistic national transportation system.

- d) To make available transport services delivery system for land transport, logistics, maritime and aviation.
- e) To enforce laws related to land transport, logistics, maritime and aviation.
- f) To determine fees and charges for services provided by the Ministry
- g) To regulate compliance to legislation, service and safety standards.
- h) To facilitate businesses related to land transport, logistics, maritime and aviation industries.
- To spearhead regional and international cooperation programmes in the field of transport.

The mission of the MOT is to strengthen the transportation system driven by technology as a catalyst for national development.

## 1.3.2 Air Accident Investigation Bureau of Malaysia (AAIB)

The AAIB is an independent investigation body under the MOT that is responsible for the investigation of air accidents and serious incidents in Malaysia or elsewhere involving Malaysian civil registered aircraft.

The fundamental objective of investigation is for the prevention of accident and serious incidents in the future and not for the purpose of apportioning blame or liability.

Its mission is to promote aviation safety through the conduct of independent and objective investigations into air accidents and serious incidents consistent with the Chicago Convention and Annex 13.

AAIB conducts continuous studies on cases of accidents and serious incidents that have occurred and from time to time proposes further safety improvements in order to prevent future similar reoccurrences.

## 1.3.3 Civil Aviation Authority of Malaysia (CAAM)

CAAM is a statutory body under the purview of MOT of which the primary function is to regulate the safety and security of civil aviation in Malaysia.

The powers and functions of the CAAM which under the supervision of the Members of the Authority, are defined in the Civil Aviation Authority of Malaysia Act 2017 [Act 788] which includes as follows:

- a) to regulate the safety and security of the civil aviation including the establishment of standards and their enforcement;
- b) to safeguard civil aviation against any acts of unlawful interference;

- to regulate the operation of aerodrome and the provision of aerodrome services and facilities in Malaysia;
- d) to encourage, promote, facilitate and assist in the development and improvement of civil aviation capabilities, skills and services in Malaysia; and
- e) to discharge or facilitate the discharge of international obligations of the Government in respect of civil aviation.

CAAM is also the coordinating point for ICAO purposes, and is responsible for the development and maintenance of this MSP document and for monitoring progress against and reporting on the associated implementation plan.

Information on CAAM profile and organisation are available on CAAM website: www.caam.gov.my.

## 1.3.3.1 State Safety Program Unit

The establishment of State Safety Program Unit is to ensure the implementation and maintenance of the SSP in Malaysia includes maintaining the Malaysia Safety Programme document including periodic review of safety policies, objectives and documents, as well as maintaining the safety management system regulatory requirements and guidance material.

For safety risk management, the State Safety Program Unit manage the hazard identification and safety risk assessment system including to ensure the implementation for the management of safety risks including administrative and legal enforcement actions.

The State Safety Program Unit manage the safety data collection and processing, accident and incident database and safety data trend analysis, monitor of service providers SPI and SPT and responsible to establish the state's ALoSP.

In addition, the State Safety Program Unit is coordinating with other divisions and agencies to ensure that the SSP implementation actions under the responsibility of each division/agencies are accomplished within the agreed timeline. This includes managing the internal and external communication and dissemination of safety information.

The State Safety Program Unit conducts periodic review to assure the continuing improvement and effectiveness of SSP and manage the SSP maturity assessment; and lead the SIG and act as secretariat to the SCG, SRG and EOC.

#### 1.3.3.2 Quality and Standards Division

The Quality and Standards Division is to provide the following:

a) Strategic affairs functions:

- 1) Plan and coordinate CAAM Transformation Programme;
- 2) Plan and coordinate the National Safety and Security Programme; and
- 3) Make necessary consideration on trade officer requirement and usage of key words (air, aviation, aerospace, etc) in relation to the formation of a company name
- b) Focal point of all matters regarding ICAO & International Aviation Industry:
  - coordinate responses for compliance to international standards and other obligations;
  - 2) work closely with airlines and other stakeholders in aviation to facilitate the sustainability and growth of the civil aviation industry;
  - act as primary contact (National Continuous Monitoring Coordinator (NCMC)) for all ICAO Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP CMA) processes and activities;
  - 4) coordinate ICAO-related matters, including handling ICAO State Letters related to safety; and
  - 5) coordinate and provide feedback on CORSIA and CAPSCA.
- c) Development of policy/rules/directives:
  - develop, study and publish policy/rules/directives for all regulatory needs;
  - develop training policy for CAAM;
  - 3) develop a quality system to manage, oversight and distribute all regulatory documents; and
  - 4) conduct internal audits as required on all regulatory divisions.

## 1.3.3.3 Flight Operations Division

The function of Flight Operations Division is to regulate flight operations activities inclusive of aircrew licensing and air/ground operator certification. Flight Operations Division is responsible for implementing safety oversight activities including issuing certificate, licence, permit, approval, authorisation, permission or other document, performing safety surveillance activities, safety investigations and undertaking enforcement actions in relation to:

- Malaysia registered aircraft for commercial air transport operations and general aviation;
- b) foreign aircraft operating in Malaysia;
- c) flight simulation training devices;
- d) unmanned aircraft system (UAS);
- e) ground handling services;

- f) flight crew licences;
- g) approved training organisations (ATO); and
- h) medical examiner.

#### 1.3.3.4 Airworthiness Division

The Airworthiness Division carries the regulatory function in respect of airworthiness through the establishment of standards, recommended practices and guidelines, and their enforcement as required by the Civil Aviation Act [CAA] 1969. Airworthiness Division is responsible for implementing safety oversight activities, issuing certificate, licence, permit, approval, authorisation, permission or other document, performing safety surveillance activities, safety investigations and undertaking enforcement actions in relation to:

- a) certification of aeronautical products;
- b) Malaysian registered aircraft;
- c) foreign aircraft operating under Malaysia AOC;
- d) maintenance, continuing airworthiness management, maintenance training, design and production organisations; and
- e) Aircraft Maintenance Licence (AML).

## 1.3.3.5 Air Navigation and Aerodrome Division

The Air Navigation and Aerodrome Division carries the regulatory function that oversees the provision of air navigation services by the air navigation service providers to ensure compliance with the national legislations and regulate aerodrome activities in ensuring safe and efficient operations for public safety in the vicinity on and of aerodromes. The Air Navigation and Aerodrome Division is responsible for:

- a) Implementing safety oversight activities including performing safety surveillance activities, safety investigations and undertaking enforcement actions in relation to:
  - Air Traffic Services (ATS);
  - Procedures for ANS-Aircraft Operations (PANS-OPS);
  - 3) Aeronautical Information Services (AIS);
  - 4) Aeronautical Charts (Chart);
  - 5) Aeronautical Meteorology (MET);
  - 6) Communication Navigation and Surveillance (CNS);
  - 7) Search and Rescue (SAR) and
  - 8) Aerodrome operations (AGA).

- Regulating, issuing certificate, licence, permit, approval, authorisation, permission or other document, performing safety surveillance activities, safety investigations and undertaking enforcement actions in relation to:
  - 1) air traffic control licence;
  - 2) ATC simulation training devices;
  - 3) ATC approved training organisations (ATC-ATO);
  - 4) flight procedure designer and design organisations;
  - 5) aerodrome certification;
  - 6) obstacle limitation surface (OLS) control; and
  - 7) helideck inspector, inspection organisations and training.

## 1.3.3.6 Aviation Security Division

The function of this Division is to regulate airlines, cargo and airport operations activities inclusive of dangerous goods activity. The Aviation Security Division is responsible for:

- a) Implementing safety oversight activities including performing safety surveillance activities, investigations and undertaking enforcement actions in relation to:
  - 1) aircraft operations for Malaysia registered aircraft;
  - 2) foreign aircraft operating in Malaysia;
  - 3) airport operator in Malaysia;
  - 4) aviation security (screener's);
  - 5) cargo terminal operator;
  - 6) freight forwarders;
  - 7) postal operators; and
  - 8) shipper.
- Regulating, approvals, surveillance activities, investigations and undertaking enforcement actions in relation to:
  - air operator annual permit dangerous goods;
  - 2) dangerous goods daily permit;
  - 3) dangerous goods card;
  - 4) dangerous goods exemption;
  - 5) special provision; and
  - 6) training programme.

## 1.3.4 Coordination within the Malaysia Aviation Safety System

## 1.3.4.1 Malaysia Safety Programme Governance

CAAM as statutory body under MOT is the regulatory organisation responsible for coordinating the implementation and administration of the MSP. The Secretary General of MOT is the MSP Accountable Executive (MSP-AE) responsible for the establishment of MSP. The MSP-AE has control of financial, human resources and relevant training in aviation safety for the effective implementation and maintenance of the MSP.

## 1.3.4.2 SSP Coordination Group

The SSP Coordination Group (SCG) is a national-level committee set up to coordinate SSP activities among relevant aviation regulatory agencies in Malaysia. The meeting shall be held at least once a year and chaired by the Secretary General of MOT, and comprise of these members:

- a) CEO, CAAM;
- b) Chief Inspector AAIB;
- c) Aviation Division Undersecretary MOT; and
- d) Aviation Division MOT and CAAM as Secretariat.

## 1.3.4.3 Safety and Security Regulator Group

The Safety and Security Regulator Group (SRG) was established with a collective responsibility to continuously improve the state safety and security oversight (SSO), implementation and the maintenance of the SSP. The meetings are regularly held and chaired by the CAAM CEO. The members of the SRG are:

- a) Deputy CEO (Regulator)
- b) Director of Quality and Standards;
- c) Director of Flight Operations;
- d) Director of Airworthiness:
- e) Director of Air Navigation Services and Aerodrome;
- f) Director of Aviation Security; and
- g) Legal Advisor

## 1.3.4.4 Safety Implementation Group

Under the SRG, the Safety Implementation Group (SIG) has been established as a working group with members represented from the safety regulatory divisions. The SIG is chaired by the State Safety Program Unit Director and the members consist of representatives from the other divisions.

#### 1.3.4.5 Coordination between CAAM and AAIB

In addition to Malaysia SSP coordination activities, several areas exist where CAAM and AAIB would need to interact closely to improve the level of aviation safety in Malaysia. Both have developed coordination procedures to facilitate each other's work, which covers the following areas:

## a) Safety recommendations

Safety recommendations addressed to CAAM can originate from AAIB or foreign investigation authorities, followed by appropriate follow-up actions. For safety recommendations addressed to any aviation organisation or aviation industry as a whole issued by AAIB, CAAM is informed so that this additional safety information can be used during the conduct of safety oversight.

## b) Sharing of safety information for trend analysis

AAIB and CAAM have access to all information received on accidents, serious incidents and incidents which are recorded in the European Coordination Centre for Accident and Incident Reporting System (ECCAIRS).

ECCAIRS is a computer application tool to assist in collecting, sharing, and analysing safety aviation information.

ECCAIRS was developed based on Accident/Incident Data Reporting (ADREP) taxonomy and Annex 13 contents, and ICAO adopted ECCAIRS to collect Accident and Serious Incident data.

#### c) Technical Support for Investigation

AAIB may formally request CAAM for technical experts to support the conduct of an investigation. CAAM would assess the request and if necessary, ascertain with AAIB on the required duration and terms of reference for the support.

#### d) Handling of ICAO State Letters

As the primary agency representing Malaysia in ICAO, ICAO's State letters are sent to CAAM. Pertaining to handling of state letters in relation with Annex 13, CAAM will forward the state letter to AAIB for further action.

## 1.3.4.6 Coordination between CAAM and Royal Malaysia Air Force (RMAF)

Jawatankuasa Induk Pengurusan Ruang Udara (JIPRUA) is a high-level committee on management of airspace established by the RMAF and CAAM as a forum to discuss and decide on the policy matters relating to airspace management within Malaysian Flight Information Region (FIR) and Malaysian sovereign airspace. It is aimed to create and maintain a safe airspace for civil aviation industry, whilst maintaining a high-level security of the nation.

The members are CAAM, RMAF, MOT, Ministry of Defence (MINDEF) and any party deemed necessary invited by the committee.

## 1.3.4.7 Coordination between CAAM and Search and Rescue (SAR) Agencies

Aeronautical SAR (A-SAR) operations in Malaysia are conducted under the Directive 20 of the National Security Council (Arahan 20 Majlis Keselamatan Negara). In that respect, CAAM undertakes the planning of the A-SAR system and prepares A-SAR programme as documented in the Aeronautical SAR Manual. One Rescue Coordination Centre for each Kuala Lumpur and Kota Kinabalu Flight Information Region is established for coordinating the conduct of search and rescue operations.

In accordance with the established SAR plan and programme, coordination is established between the CAAM and SAR agencies from the MINDEF, Ministry of Home Affairs (MOHA), Ministry of Health (MOH) and the Ministry of Housing and Local Government. A biennial full-scale SAR exercise (SAREX) will be conducted to ensure the efficiency of SAR organisations responding to the needs of SAR operations.

#### 1.3.4.8 Coordination between CAAM and Malaysian Meteorological Department

Jawatankuasa Induk Pengurusan Meteorologi Ruang Udara (JIPMURA) is a high-level committee on management of airspace established by the Malaysian Meteorological Department (MetMalaysia) and CAAM as a forum to discuss and decide on the policy matters relating to deliver aviation meteorological information for airspace user within Malaysian Flight Information Region (FIR). This close cooperation is reinforced by the establishment of sub-committees at various levels to resolve the issues arising between CAAM and MetMalaysia. The meeting also discusses the latest issues relating to the standards and recommended practices of the ICAO including the latest technological developments in the delivery of aviation meteorological information.

## 1.4 Qualified technical personnel (CE-4)

#### 1.4.1 Qualification

The establishment of the minimum qualification requirements are for the technical personnel performing safety-related functions and the provision of appropriate

initial and recurrent training to maintain and enhance their competence at the desired level to effectively perform safety oversight functions. For record keeping, CAAM implemented a system for the maintenance of training records for technical personnel.

A CAAM Safety Inspector (CSI) should be fully qualified, with specific regulatory skills, and demonstrate a minimum appropriate level of technical knowledge. The qualifications of a CSI should ideally match the qualifications of those who are being inspected.

## 1.4.2 Training Policy and Procedures

To ensure that technical personnel receive the required training in an effective manner and maintain their competency, a robust training system has been established and implemented by the CAAM. This system is based on the CAAM training policy manual.

## 1.5 Technical Guidance, Tools and Provision of Safety-Critical Information (CE-5)

## 1.5.1 Internal Guidance Material (IGM) / Internal Policy Manual

The provision of appropriate facilities, comprehensive and up-to-date technical guidance material and procedures, safety-critical information, tools and equipment, and transportation means, as applicable, to the technical personnel to enable them to perform their safety oversight functions effectively and in accordance with established procedures in a standardised manner. These internal procedures are published in the form of internal guidance materials, while internal policies are published as internal policy manuals.

The Air Accident Investigation Policy and Procedure Manual is the manual that outlines the responsibilities and provides guidelines to appointed investigators to apply various procedures when investigating aircraft accidents or serious incidents. It also acts as a framework on which other officers appointed as investigators by the Ministry of Transport to carry out investigations in their respective fields of expertise other than aviation.

## 1.5.2 Technical Guidance for Operators and Service Providers

CAAM provides technical guidance to the aviation industry on the implementation of relevant regulations by publishing Civil Aviation Guidance Material (CAGM) documents or as attachments in the safety directives. CAGM contains guidelines for operators to use to demonstrate compliance with the applicable standards and requirements published in the relevant CADs.

# 2 State Safety Risk Management

Safety Risk Management (SRM) of civil aviation activities is a shared responsibility between the Government agencies and the industry. As a whole, Malaysia has progressively put in place the supporting elements to manage safety risk proactively. The AAIB, in carrying out its independent safety investigation role, will investigate organisational and management factors to identify any systemic safety issues and will make safety recommendations to improve the management of risk.

CAAM identifies potential safety risks to the aviation system. CAAM augments its traditional methods of analysing the causes of an accident or incident with proactive processes to achieve this. Proactive processes enable CAAM to identify and address precursors and contributors of accidents, and strategically manage safety resources to maximize safety improvements. CAAM:

- a) requires that their service providers implement SMS to manage and improve the safety of their aviation related activities;
- b) establishes means to determine whether service providers' SRM is acceptable; and
- c) reviews and ensures that the service provider's SMS remains effective.

The CAAM SRM component includes the implementation of SMS by service providers, including hazard identification processes and the management of associated safety risks.

## 2.1 Licensing, Certification, Authorization and Approval Obligations (CE-6)

## 2.1.1 Implementation

The implementation of 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 such as but not limited to:

- a) Air Operators Certificates;
- b) Approved Training Organisation;
- c) Certificate of Aerodrome;
- d) Certificate of Aircraft Registrations;
- e) Certificate of Airworthiness;
- f) Certificate of Approval for Maintenance Organisation;
- g) Personnel Licencing;
- h) Technical Approval Certificate;
- i) Unmanned Aircraft System; and

j) Specific approvals such as: RVSM, PBN, LVO, EDTO, EFB, RVSM, PBCS, ADS, CPDLC and NAT HLA.

Licensing, certification, authorization and approval are state functions, enabling Malaysia to comply with the provisions of the Convention and its related Annexes. These functions cover a number of disciplines and functional areas. The activities involved in certification and licensing are such that they usually require the establishment of CAAM, with specific divisions and effective coordination.

## 2.1.2 Licensing, Certification, Authorization and Approval System

Under an effective licensing, certification, authorization and approval system, all necessary evaluations are effectively performed by qualified personnel, based on State requirements and following a formal and comprehensive process. These personnel may be from the CAAM, or in case not all required specialties and competencies exist within the CAAM, the evaluations may also be performed by external specialists through an appropriate delegation of functions. In such cases, CAAM will formally designate the specialists after verification of their competence and of the absence of possible conflicts of interest. CAAM also approves the specialists' working methodologies, defines deliverables and validates results of evaluations. The outcomes of the evaluations should be properly documented and recorded, with all the pertinent records and evidence kept by the CAAM.

Checklists used in the evaluation process should be properly completed and recorded. Completed checklists, together with associated records, should document the results of all the verifications performed. For each checklist item, the CSI should document the relevant detailed references (e.g. specific references in a manual) and facilities/equipment/other aspects reviewed on site. Copies of documentation reviewed should be kept, as needed (e.g. annotated manuals) as well as minutes or reports of audits/inspections conducted or tests performed. Such records are necessary to prove the effectiveness and ensure traceability of the licensing, certification, authorization and approval activities performed. They are also required to allow for an appropriate follow-up, as necessary. All records should be appropriately filed by CAAM. The records shall include, but not be limited to, the following:

- a) application and associated documents;
- b) service provider manual;
- c) audit/inspection reports;
- d) corrective action plans and evidence of implementation;
- e) if applicable, exception or exemption files; and
- f) copy of the certificate (and associated specifications, if applicable), licence, authorization or approval.

The licensing functions are discharged by respective divisions and the final responsibility remains with the CAAM. As applicable, and in compliance with national legislation and procedures, licensing activities includes, but not limited to, the following:

- a) approval of training courses;
- approval of the use of simulation training devices and the authorization for their use, in order to gain the experience or demonstrate the skill required for the issue of a licence or rating;
- approval, designation and supervision of individuals or organizations (including medical examiners) delegated to perform specific tasks on behalf of the personnel licensing office, if applicable;
- d) assessment and approval of applications for licences and ratings;
- e) assessments of medical fitness relating to licence requirements;
- f) issue of licences and ratings; and
- g) validation of licences and ratings issued by other States.

## 2.2 Safety Management System Obligations

## 2.2.1 Safety Regulatory Requirements

Pursuant to Regulation 167 of the Civil Aviation Regulation 2016, CAAM requires a list of service providers that are exposed to safety risks during their operations, as identified in Annex 19, to implement SMS. The SMS in the service providers are in accordance with the framework shown in below.

- 1. Safety Policy and Objectives
  - 1.1. Management commitment
  - 1.2. Safety accountability and responsibilities
  - 1.3. Appointment of key safety personnel
  - 1.4. Coordination of Emergency response planning
  - 1.5. SMS Documentation
- 2. Safety Risk Management
  - 2.1. Hazard identification
  - 2.2. Safety Risk assessment and mitigation
- 3. Safety Assurance
  - 3.1. Safety performance monitoring and measurement
  - 3.2. The management of change
  - 3.3. Continuous improvement of the SMS
- 4. Safety Promotion
  - 4.1. Training and education
  - 4.2. Safety Communication

#### 2.2.2 SMS Acceptance

The safety management established by a service provider shall be made acceptable to the relevant authorities in accordance with established technical requirements and procedures, in accordance with CAD 19 and CAGM 1902.

## 2.2.3 Acceptance of SPI and SPT

Service providers' proposed Safety Performance Indicator (SPI) are reviewed and accepted by the authority as part of the SMS acceptance. The authority may be satisfied that the proposed SPI are appropriate and pertinent to the individual service provider's aviation activities. Some of the service provider's SPI and Safety Performance Target (SPT) may link to the Malaysia state SPI and SPT for measuring and monitoring the ALoSP.

The acceptance of the service provider's SPT may be addressed after the SPI have been monitored over a period of time. This establishes the baseline performance. It may be based on targets established by the authority. Achievement of Malaysia state SPT will require the coordination of safety risk mitigation actions with the service provider.

Service providers are required to define safety performance measurements and targets as part of their SMS performance monitoring mechanism. The service providers shall undertake periodic reviews of the safety performance indicators and targets to ensure relevance. Such safety performance indicators and targets are subjected to periodic review and agreement with CAAM. CAAM is working with service providers on setting associated alert levels for the agreed safety performance indicators.

The performance of the SMS of individual service providers is regularly reviewed by CAAM through continuous surveillance activities such as audits or separate SMS assessments, to ensure the SMS is commensurate with the complexity or scope of operations. The primary focus of such assessments is to monitor the service providers' safety performance and its hazard identification and risk management procedures.

## 2.3 Accident and Incident Investigation

#### 2.3.1 Establishment

The AAIB conducts investigations in accordance with the Civil Aviation Regulation 2016 Part XXVI and Annex 13 to the Convention on International Civil Aviation, which governs how ICAO member States conduct aircraft accident investigations internationally. In carrying out the investigations, the AAIB adheres to ICAO's stated objective, which is as follows:

"The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability."

#### 2.3.2 Process

As an independent investigation authority, AAIB's investigations shall be separate from any judicial or administrative proceedings. The AAIB shall undertake investigations without fear or favour. The AAIB contributes to aviation safety by independently investigating and analysing the circumstances leading to the occurrences of accidents and serious incidents and by identifying the safety issues and making safety recommendations to address these safety issues. Such investigations support the management of safety in Malaysia. When carrying out its investigations, the AAIB will:

- a) gather, record and analyse all the available information on the accidents and incidents:
- b) determine the causes and/or validity of the contributing factor;
- c) identify the possible safety issue;
- d) draw up safety recommendations to address these safety issues; and
- e) complete the investigation report.

The AAIB's key product is information and knowledge, imparted to individuals, regulators, aerospace industry and aviation service providers to assist in ensuring that unsafe actions or conditions are not repeated or allowed to persist. The emphasis of the AAIB's investigations is on accident prevention and not on establishing blame.

The AAIB conducts Annex 13 investigations; however, this does not preclude other organisations from conducting their own investigations.

While AAIB is the primary investigation agency, especially for accidents and serious incidents, CAAM and service providers also conducts investigations of safety occurrences to the extent of CAAM powers under related safety management directives. Such investigations continue independently in parallel with AAIB's investigations as much possible, with priority of evidence given to AAIB. The investigations which are conducted by CAAM and service providers, aim to expeditiously determine safety gaps to prevent recurrence, assess breaches of regulations and guidance material and discover lessons to improve safety regulations and safety oversight processes.

## 2.4 Hazard Identification and Safety Risk Assessment

## 2.4.1 Safety data and safety information collection

The collection of internal and external data is essential to achieving an effective SSP. Malaysia complex aviation system requires CAAM to collect adequate safety data through accident and incident investigations, service provider safety investigation, continuing airworthiness reports, safety risk assessments, audit

findings / reports, safety studies / reviews and reports from mandatory and voluntary reporting system. External data is available from other States, such as investigation reports, safety reports, ICAO APAC RASG and iSTARS.

## 2.4.2 Mandatory Reporting

AAIB and CAAM have established mechanism to facilitate mandatory reporting of accidents, serious incidents and incidents through CAAM website.

In accordance with MCAR 2016 Regulation 165 and Regulation 185, when an accident or serious incident occurs in Malaysia or outside Malaysia involving a Malaysia aircraft or an aircraft operated by a Malaysia operator, relevant persons/operators must notify and submit report to CAAM through the website within such time and in such manner as prescribed in the CAD 1900 – Safety Reporting System.

All information received on accidents, serious incidents and incidents are recorded in the European Co-ordination Centre for Accident and Incident Reporting System (ECCAIRS), which acts as a database for reportable occurrences.

The safety reporting system is established for the preparation and submission of reports by persons or organisations involved in occurrences that they have experienced. In this scheme, the term occurrence means any fault problem or shortcoming of parts or people. In general terms, this covers hazardous occurrences to all aircraft registered in Malaysia.

The objectives of the occurrence reporting are as follows:

- a) to ensure that the CAAM and AAIB is advised of hazardous or potentially hazardous incidents and defects, hereafter referred to as occurrences;
- b) to ensure that knowledge of these occurrences is disseminated so that other persons and organisations may learn from them; and
- c) to enable an assessment to be made by those concerned (whether inside or outside the CAAM and AAIB) of the safety implications of each occurrence, both in itself and in relation to previous similar occurrences that they may take or initiate any necessary action.

It is not the objective of the CAAM or AAIB to determine or apportion any blame or liability in connection with aviation occurrences. CAD 1900 – Safety Reporting System provides additional details on safety reporting for civil aviation.

#### 2.4.3 Voluntary Reporting

CAAM encourages voluntary reporting across the whole spectrum of Malaysian civil aviation operations. A voluntary report is made by a person not required to report under the legislation described under MCAR Regulation 165 (2). Voluntary reports are processed in a similar way to mandatory reports. Voluntary occurrence

reporting does not eliminate the need for mandatory occurrence reporting of aircraft accidents and incidents to the relevant authorities under the existing law.

The objective of voluntary reporting is to enhance aviation safety through the collection of feedback on incidents that are not captured by the Mandatory Occurrences Reporting System (MOR), or that may appear minor but may be useful for others to learn from the reporter's experience and may even lead to changes in procedures or design.

Occurrences that are considered to include particularly dangerous or potentially dangerous circumstances should be reported to CAAM immediately.

All voluntary reports may be submitted through CAAM official website via <a href="https://www.caam.gov.my/contact-us/feedback/">https://www.caam.gov.my/contact-us/feedback/</a>.

## 2.4.4 Information Sharing with States / Administration and Industry

Beyond sharing safety information with ICAO, Malaysia also shares information with the following safety information exchange mechanisms, and leverages on them to enhance its safety oversight efforts:

- a) Association of Southeast Asian Nations (ASEAN) Aviation Regulatory Monitoring System (AARMS). AARMS is an initiative among ASEAN authorities that aims to:
  - monitor the implementation of national aviation regulations in member
     States in accordance with agreed standards;
  - identify non-compliance with agreed standards;
  - · identify significant safety issues; and
  - monitor implementation of corrective actions to resolve non-compliances and safety issues.
- b) ASEAN Foreign Operator Safety Assessment (AFOSA). AFOSA focuses on the sharing and analysis of ASEAN ramp inspection data of foreign carriers, for the mutual management of imported safety risks among ASEAN authorities.

#### 2.4.5 Safety Risk Assessment

The safety risk assessment for regulatory issues are conducted by the safety regulatory divisions using the safety risk assessment process developed by CAAM. This process provides the mechanism for discovering lack of effective implementation within the safety regulatory system by:

- a) ensuring that appropriate corrective action is planned to address identified deficiency, if any:
- b) ensuring that appropriate corrective action is implemented; and
- c) monitoring the effectiveness of the action.

Risk assessment will be conducted when triggered by stakeholder's feedback, statutory/legal requirements, serious incident and accident reports, staff concerns, and management decisions or review.

The scope of risk assessment includes assessing the CAAM capability in the specific operating regulations, system and functions, qualified technical personnel, technical guidance, tools and provision of safety-critical information, licensing, certification, authorization and approval obligations, surveillance obligation and resolution of safety issues.

## 2.5 Management of Safety Risks (Resolution of Safety Issues CE-8)

## 2.5.1 Resolution of Safety Issues

The use of documented process to take appropriate actions, up-to and including enforcement measures, to resolve identified safety issues.

## a) Identification of safety issues

An effective and sustainable safety oversight system should provide for the identification of non-compliances and other safety issues and for their effective and timely resolution. Safety issues identified in Malaysia include:

- non-compliances and other deficiencies identified by the CSI during surveillance;
- analysis of reported safety events;
- · negative safety trends; and
- results including safety recommendations of aircraft accident and incident investigations.

#### b) Follow-up of safety issues

Should the surveillance activities reveal that the certificate, licence, permit, approval, authorisation, permission, other document holder or service provider has failed or unable to meet or maintain the required standards, the relevant CAAM divisions shall:

- promptly advice the certificate, licence, permit, approval, authorisation, permission, other document holder or service provider of the deficiency observed through the surveillance report;
- provide deadlines for the submission of corrective action plan to be taken by the certificate, licence, permit, approval, authorisation, permission, other document holder or service provider;
- verify the corrective actions and related timeframes are appropriate before acceptance of the corrective action plan; and
- initiate appropriate follow-up to verify the effective implementation of the corrective actions.

#### c) Enforcement

Effective and timely actions taken by the licence, certificate, approval holder or service provider will result in the effective resolution of safety issues. In the absence of a resolution, CAAM shall, in the interest of safety, take appropriate enforcement action to caution, warn, suspend, revoke or vary a certificate, licence, permit, approval, authorisation or permission in accordance with the Civil Aviation Regulations, Civil Aviation (Aerodrome Operations) Regulations and Civil Aviation (Security) Regulations.

## d) Follow-up of Safety Recommendation

Accident and incident investigations play a crucial role in the identification of deficiencies and safety issues. Safety recommendations may be issued in the course of or at the completion of an investigation, safety review or safety studies.

A procedure must also be implemented by the organisation receiving the safety recommendation to record their response and to monitor the progress of action taken.

#### e) Enhancement of Safety Standards and Recommendations

In addition to publishing recommendation in the form of Safety Information (SI), supplementary control measures may be issued in form of directive, circular, or notice to enhance safety.

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## 3 State Safety Assurance

CAAM safety assurance activities aim to assure the functions are achieving the intended safety objectives and targets. Service providers are required to implement a safety assurance process as part of their SMS. Safety assurance activities, provides CAAM with assurance that the safety processes are functioning effectively and Malaysia is on target to achieve the safety objectives via the collective efforts of Malaysia aviation industry.

## 3.1 Surveillance Obligations (CE-7)

## 3.1.1 Implementation

CAAM establishes surveillance mechanisms to identify and monitor the identification of hazards as well as monitor the management of safety risks by service providers in accordance with relevant regulations. CAAM surveillance components include scheduled, unscheduled audits and inspections and data collection and monitoring.

## 3.1.2 Safety Risk-Based Surveillance

3.1.3 A safety risk-based surveillance (SRBS) approach enables prioritization and allocation of CAAM safety management resources commensurate with the safety risk profile of certain specific areas of regulatory functions. CAAM gains experience and familiarity with each service provider by monitoring the steadily developing maturity of their safety assurance process, and in particular, their management of safety performance.

## 3.1.4 Activities

Surveillance activities are carried out to proactively verify that aviation certificate, licence, permit, approval, authorisation, permission, other document holder or service provider continue to meet the established requirements and function at the level of competency and safety. These activities include the conduct of inspections (announced and unannounced visits), the review of documents submitted by the service providers, meetings with concerned parties and analyses of available safety information.

CAAM may increase surveillance activities with additional audits and inspections when significant issues are detected from accident and incident reports, voluntary reports or other means.

CAAM's oversight components include:

- Qualified and trained technical staff with specific training in relation to SMS:
- Documented procedures and guidance for approval, surveillance and associated safety processes;
- Licensing, certification, authorisation and approval; and

 Surveillance activities – including regular planned and unplanned audits and inspections, data collection and exchange, analysis, workflow management and information management.

## 3.2 State Safety Performance

## 3.2.1 Safety Performance Indicators (SPI)

The measurement and monitoring of safety performance are the means used for describing and assessing the safety performance of the aviation system of Malaysia. The analysis of safety data and information can help identify emerging risk areas. This information is used for communicating decisions concerning the implementation of the appropriate safety measures and the subsequent assessment of their effectiveness.

Malaysia has classified its safety performance indicators (SPIs) into lagging indicators – low probability/high severity and lagging indicators – high probability/low severity. Details of SPI indicators requirements are available in CAGM 1902 Safety Management System.

For a more precise and useful indication of safety performance, Malaysia has identified a set of indicators, as indicated in CAGM 1902.

## 3.2.2 Acceptable Level of Safety Performance (ALoSP)

Malaysia has established the ALoSP achieved through the implementation and maintenance of the SSP and implementation and maintenance of SPI and SPT.

CAAM is responsible for the state ALoSP expressed through the sets of SPI for the service providers. The goal is to maintain or continuously improve the safety performance of the entire aviation system. Safety data are available in the aircraft operators, maintenance repair and overhaul organisations, aerodrome operators and the air traffic service providers.

In order to determine and update the ALoSP of Malaysia, the effectiveness of the following four components has been considered:

- a) SSP implementation;
- b) SMS implementation by service providers;
- safety risk management in the aviation system and the associated safety performance indicators; and
- d) implementation of the standards and recommended practices (SARPs) of the Annexes to the Convention on International Civil Aviation.

## 3.2.3 Ensuring Effective Fulfilment of ICAO Safety Oversight Obligations

Malaysia is committed to fulfilling its aviation safety oversight obligations. The SRG ensure the implementation of ICAO USOAP CMA activities and monitors the effectiveness of the eight Critical Elements (CEs) in the safety oversight function in the following areas:

- a) Primary aviation legislation and specific operating regulations (LEG);
- b) Civil aviation organisation (ORG);
- c) Personnel licensing and training (PEL);
- d) Aircraft operations (OPS);
- e) Airworthiness of aircraft (AIR);
- f) Aircraft accident and incident investigations (AIG);
- g) Air navigation services (ANS); and
- h) Aerodrome and ground aids (AGA).

The eight CEs are as follows:

- a) CE-1: Primary aviation legislation;
- b) CE-2: Specific operating regulations;
- c) CE-3: State system and functions;
- d) CE-4: Qualified technical personnel;
- e) CE-5: Technical guidance, tools and provision of safety-critical information;
- f) CE-6: Licensing, certification, authorisation and approval obligations;
- g) CE-7: Surveillance obligations; and
- h) CE-8: Resolution of safety issues.

## 3.3 Internal Quality Assurance

CAAM has established a quality assurance programme through the Quality & Standards Division to ensure that the organisation's business management system is implemented, maintained, continuously improved and to ensure internal audits on all divisions are conducted routinely. Findings during the audit are documented and the associated corrective actions and implementation plans are documented and agreed.

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## 4 State Safety Promotion

CAAM and AAIB established mechanisms to provide relevant safety information to its personnel to support the development of a culture that fosters an effective and efficient SSP. The communication of the safety policies, safety plans and SSP documentation should improve awareness and collaboration among the staff, so that safety management processes put in place by CAAM and AAIB remain effective.

## 4.1 Internal Communication and Dissemination of Safety Information

#### 4.1.1 Internal Communication and Dissemination in CAAM

Internally, CAAM communicates information including safety policy and SSP documentation either through personal interaction, printed media or electronic means.

Interactive meetings are conducted at the organisation-wide level, within the divisions on an informal basis. Training, workshops, seminars and ad-hoc meetings are other avenues of personal interaction to communicate and disseminate safety information effectively within CAAM.

Example of printed media are newsletters, safety bulletins and posters.

Electronic dissemination of safety information ensures continuity of knowledge and reach to a wider audience. CAAM has a dossier of internal policy documents that collectively describes the management system for dissemination of documents, including ICAO State Letters, legislation, regulations, directives, procedures, meeting notes, publicly available newsletters and other relevant information. This system is accessible by relevant personnel of all regulatory and administrative divisions.

#### 4.1.2 Internal Communication and Dissemination in AAIB

Internally, the AAIB communicates information either through personal interaction or electronic means. Departmental and investigation meetings are conducted regularly to ensure essential information is being shared among staff.

## 4.2 External Communication and Dissemination of Safety Information

## 4.2.1 External Communication and Dissemination of Safety Information by CAAM

CAAM sustains several collaboration efforts to exchange safety information including SSP documentation with service providers and the public, with the two-pronged purpose of disseminating important changes and collecting external feedback to improve operations.

For personal interaction, CAAM organises events, comprising a mix of talks, workshops and seminars, to update the aviation industry on developments in safety policies and regulations as well as to address any impact of new

programmes/changes on the industry. CAAM also holds regular dialogues and meetings with regulated entities, at working and management levels, to discuss aviation safety issues.

CAAM also publishes an e-magazine titled AWAN through the website that will discuss the latest aviation safety issues. Additionally, CAAM publishes Advisory Information (AI) and Safety Information (SI) on a regular basis to exchange information and promote safety.

For electronic external outreach and engagement, CAAM maintains its website (www.caam.gov.my) and social media accounts (facebook.com/CAAMalaysia, twitter.com/CAA\_Malaysia and instagram.com/caa\_malaysia/). Regulations and guidance material are published on the CAAM website for industry and public access (<a href="https://www.caam.gov.my/resources/publications/">https://www.caam.gov.my/resources/publications/</a>). Where changes to requirements are made, circulars or notices would be issued on the website. The industry and public are encouraged to subscribe to an electronic notification service offered by CAAM for notifications on rulemaking and events.

## 4.2.2 External Communication and Dissemination of Safety Information by AAIB

For electronic external engagement with the aviation industry and public, AAIB maintains its website and social media account (facebook.com/AAIBMalaysia). Legislation and investigation reports are made publicly available on the website:

(http://www.mot.gov.my/en/aviation/air-incident-investigation)

For external outreach to the aviation industry, the AAIB organises safety seminars to allow them to understand AAIB's roles and responsibilities. Besides the safety seminars, the AAIB organises dialogues and meetings from time to time to discuss issues relating to air accident and serious incident investigations processes, safety recommendations and safety information.

Safety investigation reports are published on the AAIB website for experience sharing and as lesson learnt for the relevant authorities and parties to review their safety plans and procedures.



# KEMENTERIAN PENGANGKUTAN MALAYSIA MALAYSIA MALAYSIA STATE SAFETY PROGRAMME

MINISTRY OF TRANSPORT MALAYSIA