REPUBLIC OF MAURITIUS

STATE SAFETY PROGRAMME

DEPARTMENT OF CIVIL AVIATION

2013

FOREWORD

As a signatory of the Convention on International Civil Aviation (Chicago Convention), the Republic of Mauritius is committed to implement the provisions made in the Convention and its Annexes, including related documents for the safe, secure, regular and efficient air transport within its area of jurisdiction.

Article 37 of the Convention states that each Contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in requirements, standards, procedures, and organisation in relation to aircraft, personnel, airways , airports and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation.

The International Civil Aviation Organisation (ICAO) Annexes 1, 6, 8, 11, 13 and 14 require Contracting States to establish a State Safety Programme (SSP), in order to achieve an Acceptable Level of Safety (ALoS) in civil aviation. A SSP is defined as an integrated set of requirements and activities in a State aimed at improving safety. The Safety Management Manual (SMM) of ICAO, Doc 9859, describes basic safety concepts as the foundation which needs to be understood for both a Safety Management System (SMS) and a SSP, as well as how these safety concepts are embodied into the ICAO Standards and Recommended Practices (SARP's).

The SSP plays an important role in identifying, monitoring and maintaining the effectiveness of the various elements in our safety systems. The concept of establishing an ALoS complements the current approach to safety management based on regulatory compliance with a performance based approach.

The Civil Aviation Act of 1974 as amended, and associated regulations, confer on the Authority the obligation to issue necessary requirements, directives, manuals and documents for the systematic implementation of ICAO SARPs. As the regulatory authority in civil aviation, the Department of Civil Aviation is responsible to develop a SSP and implement it in coordination with other stakeholders responsible for civil aviation safety.

This SSP 2013 has been issued by the Director of Civil Aviation of the Republic of Mauritius under provisions made under Regulation 135 of the Civil Aviation Regulations 2007 as amended.

This SSP 2013 identifies and describes current arrangements and outlines the steps all the aviation stakeholders need to adhere and adopt in order to respond to present and upcoming safety challenges.

09 JULY 2013

Executive Summary

(a) The State Safety Programme includes a regulatory framework and activities within the State to ensure the discharge of the State‘s obligations under the Chicago Convention.

(b) The Civil Aviation Regulations (CARs) gives effect to the Mauritius Department of Civil Aviation (DCA) Requirements and these provide a sound, simple, cohesive legal framework which is, wherever practicable, consistent and compliant with the Annexes to the Convention and suited to the level of aviation activity within the State.

(c) The DCA Requirements comprise a stand-alone system of regulation that largely eliminates the need for constant cross-reference to the CARs or the Annexes.

(d) In legal terms, the DCA Requirements have force of law and is classified as a subsidiary legislation or regulations, they are the means by which compliance with the legislation may be demonstrated. They are also the means by which the Director of Civil Aviation can be satisfied as to the basis for the issue or maintenance of a licence, certificate or approval. However, the CARs do comply with the ICAO generic definition of ‘regulations’ in ICAO Doc 9734 Safety Oversight Manual

(e) All amendments to the CARs and each new or amended DCA Requirement part will be the subject of a full consultation exercise.

(f) There shall be a DCA Safety Plan which shall include any variations to cover local needs.

(g) By these means the Government of the Republic of Mauritius can be assured, and demonstrate as required, that the aviation industry within the Republic of Mauritius is meeting the agreed international standards and that the regulatory oversight of the industry is adequate.

Contents

		Page
Foreword		**1**
Executive Summary		2
Contents		3
Definitions		5
Abbreviations		**6**
Records of Amendments		**8**
Part I – General		9
1.	Purpose of this Document	9
2.	Background	11
3.	State's Safety Programme Gap Analysis	11
4.	State's Safety Programme Implementation Plan	12
5.	Document Control	12
6.	Distribution List and Record of Copies of the SSP Document	13
Part II – State's Safety Programme		14
1.	Mauritius safety policy and objectives	14
1.1	Mauritius safety standards	16
1.2	DCA safety responsibilities and accountabilities	22
1.2.1	Mauritius Regulatory Responsibilities	22
1.2.1	Department of Civil Aviation	23
1.2.3	Safety Responsibilities and Accountabilities of the Director of Civil Aviation	23
1.3	Accident and incident investigation	26
1.4	Enforcement policy	26
2.	Mauritius safety risk management	27
2.1	Safety requirements for service providers SMS	27

2.2 Approval of service provider's acceptable levels of safety 28

3. State's safety assurance 31

3.1 Safety oversight 32

3.2 Safety data collection, analysis and exchange 33

3.3 Safety data driven targeting of oversight on areas of greater concern or need 35

4. State's safety promotion 36

4.1 Internal training, communication and dissemination of safety information 36

4.2 External training, communication and dissemination of safety information 37

References 27

Appendices 39

Appendix – A: State's Safety Programme Gap Analysis 39

Appendix – B: State' Safety Programme Implementation Plan 48

Appendix – C: State's Safety Programme Structure 51

Appendix – D: Regulatory Framework 52

Appendix – E: Extract from ICAO Doc. 9734 Safety Oversight Manual,

Part A - The Establishment and Management of a State's Safety

Oversight System 53

Appendix – F: DCA Safety Policy 56

Appendix – G: DCA Organizational Structure 57

Appendix – H: Acceptable Level (s) of Safety approved by the DCA 58

Definitions

For the purposes of this document:

State Safety Programme means an integrated set of regulations and activities aimed at improving safety.

Safety performance indicator is a measure (or metric) used to express the safety performance in a system.

Safety performance target is the desired level of safety performance. A safety performance target comprises one or more safety performance indicators, together with desired outcomes expressed in terms of those indicators.

Note: ICAO Doc.9859 Safety Management Manual describes safety performance indicators and safety performance targets within the concept of an "acceptable level of safety". This concept is used to express safety expectations under a performance-based approach that is designed to complement regulatory compliance.

Safety requirements (initiatives) are the steps that need to be taken to achieve the safety performance targets. They include the operational procedures, technology systems and programmes to which measures of reliability, availability, performance and/or accuracy can be specified.

Service Providers refers to any organization providing aviation services. The term includes approved training organizations, aircraft operators, and maintenance organizations, organizations responsible for type design and/or assembly of aircraft, air traffic services providers and certified aerodrome operators, as applicable.

A hazard is any situation or condition that has the potential to cause damage or injury.

Risks are the potential adverse consequences of a hazard, and are assessed in terms of their severity and likelihood.

When risks have been assessed, **mitigation** is then needed: either to eradicate the hazard, or to reduce the severity or likelihood of the risks.

ABBREVIATIONS

ADREP	Accident/incident data reporting (ICAO)
AEP	Aerodrome emergency plan
AIRPROX	Aircraft proximity
ALARP	As low as reasonably practicable
ALoS	Acceptable level of safety
AMO	Approved maintenance organization
AOC	Air operator certificate
ASR	Air safety report
ASRB	Aviation Safety review board
ATC	Air traffic control
ATM	Air traffic management
ATS	Air traffic service(s)
ATC	Air Traffic Control
DCA	Department of Civil aviation
MCAR	Mauritius Civil Aviation Requirements
CDA	Continuous Descend Arrival
CFIT	Controlled flight into terrain
CRM	Crew resource management
Doc	Document (ICAO)
ERP	Emergency response plan
FDA	Flight data analysis
FDM	Flight data monitoring
FOD	Foreign object (debris) damage
ICAO	International Civil Aviation Organisation
LOA	Letter of Agreement
MOR	Mandatory occurrence report

OJT	On-the-job training
QA	Quality assurance
QC	Quality control
SARPs	Standards and Recommended Practices (ICAO)
SDCPS	Safety data collection and processing systems
SMM	Safety management manual (ICAO Doc 9859)
SMS	Safety management system(s)
SOPs	Standard operating procedures
SRM	Safety risk management
SSP	State safety programme
STP	Standard Training Package
USOAP	Universal Safety Oversight Audit Programme (ICAO)

Records of Amendments

Amendment to this document will be achieved by a re-issue of the entire document rather than by the amendment of individual pages.

Issue No	Date	Description
Issue 1	09 July 2013	

Part I - General

1. Purpose of this document

(a) The Authority has promulgated the State Safety Programme (SSP) and the requirements for Safety Management System (SMS) for Air Navigation Service providers, Airline Operators, Maintenance Organisation and Aerodrome Operators under the provisions of Regulation 135 of the Civil Aviation Regulations 2007 as amended.

(b) ICAO Doc 9859 Safety Management Manual, paragraph 6.3.1 and 6.4.1 state: Annexes* 1, 6, 8, 11, 13 and 14 to the Chicago Convention include the requirement for States to establish a SSP, in order to achieve an Acceptable Level of Safety in civil aviation.
The acceptable level of safety shall be established by the States concerned.

*see Annexes 1, 6, 8 11, 13 and 14 to the Chicago Convention.

(c) While ICAO currently restricts its requirements for safety programmes and safety management systems (SMS) to Annexes 1,6,8,11,13 and 14, within the State the opportunity will be taken to extend SMS concepts for continuous safety improvement to all functional areas within the aviation industry where it can be possibly applied in anticipation of further changes to ICAO SARP's.

(d) Therefore, the purpose of this document is to demonstrate:
(e)

- compliance by the Authority with the SARP's of ICAO;
- that the DCA has conducted gap analysis comparing the State's Safety Programme (SSP) requirements against the existing resources in the State (see SSP Gap Analysis in **Appendix – A**);
- that the DCA has developed the State Safety Programme (SSP) and its implementation plan based on the results of the SSP gap analysis (see SSP Implementation Plan in **Appendix – B**);
- the regulatory framework, thereby enabling visible linkage between national regulatory planning and an operator's/service provider's SMS;
- the integration of the diverse, multidisciplinary safety regulatory activities into a coherent whole, as illustrated in the diagram in **Appendix - C;**

- that adequate provisions are being made for the safety regulation of the aviation system within the jurisdiction of the State and that the State is meeting the requirements of the larger global aviation system;

- that regulatory, oversight and enforcement functions are in place;

- that risk-based resource allocations approach for all regulatory functions (proactively targeting regulatory attention on known areas of high risk) is adopted;

- that the DCA has established performance monitoring for safety regulatory functions (licensing, certification, enforcement, etc.);

- that acceptable levels of safety for aviation within the State are being set and achieved, and expressed in terms of safety performance indicators and safety performance targets;

- that the DCA has established hazard identification programme through the implementation of:

  - Mandatory occurrence reporting system;

  - Voluntary (non-punitive) incident reporting system;

  - Service difficulty reporting system, etc.

- that the DCA has established active and passive safety promotion programmes to assist operators and to make safety information broadly accessible (including safety database, trend analysis, monitoring of best industry practices, etc.);

- that the DCA has established national safety monitoring programmes (trend monitoring and analysis, safety inspections, incident investigations and safety surveillance);

- that the DCA has established regular regulatory safety audits to ensure compliance by all operators and service providers; and

- that the State has a system of managing accident investigation independent from regulatory authority and a

competent incident investigation capability.

2. Background

(a) Mauritius is a signatory to the Convention on International Civil Aviation (the Chicago Convention) and, therefore, agrees to comply with the Standards and Recommended Practices (SARPs) published by the International Civil Aviation Organization (ICAO) in the Annexes to the Convention.

(b) The Director of Civil Aviation is responsible for safety regulation of all aspects of civil aviation, including the licensing of personnel and the certification of aircraft, airlines, airports and air traffic control.

(c) The Director of Civil Aviation is responsible for regulatory oversight of aviation activities within the State and of aircraft on their register wherever they may be.

(d) The Director of Civil Aviation has responsibility for ensuring that the Authority financial and human resources are sufficient for establishment and maintenance of SSP.

(e) The State Safety Programme has been established by the Director of Civil Aviation under the provisions of the Civil Aviation Regulations 2007.

3. State's Safety Programme Gap Analysis

(a) The Authority is responsible for the implementation of a safety programme in order to achieve an acceptable level of safety for the activities performed by the service providers. The State Safety Programme (SSP) is an integrated set of regulations and activities aimed at improving safety.

(b) The implementation of an SSP requires that the Authority conducts an analysis of its safety system to determine which components and elements of an SSP are currently in place and which components and elements must be added or modified to meet the implementation requirements. This analysis is known as gap analysis, and it involves comparing the SSP requirements against the existing resources in the Authority.

(c) The guidelines for the SSP gap analysis provided in checklist format in **Appendix – A,** provides information to assist in the

evaluation of the components and elements that comprise the ICAO SSP framework and to identify the components and elements that will need to be developed. Once the gap analysis is complete and documented, it will form one basis of the SSP implementation plan.

(d) The gap analysis form included in **Appendix – A** can be used as a template to conduct a gap analysis. Each question is designed for a "yes" or "no" response. A "yes" answer indicates that the State already has component or element of the ICAO SSP framework in question incorporated into its safety system, whether it matches or exceeds the requirement. A "no" answer indicates that a gap exists between the component/element of the ICAO SSP framework and the safety system in the State.

4. State's Safety Programme Implementation Plan

Based on the result of the SSP gap analysis the SSP implementation plan is developed by the Authority and which is provided in the **Appendix – B**.

5. Document Control

(a) This is the State's Safety Programme (SSP) required under ICAO Annexes 1, 6, 8, 11, 13 and 14 for Mauritius to meet it international obligations. The copy of the SSP will be made available to all regulatory staff having safety oversight responsibilities by the Regulatory unit...

(b) Changes to this document will be achieved by a re-issue of the entire document rather than by the amendment of individual pages.

(c) It is the function and responsibility of the Director of Civil Aviation to review the document at least annually to ensure the relevance and currency of all Legislation, Regulations, DCA Requirements and Advisory Circulars etc.

6. Distribution List and Record of Copies of the SSP Document

The total number of copies of this SSP document produced for use by the Authority officials is shown below. One printed copy of the manual has been designated as the "Master Copy". Some users are provided with a printed copy of the SSP document while others are given an

electronic copy. This is also indicated in the table below.

Copy No.	SSP Document User Name	Print (P) Electronic (E)	Signature	Date Provided	Date Returned
1	Director of Civil Aviation	P/E			
2	Dy. Director of Civil Aviation	P/E			
3	Dy. Director of Civil Aviation	P/E			
4	Divisional Head Airworthiness	P/E			
5	Divisional Head ATM	P/E			
6	Divisional Head CNS	P/E			
7	Aerodrome Licensing Office	P/E			
8	Air Traffic Services Standard Office	P/E			
9	Flight Operations Office	P/E			
11	Technical Library	P/E			

Part – II

State's Safety Programme

1.0 Mauritius Safety Policy and Objectives

The Department of Civil Aviation (DCA)of Mauritius is the regulatory body of civil aviation in Mauritius. The management of civil aviation safety in Mauritius is one of the major responsibilities of the DCA. The DCA is committed to develop, implement, maintain and constantly improving strategies and processes to ensure that all aviation activities that take place under its oversight will achieve the highest level of safety performance, while meeting both national and international standards.

The Director of Civil Aviation is responsible for the implementation, operation and supervision of the SSP and coordinate as appropriate, the activities of the various aviation organisations which are encompasses under the SSP.

As the Accountable Officer of the SSP, the Director of Civil Aviation is committed to:

(a) ensure that all levels of management are accountable for the delivery of the highest level of safety performance within the DCA;

(b) develop requirements and specific operational policies that build upon safety management;

(c) consult with all segments of the aviation industry on issues regarding regulatory development;

(d) support the management of aviation safety in the State through effective safety reporting and communication systems;

(e) interact effectively with service providers in the resolution of safety concerns;

(f) ensure that within the DCA, sufficient resources are allocated and personnel have the proper skills and are trained for discharging their safety responsibilities;

09/07/13

(g) conduct both performance-based and compliance-oriented oversight activities, supported by analyses and prioritise resource allocation based on safety risks;

(h) promote and educate the aviation industry on safety management concepts and principles;

(i) oversee the implementation of SMS within aviation organisations;

(j) ensure that all activities under oversight achieve the highest safety standards;

(k) establish provisions for the protection of safety data, collection and processing systems (SDCPS), so that aviation stakeholders are encouraged to provide essential safety-related information on hazards, and there is a continuous flow and exchange of safety management data between the regulator and service providers;

(l) establish and measure the realistic implementation of our SSP against safety indicators and safety targets which are clearly identified; and

(m) promulgate an enforcement policy that ensures that no information derived from any SDCPS established under the SSP or the SMS will be used as the basis for enforcement action, except in the case of gross negligence or wilful deviation.

This policy must be understood, implemented and observed by all personnel involved in regulatory oversight activities of the DCA.

Sarupanand KINNOO
Ag Director of Civil Aviation
09/07/13

Note: This policy approved on 09 July 2013 part of the Staff Instruction Manual and Administrative Manual Procedures

1.1 Mauritius Safety Standards

Mauritius has promulgated a national legislative framework and specific regulations to ensure compliance with international and national standards, and that define how the Department of Civil Aviation will oversee the management of safety in the State. This includes the Department of Civil Aviation participation in specific activities related to the management of safety in the State, and the establishment of the roles, responsibilities, and relationships of organizations in the system. The safety standards are periodically reviewed to ensure they remain relevant and appropriate to Mauritius.

1.1.1 Safety Regulatory Framework – Objectives and Criteria (See diagram at Appendix – D)

The regulatory framework meets the following objectives or criteria:

(a) To ensure that the safety regulatory regime of Mauritius meets the ICAO 8 Critical Elements of a safety oversight system (see Appendix – E). Effective implementation of the Critical Elements demonstrates that the Department of Civil Aviation is 'fit for purpose' safety regulatory body.

(b) Legislative system in Mauritius comprises three tiers:

- **the primary aviation legislation**:

  in this case the Civil Aviation Act;

- **the secondary legislation**:

  the Civil Aviation Regulations (CAR);

- **The Standards:**

  Mauritius Civil Aviation Requirements (MCAR)

(c) Additional Requirements and Information are implemented in the form of Aviation Safety Information – Aeronautical Information Circular (AIC) and Mauritius Airworthiness Notices.

(d) The advisory materials are published in the AIC and forms part of the AIP and Mauritius Airworthiness Notices forms part of the aircraft maintenance and airworthiness standards.

(e) The regulatory framework enables the fulfilment of the obligations of Mauritius under the Chicago Convention within the State. More detailed information about the legal framework may be found at Department of Civil Aviation **Website: http\\civil-aviation.gov.mu**

(f) The regulatory framework provides consistency and compliance with the Annexes to the Convention wherever practicable.

(g) The regulatory framework gives effect to, or enables, the application of Standards suitable for Mauritius.

(h) The 3 tier regulatory framework provides a sound legal framework and the flexibility for the adoption of Safety standards in a timely manner.

(i) The regulatory system comprises a stand-alone system of regulation that largely eliminates the need for constant cross-reference to the ICAO Annexes.

(j) The regulatory framework suits the level of aviation activity in Mauritius.

(k) The regulatory provisions use ICAO terminology and definitions wherever possible.

1.1.2 Civil Aviation Act

The Civil Aviation Act 1974 as amended is the primary legislations that provide the authority to implement other statutory instruments in the area of civil aviation within Mauritius.

1.1.3 Civil Aviation Regulations

(a) The operating Civil Aviation Regulations 2007 as amended in 2010 is secondary (i.e. subordinate) legislation. The CAR's enables, or gives power to, the requirements and guidance contained in the DCA Requirements and DCA ACs.

(b) The DCA has, in recent years, made a series of amendments to the CAR's to address all of the objectives and criteria above. The latest revision is a complete re-write simplifying and modernizing the CAR's to form a coherent unit with the DCA Requirements, the DCA Requirements taking the lead and the CAR's providing mainly the necessary legal basis. This rebalanced and consolidated version, the Civil Aviation Regulations, became effective in September 2007.

(c) It is important to note that the Director of Civil Aviation is given a wide variety of discretionary powers under the CAR's to grant certificates, licences and approvals of various kinds.

(d) Although the above Regulations provide the comprehensive requirements there may be a requirement to issue special directions, not inconsistent with these regulations relating to -

- the operation, use, possession, maintenance or navigation of aircraft including flight crew and aircraft maintenance engineer's licensing; and

- the operation and maintenance of any aerodrome and air traffic control service in Mauritius.

(e) Under section 135 of the CAR 2007 the Authority may issue such directions by notices to airmen, aeronautical information publication, aeronautical information circular, civil airworthiness requirements, civil air navigation requirements, dangerous goods requirements, airport circular or notice to aircraft owners and maintenance engineers issue,

(f) Under section 136 of the CAR 2007 the Authority may, with the approval of the Minister, issue special directives in the interest of safety, to apply any provisions or amendments of the Annexes to the Convention as issued by the International Civil Aviation Organisation.

(g) The above regulatory framework enables the fulfilment of the obligations of Mauritius under the Chicago Convention, 1944, within the State

(h) This regulatory framework further provides consistency and compliance with the Annexes to the Convention, 1944, wherever practicable. Differences, if any, to standards and recommended practices of the Annexes, are filed to ICAO as per Article 38 of the Convention.

1.1.4 DCA MCAR Requirements

(a) The basic philosophy underlying the DCA Requirements which are compulsory is to have a package of requirements/standards that forms a means of compliance with the ICAO SARP's that is consistent with the legislation in force.

(b) Where this is a State responsibility, the means of ensuring that aspects of the State civil aviation system comply with ICAO SARP's, e.g. MET, SAR.

(c) The Department of Civil Aviation is required to produce the means of compliance to enable the Authority to be satisfied that applicants for, or holders of, licenses, certificates and approvals meet their legal obligations. The Department of Civil Aviation has the authority to publish implementing standards under regulation 135 of the Civil Aviation Regulations 2007 as amended. These, however, conform to the wider ICAO definition of regulations within ICAO Doc 9734 Safety Oversight Manual.

(d) The Civil Aviation Requirements which are compulsory provisions set out, for the benefit of those regulated:

- the requirements for obtaining and holding a license, certificate, authority or approval;
- the way in which the rights and privileges of licenses, certificates, authorities or approvals are exercised;
- the way obligations which come with the privileges are to be discharged; and
- general instructions regarding the operation and piloting of aircraft.

(e) The criteria to be applied in relation to requirements are that:

- Enforcement actions for failure to comply with any obligation imposed upon a person or organization must be supported by the Civil Aviation Act if it is to be enforceable.
- The requirements are the means by which compliance with the law may be demonstrated. They are also the means by which the Department of Civil Aviation can be satisfied as to the basis for the issue or renewal of a license, certificate, approval or other aviation documents.
- The requirements employ common terms or expressions used by ICAO in making the SARPs and adopted by most of the countries around the world.

(f) The Department of Civil Aviation may accept alternative or other acceptable means of compliance (AMOC) submitted by the

operator's or service providers if it can be demonstrated through risk assessment that the AMOC offers the same or better safety measures and outcomes.

1.1.5 DCA Advisory Circulars

Whereas the DCA Requirements are intended to provide a comprehensive suite of requirements, there is also a need to promulgate additional information which is not appropriate for inclusion in the DCA Requirements themselves. Such information and guidance is included in DCA Advisory Circulars (ACs). DCA ACs cover the following topics:

- Practical, detailed guidance on meeting the requirements in the DCA Requirements.
- Information of a temporary nature.
- Administrative material.
- Information published in advance of a formal amendment to DCA Requirements.
- General administrative process.

1.1.6 Policies and Procedures

(a) Policies for the State which are of high importance or controversial issues which affects industry as a whole are referred to the Ministry of External Communications by the Director of Civil Aviation for a decision. The resulting Policy Statements will then be subjected to consultation and approval by the concerned Minister. The policies are placed on the Department of Civil Aviation website. Policy Statements are used to drive the development of requirements set out in the Laws & Standards.

(b) The Technical Procedures to be followed by the inspectors in the Department of Civil Aviation are available in the Inspectors Handbooks published by each technical section in the Department of Civil Aviation, while the procedures of administrative nature for the Department staff are available in the Department Administration Policy Manual.

(c) Technical Procedures assist objective regulation by providing the Department inspectorate staff with essential information, guidance and protocols. The guidance for inspectors has to be consistent with those requirements that have been designed to

suit the needs of aviation activity within Mauritius. Technical procedures provide the mechanism for DCA inspectors to make an objective assessment of compliance whilst maintaining the safety objectives of the DCA Requirements.

1.1.7 Consultation

(a) All amendments to the CARs and each new DCA Requirement part will be the subject of a full consultation exercise. DCA Requirement amendments are subject to consultation unless minor in nature. The consultative material is placed on the DCA website for comment usually for a period of at least 12 weeks. A Comments Log showing all comments and DCA's responses is posted on the DCA website following the consultation period.

The following will be consulted:

- the concerned Ministry;
- the concerned Department; and
- the aviation industry;

(b) Additionally, it is open to any person reading the consultation on the website to comment.

1.1.8 Monitoring and Review of the State's Regulatory Framework

(a) Oversight of the regulatory framework:

The regulatory framework is monitored continuously by the Department of Civil Aviation in the course of its usual regulatory business. A full and formal review of the framework will be under taken yearly taking into account changes by ICAO and inputs from oversight activities and industry. Changes to the framework identified will be included as part of the Department of Civil Aviation Corporate Plan. Proposed amendments to the primary and secondary legislation will be submitted to government for approval and promulgation and changes to the standards documents, AIC's and AIP's will be approved and published by the Department of Civil Aviation.

(b) Maintenance of the regulatory framework: The Director of Civil Aviation is responsible for the administration necessary to maintain the regulatory framework. The Department of Civil Aviation has suitable procedures and is adequately resourced (staffed, funded etc.), for the longer term, to fulfil this task. The Department of Civil Aviation Corporate Plan describes this

commitment in detail; and the funding to support the Department of Civil Aviation overall oversight activities.

1.2 CAA Safety Responsibilities and Accountabilities

Mauritius has identified and defined the Department of Civil Aviation functions, responsibilities and accountabilities regarding the establishment and maintenance of the State's safety programme. This includes the directives to plan, organize, develop, control, monitor and continuously improve the State's safety programme in a manner that meets the State's safety needs. It also includes a clear statement about the provision of the necessary human and financial resources for the implementation of the State's safety programme.

1.2.1 State's Regulatory Responsibilities

(a) Regulatory responsibilities of the Department of civil aviation activities are:

- **SARPs**. - Mauritius as the signatory to the Chicago Convention is responsible for implementation of ICAO SARPS within the airspace and at aerodromes for which it has responsibility.

- **The Department of Civil Aviation of Mauritius (DCA)** – The Republic of Mauritius has established the Department of Civil Aviation (DCA), with the necessary powers to ensure compliance with the regulations under the Civil Aviation Act of 1974.

- **Safety oversight**. - The Department of Civil Aviation has established the safety oversight mechanisms to ensure that operators and service providers maintain an acceptable level of safety in their operations.

(b) In the discharge of regulatory responsibilities of Mauritius, the DCA should:

- Represent a well-balanced allocation of responsibility between the State and the operator or service provider for safety;

- Be capable of providing economic justification within the resources of the DCA for decisions it makes without compromising safety.

- Enable the DCA to maintain continuing regulation and supervision of the activities of the operator or service

provider without unduly inhibiting their effective direction and control of the organization; and

- Cultivate and maintain harmonious relationships with all stakeholders, the operators, service providers and government in manner that promotes aviation.

1.2.2 Department of Civil Aviation.

(a) The Department of Civil Aviation (DCA) is the State's agent for implementing the legislative and regulatory provisions for aviation safety. In effect, the Department of Civil Aviation develops and delivers the State's safety programme.

(b) The Department of Civil Aviation is guided by:

(1) A clear statement of its vision and mission regarding safety (refer to DCA Safety Policy);

(2) A well understood and accepted set of:

- Operating principles, such as delivering safe and efficient service consistent with public expectations and at reasonable cost; treating clients and employees with respect, etc.; and

- Corporate values such as competence, openness, fairness, integrity, respect, responsiveness to client needs, etc.

(c) A statement of the Department safety objectives (DCA Safety objectives are given with the DCA Safety Policy.)

The DCA Organizational Structure is given in Appendix – F which shows all safety regulatory functions of the DCA.

1.2.3 Safety Responsibilities and Accountabilities of the Director of Civil Aviation

(a) The Department of Civil Aviation is accountable for:

(1) Establishing and implementing the rules, regulations and procedures but not limited to the following key areas:

- Personnel licensing

- Aircraft Registration

- Certification of continuing Airworthiness of Aircraft.
- Certification of Air Operators
- Certification of Air Navigation service Providers
- Certification of Aviation Training Organizations
- Certification of Repair and Maintenance Organizations
- Certification of Aerodrome etc.;

(2) Implementing a system for safety oversight of the entire civil aviation system by using inspections and safety audits, etc.;

(3) Carrying out enforcement actions as necessary;

(4) Monitoring technological developments and best industry practices with a view to improving the State's aviation system performance;

(5) Maintaining a system of aviation records, including licenses and certificates, reported accidents and incidents, etc.;

(6) Conducting analyses of safety trends, including accident/incident data, service difficulty reports, etc.; and

(7) Promoting safety through the dissemination of specific safety materials, conducting safety seminars, etc.

(b) The Director of Civil Aviation is accountable for:

(1) Ensuring that the Department of Civil Aviation financial and human resources are sufficient for the establishment implementation and maintenance of the SSP.

1.3 Accident and Incident Investigation

PART XI – of the Civil Aviation Regulations, 2007 make provisions for investigation of accidents and incidents. Accidents and incidents are

generally investigated by the Director of Civil Aviation (the Authority) or by a person appointed by the Authority (referred to as an investigator). The investigation is carried out in compliance with Annex 13 SARPS, and experts from different aviation disciplines usually are nominated as the member of such investigation. In Mauritius it is the practice to avail of the assistance of the primary certification Authority accident investigation board personnel to advise on the conduct of the investigation.

The Civil Aviation Regulations also provide that in determining the circumstances and causes of an accident or incident, the Authority or an Investigator, as the case may be, shall have regard to the principle, that an investigation is carried out with a view to avoid recurrence of accidents or incidents in the future, and not for apportioning blame or liability. The investigator has all the powers like a sitting judge and may summon any person linked with the accident or incident whether on oath or not. The report is normally submitted to the Minister.

However, notwithstanding the above, depending on the seriousness of any accident, whenever there is injuries, the Minister may considers it expedient, he may appoint a Committee of Inquiry chaired by a sitting judge to hold an inquiry into the accident or incident assisted by the investigators of the Authority Final Report of the accident investigation is made available to the Minister responsible for aviation and has the privilege to made public the report and safety recommendations are usually implemented accordingly.

In general all accident and major incidents will be investigated in accordance with the accident investigation Manual published by the Authority which make provision for the release of the investigators for the duration of the investigation.

1.4 Enforcement Policy

The Department of Civil Aviation Authority has promulgated an enforcement policy that allows service providers to deal with, and resolve, events involving safety deviations and minor violations internally, within the context of the service provider safety management system (SMS), to the satisfaction of the authority.

The enforcement policy includes provisions for the DCA to deal with events involving gross negligence and wilful deviations through established enforcement procedures.

(a) The CARs confers on the Director of Civil Aviation the power of enforcement and this power may be delegated to the DCA officials, as appropriate. Breach of the CARs is a criminal offence under the Civil

Aviation Act 1974 and carries a maximum penalty which depends on the nature and circumstances of the breach.

(b) Although the DCA Requirements do not themselves constitute legislation or regulations, they are the means by which the DCA can be satisfied as to the basis for the issue or maintenance of a license, certificate or approval.

Therefore, non-compliance with the DCA Requirements may result in the DCA revoking a license, certificate or approval, refusing to grant a license, certificate or approval or granting a license, certificate or approval with conditions.

(c) The revised DCA enforcement policy allows:

(1) Operators/service providers to deal with, and resolve, events involving safety deviations and minor violations internally, within the context of the service provider safety management system (SMS), to the satisfaction of the DCA;

(2) The DCA to deal with events involving gross negligence and wilful deviations through established enforcement.

2 State's Safety Risk Management

2.1 Safety requirements for service providers SMS

The Authority has established the controls which govern how service providers will identify operational hazards and manage safety risks. This includes the requirements, specific operating regulations and advisory materials for service providers' SMS. The requirements and specific operating regulations are periodically reviewed to ensure they remain relevant and appropriate to the service providers.

(a) The MCAR SMS "Regulatory Requirements on Safety Management Systems" requires that the ATS Service providers, Aerodrome Operators and Aircraft Operating Agencies to have a safety management system in place in their operations as per the requirements specified in MCAR SMS. The operators and service provider shall also develop the SMS implementation plan considering a phased approach of its implementation and shall be approved by the DCA.

(b) The hazard identification process and safety risk management are described in the MCAR SMS

(c) The Authority has established following requirements for the operator's/service provider's SMS to achieve by the operators/service providers, an acceptable level of safety in their operations:

- ❖ Mandatory occurrence reporting scheme**;**
- ❖ Voluntary (non-punitive) incident reporting scheme;
- ❖ Service difficulty reporting scheme;

(d) The following Guidance Materials give detail guidance on those schemes/programmes mentioned in 2.1 (c) above:

- ❖ AIC – Mandatory/Voluntary Occurrence Reporting Scheme
- ❖ AIC – Regulatory Requirements on Safety Management Systems
- ❖ AIC – Service Difficulty Reporting Scheme

2.2 Approval of service provider's acceptable levels of safety

The Authority is working with individual operators and service providers to establish their Safety Performance Indicators and Safety Targets. These Safety Targets are commensurate to the complexity of individual operators and service provider's specific operational contexts and the availability of individual service provider's resources to address safety risks. The agreed Safety Targets are given with Safety Performance Indicators. The agreed Safety Targets will be periodically reviewed to ensure they remain relevant and appropriate to the service providers.

2.2.1 DCA Safety Plan (SP)

(a) The DCA Safety Plan represents the more operationally focused part of the SSP and is established to achieve an acceptable level of safety in aviation operations.

(b) The DCA Safety Plan is driven by safety data targeting oversight of areas of greater safety concern or need based on safety information derived from the following inputs.

(1) Input from (but not limited to):

- the DCA Safety Risk Register:
  - mandatory occurrence reports,
  - Mauritius Confidential Incident Report (MCAIR),
  - wildlife/bird strike report,
  - safety initiatives developed by other National Aviation Authorities and regional organizations,
  - Outcome of Surveillance activities conducted by staff of the DCA

(2) **Safety Performance Indicators (SPI) -** are the measures (or metrics) used to express the safety performance in a system. They should be uncomplicated, easy to measure and enable linkage between the Safety Plan and an operator's/service provider's SMS. They will therefore

differ between segments of industry, such as aircraft operators, aerodrome operators or ATS providers.

(3) **Safety Performance Targets (SPT**) - (sometimes referred to as goals or objectives) represent the desired level of safety performance. A safety performance target comprises one safety performance indicator together with desired outcome expressed in terms of this indicator. These are necessarily determined by considering what safety performance levels are desirable and realistic for individual service provider/operator's. SPT should be measurable and acceptable to the parties involved. Note: This approach enables safety expectations to be expressed in terms that are performance based, for example: • maintain accident rate to below the global rate each year

Note: This approach enables safety expectations to be expressed in terms that are performance based, for example:

1.0 bird strike per 1,000 aircraft movements (SPI) with a 50% reduction in five years (SPT).

Safety committee meetings to be held monthly and whenever necessary (SPI) as long as the intervals between meetings are not greater than 6 weeks (SPT).

(4) **Safety Requirements** – (sometimes refers to as safety initiatives) are the tools or means required to achieve the safety targets. They include the operational procedures, technology, systems and programmes to which measures of reliability, availability, performance and/or accuracy can be specified.

Examples of safety requirements are:

- ❖ DCA accident prevention programme,
- ❖ Runaway & Safety Programme,
- ❖ Fatigue Risk Management programme,
- ❖ Safety Education/Training,

- ❖ a wildlife/bird strike hazard reduction programme,
- ❖ the deployment of ADS-B surveillance for Mauritius airspace within the next 24 months etc.

(5) **Activities** – are the practical tasks to be implemented by the DCA, service providers and operators to achieve the SPT.

2.2.2 Acceptable Level of Safety

(a) The concept of acceptable level of safety responds to the need to complement the prevailing approach to the management of safety based upon regulatory compliance, with a performance-based approach.

(b) When establishing ALoS, consideration must be given to

(i) the level of safety risk that applies

(ii) the safety risk tolerance

(iii) the cost/benefits of improvements to the aviation system

(iv) the public expectations in civil aviation system

(c) Acceptable level of safety expresses the safety goals (or expectations) of the DCA.

(d) The acceptable level of safety is expressed by two measures/metrics (safety performance indicators and safety performance targets) and implemented through various safety requirements.

(e) The DCA is responsible for the establishment of the acceptable level of safety in aviation operations.

(f) At the beginning DCA will establish initial ALoS on selected high level high consequence (safety measurement) outcomes.

(g) As the SSP achieves maturity DCA will establish ALoS on low level low consequence (safety performance measurements) outcomes too.

(h) The DCA has established the following initial acceptable levels of safety benchmarked to global measurement to be achieved by the establishment of this safety programme:

(1) 0.5 fatal accidents per 100,000 hours for airline operators (safety indicator) with a 40 per cent reduction in five years (safety target);

(2) 50 aircraft incidents per 100,000 hours flown (safety indicator) with a 25 per cent reduction in three years (safety target);

(3) 200 major aircraft defect incidents per 100,000 hours flown (safety indicator) with a 25 per cent reduction over the last three-year average (safety target);

(4) 1.0 bird strike per 1,000 aircraft movements (safety indicator) with a 50 per cent reduction in five years (safety target);

(5) No more than one runway incursion per 40,000 aircraft movements (safety indicator) with a 40 per cent reduction in a 12-month period (safety target); and

(6) 40 airspace incidents per 100,000 hours flown (safety indicator) with a 30 per cent reduction over the five-year moving average (safety target);

The acceptable level(s) of safety for different operators/service providers are yet to be received. This will be listed in Appendix – H once they are finalised.

3. State's Safety Assurance

3.1 Safety Oversight

The Authority has established mechanisms to ensure that the identification of operational hazards and the management of safety risks by service providers follow established regulatory controls (requirements, specific operating regulations and guidance materials). These mechanisms include inspections, audits and surveys to ensure that regulatory safety risk controls are appropriately integrated into the service providers' SMS, that they are being practiced as designed, and that the regulatory controls have the intended effect on safety risks.

3.1.1 Safety Oversight of Operators and Service Providers

(a) The responsibility for regulatory oversight of the operators and service providers rests with the DCA.

(b) Oversight is conducted through a mixture of what ICAO terms the 'traditional perspective' and the 'modern perspective' – the DCA is moving towards the modern perspective.

(c) Designations in all functional areas of DCA are under review through the Assessment process.

(d) DCA regulatory staffs are specialists in the functional area which they regulate.

(e) Regulatory oversight is conducted through inspections, audits and surveys together with provision of advice and guidance, to ensure that:

(1) Operators and service providers meet the national and international standards;

(2) the identification of operational hazards and the management of safety risks by service providers follow established regulatory controls (e.g., requirements, specific operating regulations and implementation policies);

(3) regulatory safety risk controls are appropriately integrated into the service provider's SMS;

(4) regulatory safety risk controls are practised as designed;

(5) regulatory safety risk controls have the intended effect on safety risks.

(f) Ramp checks of foreign aircraft are also planned to be conducted by the airworthiness and flight operations team.

(g) For complex general aviation including corporate operations, where an operator uses an operating base in a State other than the State in which the aircraft has been registered, The Authority will requires the operator to notify the DCA of the State in which aircraft has been registered and the State in which the operating base is located. This is to facilitate the co-ordination of regulatory oversight.

Note:- Aviation safety has traditionally focused on compliance with regulatory requirements and reacted to undesirable events by prescribing measures to prevent recurrence. A different approach is needed to keep safety risks at an acceptable level as the industry continues to develop. The 'modern perspective' includes the use of safety management systems and is designed to complement regulatory compliance by the proactive use of best practices.

3.1.2 Internal Oversight Audit of DCA

(a) The DCA has a fully-functioning requirement, as described in paragraph 1.1.6 (b) above. Internal quality assurance audits and internal technical audits are carried out regularly by the DCA Internal Audit and Quality Assurance Department to provide assurance on corporate governance to the Director of Civil Aviation.

(b) The DCA Internal Audit and Quality Assurance Department is to audit aviation safety regulations of the State and to advise the Director of Civil Aviation and those responsible for aviation safety regulation on:

(1) whether the DCA is complying with the State's obligations under the Chicago Convention;

(2) the standard of State's aviation safety regulation;

(3) the adequacy of the resources employed on safety regulation in the DCA and any remedial measures that may be necessary.

(c) Assessments are currently made in relation to the ICAO 8 Critical Elements of a safety oversight system (see Appendix – E) to ensure that the CAA is "fit for purpose" regulator, and having particular regard to sustainability.

(d) It is envisaged that adoption of the Safety Programme system will, in time, permit the DCA to be self-assess by reviewing its safety risk register, safety performance targets and outputs to ensure:

- ❖ the effectiveness of the SSP;
- ❖ timely update and improvement of the SSP and sharing of best practices across the DCA.

3.1.3 ICAO Safety Oversight Audit on State's Safety Oversight System

(a) In consideration of the critical need for increased attention to global aviation safety, ICAO carries out audits of the DCA as part of its Universal Safety Oversight Audit Programme.

(b) The ICAO audits assess:

- ❖ the State's regulatory system against the ICAO 8 Critical Elements of a safety oversight system; and
- ❖ the degree to which SARPs have been implemented within the State concern.

3.2 Safety data collection, analysis and exchange

The DCA has established mechanisms to ensure the capture and storage of data on operational hazards and safety risks at an aggregate State's level. The DCA has also established mechanisms to develop information from the stored data, and to actively exchange safety information with service providers and/or other States as appropriate.

3.2.1 Occurrence Reporting and Analysis

(a) The Civil Aviation Regulations require operators and service providers to report occurrences to the DCA. The manual on Occurrence Reporting and Investigation (MORI) contains procedures for handling such reports.

(b) The DCA currently uses the European Co-ordination Centre for Aviation Incident Reporting Systems (ECCAIRS) safety database which includes capabilities for analysing and presenting the information in a variety of formats. ECCAIRS safety database is compatible with ICAO Accident/Incident Data Reporting (ADREP) System.

3.3 Safety data driven targeting of oversight on areas of greater concern or need

The DCA has established procedures to prioritize inspections, audits and surveys towards those areas of greater safety concern or need, as identified by the analysis of data on operational hazards and safety risks areas.

(a) The DCA has established procedures to prioritize inspections, audits and surveys towards those areas of greater safety concern or need, as identified by the analysis of data on operational hazards and safety risks areas.

(b) The DCA has adopted risk-based resource allocations system for all regulatory functions (proactively targeting regulatory attention on known areas of high risk).

4 State's Safety Promotion

4.1 Internal training, communication and dissemination of safety information

The DCA provides training, awareness, and two-way communication of safety relevant information to support, within the DCA, the development of a positive organizational culture that fosters the development of an effective and efficient State's safety programme.

(a) DCA remit, and budget, includes the provision of assistance, training and advice to those responsible for aviation safety regulation within the DCA. Individual and group training, for both initial and recurrent training, is provided under this heading.

The training/seminar/workshop is focused to promote:

- the development of a positive organizational culture that fosters the development of an effective and efficient State's safety programme;
- the confidence among regulatory staff in assessing operator's/service provider's SMS and its performance.

(refer to Step 2 of SSP Implementation Plan provided in **Appendix – B**.)

(b) The DCA has established the following methods of communication and dissemination of safety-relevant information within the DCA:

For critical safety-relevant information:

- Confidential Letters;
- Email system.

For non-critical safety-relevant information:

- DCA Website;
- DCA Intranet;
- Safety Notice Boards;
- Safety Alerts;

- Safety Newsletters (quarterly);
- Safety Journal (annual).

4.2 External training, communication and dissemination of safety information

The DCA provides education, awareness of safety risks and two-way communication of safety relevant information to support among services providers the development of a positive organizational culture that fosters safe practices, encourages safety communications and actively manages safety with the same attention to results as financial management.

References

1 ICAO State Letter Ref. AN 12/51-07/74 dated 7 December 2007, Subject: Proposal for the amendment of Annex 1, Annex 6, Parts I and III, Annex 8, Annex 11, Annex 13 and Annex 14, Volume I, to harmonize and extend provisions relating to safety management.

2 ICAO Safety Management Systems Course.

3 ICAO Doc. 9859, AN/460 Safety Management Manual, First Edition 2006.

4 ICAO Guidance on the Development of a State's Safety Programme Gap Analysis.

5 ICAO Doc 9734, AN/959 Safety Oversight Manual, Part A – The Establishment and Management of a State's Safety Oversight System, Second Edition – 2006.

6 State Safety Programme for the UK Overseas Territories, Air Safety Support International Limited, First Published – 2007.

7 Safety Management Systems, Implementation Procedures Guide for Air Operators and Approved Maintenance Organizations, Transport Canada, TP 14343E, June 2005.

Appendix - A

State's Safety Programme (SSP) Gap Analysis

ICAO reference	*Aspects to be analyzed or question to be answered*	*Answer*	*Status of implementation*
Component N° 1 – STATE'S SAFETY POLICIES AND OBJECTIVES			
Element 1.1 – Civil Aviation Authority (CAA) safety standards			
	Has the State have promulgated a national legislative framework and specific regulations to allow oversight of the management of safety in the State?	☐ Yes ☐ No	Civil Aviation Regulations – to be developed based on: Existing CAR and MCAR;
	Does the State participate in specific activities related to the management of safety in the State?	☐ Yes ☐ No	DCA Regulatory staffs has during the last five years followed courses on: • SMS • GSI PEL • GSI AIR • GSI AERODROME • AUDITING TECHNIQUES • SSP
	Has the State established requirements, responsibilities and accountabilities regarding the management of safety in the State by the civil aviation authority?	☐ Yes ☐ No	State Safety Programme Document. Job descriptions of the officers Licensing, Certification Requirements
	Are safety standards are periodically reviewed to ensure they remain relevant and appropriate to the State?	☐ Yes ☐ No	Responsible person is head of each section. Review at least once a year and submit to DCA. Include in the annual work programme - Safety performance and requirements review.
	Are safety standards periodically reviewed within the CAA to ensure that they are up-to-date with respect to international standards?	☐ Yes ☐ No	Yes – with respect to MCAR. Include in the annual work programme - Safety performance and requirements

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
			review.
	Is the SSP with its defined components and elements established, maintained and adhered to?	☐ Yes ☐ No	SSP Document
	Is the SSP appropriate to the scope and complexity of the aviation operations in the State?	☐ Yes ☐ No	Develop aviation inventory including equipment organizations personnel and approved places.
	Has the State established a safety policy?	☐ Yes ☐ No	Included in the SSP Document
	Is the State's safety policy approved by the CAA accountable manager or higher authority within the State?	☒ Yes ☐ No	Safety Policy is approved by the Authority.
	Is the State's safety policy promoted by the CAA accountable manager?	☒ Yes ☐ No	
	Is the State's safety policy reviewed periodically?	☒ Yes ☐ No	Will be reviewed periodically as and when required.
	Is the State's safety policy communicated with visible endorsement to all employees in the CAA with the intent that they are made aware of their individual safety responsibilities?	☒ Yes ☐ No	Displayed in every Section in the DCA.
	Has the CAA developed documentation that describes the SSP, including the interrelationship between its components and elements?	☐ Yes ☐ No	SSP Document
	Does the CAA have a records system that ensures the generation and retention of all records necessary to document and support the SSP activities?	☐ Yes ☐ No	ECCAIRS
	Does the records system provide the control processes necessary to	☒ Yes ☐ No	

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	ensure appropriate identification, legibility, storage, protection, archiving, retrieval, retention time, and disposition of records?		
Element 1.2 – CAA safety responsibilities and accountabilities			
	Does the State have identified and defined the CAA's requirements, responsibilities and accountabilities regarding the establishment and maintenance of the SSP?	☒ Yes ☐ No	Job Descriptions Regulations SSP Document
	Do the requirements include directives and activities to plan, organize, develop, control and continuously improve the SSP in a manner that meets the State's safety needs?	☐ Yes ☐ No	Included in the Safety Policy under the DCA's Commitments
	Do the requirements include a clear statement about the provision of the necessary human and financial resources for the implementation and maintenance of the SSP?	☐ Yes ☐ No	This requirement is included in the Safety Policy under the DCA's Commitments.
	Has the CAA identified and appointed as accountable manager a qualified person having direct responsibility for the SSP implementation, operation and supervision?	☒ Yes ☐ No	Director of Civil Aviation
	Is the accountable manager responsibility for ensuring that the State's safety programme is performing to requirements in all areas of the CAA explicitly addressed?	☒ Yes ☐ No	SSP DOCUMENT
	Does the accountable manager have control of the financial and human resources required for the proper execution of the SSP?	☐ Yes ☒ No	Ministry of Finance allocate the Budget
	Does the person overseeing operation and supervision of the	☒ Yes ☐ No	

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	State's safety programme fulfill the required job functions and responsibilities?		
	Are CAA personnel safety responsibilities and accountabilities, at all levels, regarding the SSP well defined and documented?	☒ Yes ☐ No	
	Do all CAA personnel understand their authorities, responsibilities and accountabilities in regards of the SSP and all safety management processes, decisions and actions?	☒ Yes ☐ No	More awareness will be undertaken to ensure 100 percent personnel coverage.
Element 1.3 – Accident and incident investigation			
	Has the State established an independent accident and incident investigation process, the sole objective which is to support the management of safety in the State and not the apportioning of blame on liability?	☐ Yes ☐ No	Explained in 2.15 in this document
Element 1.4 – Enforcement policy			
	Has the State promulgated an enforcement policy that allows service providers to deal with, and resolve safety deviations and minor violations internally, within the context of the service provider safety management system (SMS), to the satisfaction of the authority?	☒ Yes ☐ No	Included in SSP
	Does the enforcement policy include provisions for the CAA to deal with events involving gross negligence and willful deviations through established enforcement procedures?	☒ Yes ☐ No	Included in SSP
Component N° 2 – STATE'S SAFETY RISK MANAGEMENT			
Element 2.1 – Safety requirements for service providers SMS			

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	Has the CAA established the regulatory controls and developed associated guidance material governing how service providers will identify operational hazards and manage safety risks?	☒ Yes ☐ No	MCAR-SMS
	Do these controls include operating regulations and implementation policies for SMS service providers?	☒ Yes ☐ No	MCAR-SMS
	Are the operating regulations periodically reviewed to ensure they remain relevant and appropriate to the service providers?	☒ Yes ☐ No	
	Is there a structured process within the CAA to assess how the service providers will manage the risks associated with identified hazards, expressed in terms of probability and severity of occurrence?	☒ Yes ☐ No	SSP
	Has the CAA established criteria for evaluating risk?	☒ Yes ☐ No	SSP
	Has the CAA established criteria and/or guidelines to define risk tolerability?		
	Has the CAA risk management strategies, including corrective/ preventive action plans, to address recurrence of documented occurrences and deficiencies?	☒ Yes ☐ No	SSP
	Have the CAA formal processes for evaluating the effectiveness of the corrective/ preventive measures that have been developed?	☒ Yes ☐ No	SSP
	Has the CAA formally documented risk management strategies for corrective/ preventive actions, including timelines?	☒ Yes ☐ No	SMS

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	Is there a policy in place that ensures effective safety reporting of safety deficiencies, hazards or occurrences including the conditions under which protection from disciplinary and /or administrative action applies?	☒ Yes ☐ No	Included in the Voluntary/Mandatory Reporting System
Element 2.2 – Approval of service providers acceptable levels of safety			
	Does the CAA have individually agreed on, and approved, acceptable levels of safety with service providers?	☐ Yes ☐ No	Agreed SFT are included in the SSP Document.
	Are the agreed acceptable levels of safety commensurate to the complexity of individual service provider's specific operational contexts?	☐ Yes ☐ No	
	Do agreed acceptable levels of safety consider individual service provider's resources to address safety risks?	☐ Yes ☐ No	
	Are agreed acceptable levels of safety expressed by multiple safety indicators and safety targets, as opposed to a single one, as well as by safety requirements?	☐ Yes ☐ No	
	Are agreed acceptable levels of safety periodically reviewed to ensure they remain relevant and appropriate to the service providers?	☐ Yes ☐ No	
Component N° 3 – STATE'S SAFETY ASSURANCE			
Element 3.1 – Safety oversight			
	Has the CAA established mechanisms to ensure that the identification of operational hazards and the management of safety risks by service providers follow established regulatory controls? (e.g., requirements, specific operating regulations and implementation policies)	☒ Yes ☐ No	

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	Do established mechanisms include inspections, audits and surveys to ensure that regulatory safety risk controls are appropriately integrated into the SMS service providers?	☒ Yes ☐ No	Surveillance Programme Inspection Checklists
	Do established mechanisms ensure that regulatory safety risk controls are practiced as designed?	☒ Yes ☐ No	1) Inspections 2) Audits 3) Surveys
	Do established mechanisms ensure that regulatory safety risk controls have the intended effect on safety risks?	☒ Yes ☐ No	
	Are regular and periodic reviews conducted regarding the CAA's safety performance?	☒ Yes ☐ No	
	Do reviews consider changes that could affect the State's safety programme, recommendations for improvement and sharing of best practices across the CAA?	☒ Yes ☐ No	
	Is there a process to evaluate the effectiveness of changes related to the SSP?	☒ Yes ☐ No	
	Is there a formal process within the CAA to develop and maintain a set of performance parameters to measure the effectiveness of the SSP?	☒ Yes ☐ No	
Element 3.2 – Safety data collection, analysis and exchange			
	Has the CAA established mechanisms to ensure the capture and storage of data on operational hazards and safety risks at the State's level?	☒ Yes ☐ No	1) Aviation Reporting system in Aerodromes , airline and ANS 2) ECCAIRS
	Has the CAA had also established mechanisms to develop information from the stored data, and promote the exchange of safety information with service providers and/or other States	☒ Yes ☐ No	Explained under safety promotion in this document

ICAO reference	Aspects to be analyzed or question to be answered	Answer	Status of implementation
	as appropriate?		
Element 3.3 – Safety data driven targeting of oversight on areas of greater concern or need			
	Has CAA has procedures to prioritize inspections, audits and surveys towards those areas of greater safety concern or need, as identified by the analysis of data on operational hazards and safety risks areas?	☐ Yes ☐ No	Criteria for the preparation of Surveillance Programme
Component N° 4 – STATE'S SAFETY PROMOTION			
Element 4.1 – Internal training, communication and dissemination of safety information			
	Does the CAA provide internal training, awareness, and two-way communication of safety-relevant information within the CAA?	☒ Yes ☐ No	1) SMS Training 2) Regulatory Audit Training 3) DCA Training Programme
	Are there communication processes in place within the CAA that permit the safety programme to function effectively?	☒ Yes ☐ No	.
	Are communication processes (written, meetings, electronic, etc.) commensurate with the size and scope of the CAA?	☒ Yes ☐ No	ELECTRONIC,WRITTEN
	Is information established and maintained in a suitable medium?	☒ Yes ☐ No	
	Is there a process for the dissemination of safety information throughout the CAA and a means of monitoring the effectiveness of this process?	☐ Yes ☐ No	Not established as yet
Element 4.2 – External training, communication and dissemination of safety information			
	Does the CAA provide external education, awareness of safety risks and two-way communication of safety-relevant information?	☐ Yes ☒ No	Not yet establishes as yet

ICAO reference	*Aspects to be analyzed or question to be answered*	*Answer*	*Status of implementation*
	Does the CAA encourage safety communications and actively manage safety within the State?	☒ Yes ☐ No	Mandatory occurrence reporting Voluntary reporting
	Are there communication processes in place within the CAA that allow the SSP to be nationally and internationally promoted?	☒ Yes ☐ No	Published on the Department website
	Are communication processes (written, meetings, electronic, etc.) commensurate with the size and scope of the CAA?	☒ Yes ☐ No	MOR FORMS
	Is information established and maintained in a suitable medium?	☒ Yes ☐ No	ECCAIRS
	Is there a formal process for the external dissemination of safety information throughout the State, and means of monitoring the effectiveness of this process?	☒ Yes ☐ No	ECCAIRS SYSTEM TO BE EXTENDED TO ALL STAKE HOLDERS

Appendix - B

State's Safety Programme Implementation Plan

Note:- The implementation of the State's Safety Programme are based on following 5 steps and the detailed activities are illustrated in the plan prepared in Microsoft Project 2003 which is provided separately.

STEP 1: State's safety programme gap analysis:

Conduct a gap analysis vis-à-vis the current status in the State of the following:

1. **State's safety policy and objectives**
   - 1.1 DCA safety standards
   - 1.2 DCA safety responsibilities and accountabilities
   - 1.3 Accident and incident investigation
   - 1.4 Enforcement policy

2. **State's safety risk management**
   - 2.1 Safety requirements for service providers SMS
   - 2.2 Approval of service providers' acceptable levels of safety

3. **State's safety assurance**
   - 3.1 Safety oversight (Inspections, audits and surveys)
   - 3.2 Safety data collection, analysis and exchange
   - 3.3 Safety data driven targeting of oversight on areas of greater concern or need

4. **State's safety promotion**
   - 4.1 Internal training, communication and dissemination of safety information
   - 4.2 External training, communication and dissemination of safety information

STEP 2: DCA training programme:

Develop a training programme for DCA officers to:

1. provide knowledge of **safety management concepts and ICAO SARPs** on safety management in Annexes 6, 11 and 14, and related guidance material; and
2. develop knowledge to **certify and oversee** the implementation of key components of an SMS, in compliance with the national regulations and relevant

ICAO SARPs.

STEP 3: Implementation of SMS SARPs:

Develop SMS regulations for operators/service providers.

1. Refer to the SMS components and elements as per the ICAO SMS training course;
2. Prepare guidance material for the implementation of SMS. Refer to ICAO Doc 9859 and the ICAO SMS training course.

STEP 4: DCA enforcement policy:

Revise the DCA's enforcement policy.

1. Operators/service providers allowed to deal with deviations/minor violations internally, within the context of the SMS, to the satisfaction of the authority;
2. Gross negligence, willful deviation and so forth to be dealt through established enforcement procedures.

STEP 5: Development of State's safety programme:

Develop the State's safety programme *(an integrated set of regulations and activities aimed at improving safety)* around the 4 components and 11 elements of the ICAO SSP framework.

State's safety programme components and elements:

1. State's safety policy and objectives

1.1 DCA safety standards
1.2 DCA safety responsibilities and accountabilities
1.3 Accident and incident investigation
1.4 Enforcement policy

2. State's safety risk management

2.1 Safety requirements for service providers SMS
2.2 Approval of service providers' acceptable levels of safety

3. State's safety assurance

3.1 Safety oversight (Inspections, audits and surveys)
3.2 Safety data collection, analysis and exchange

3.3 Safety data driven targeting of oversight on areas of greater concern or need

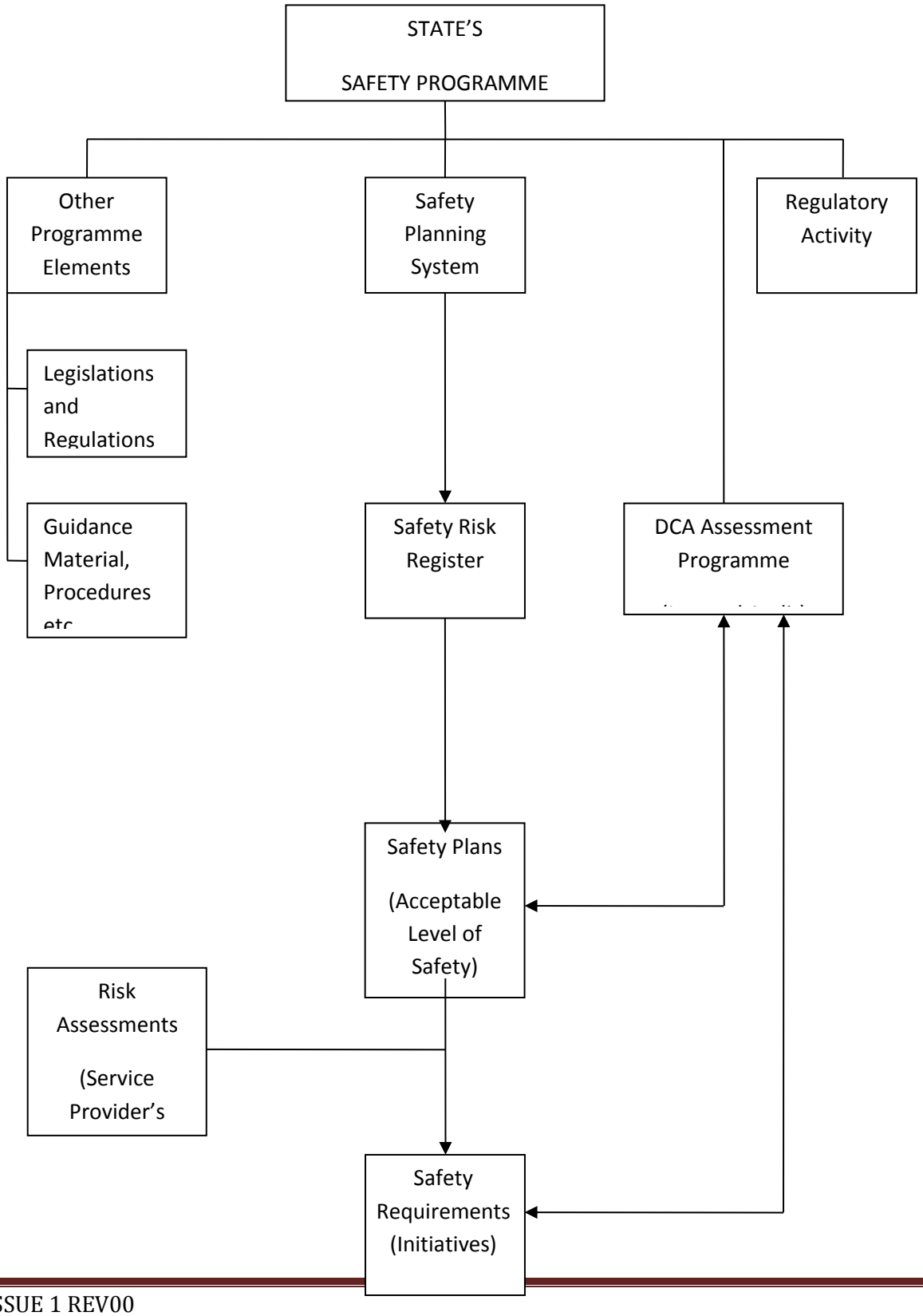
4. State's safety promotion

4.1 Internal training, communication and dissemination of safety information

4.2 External training, communication and dissemination of safety information

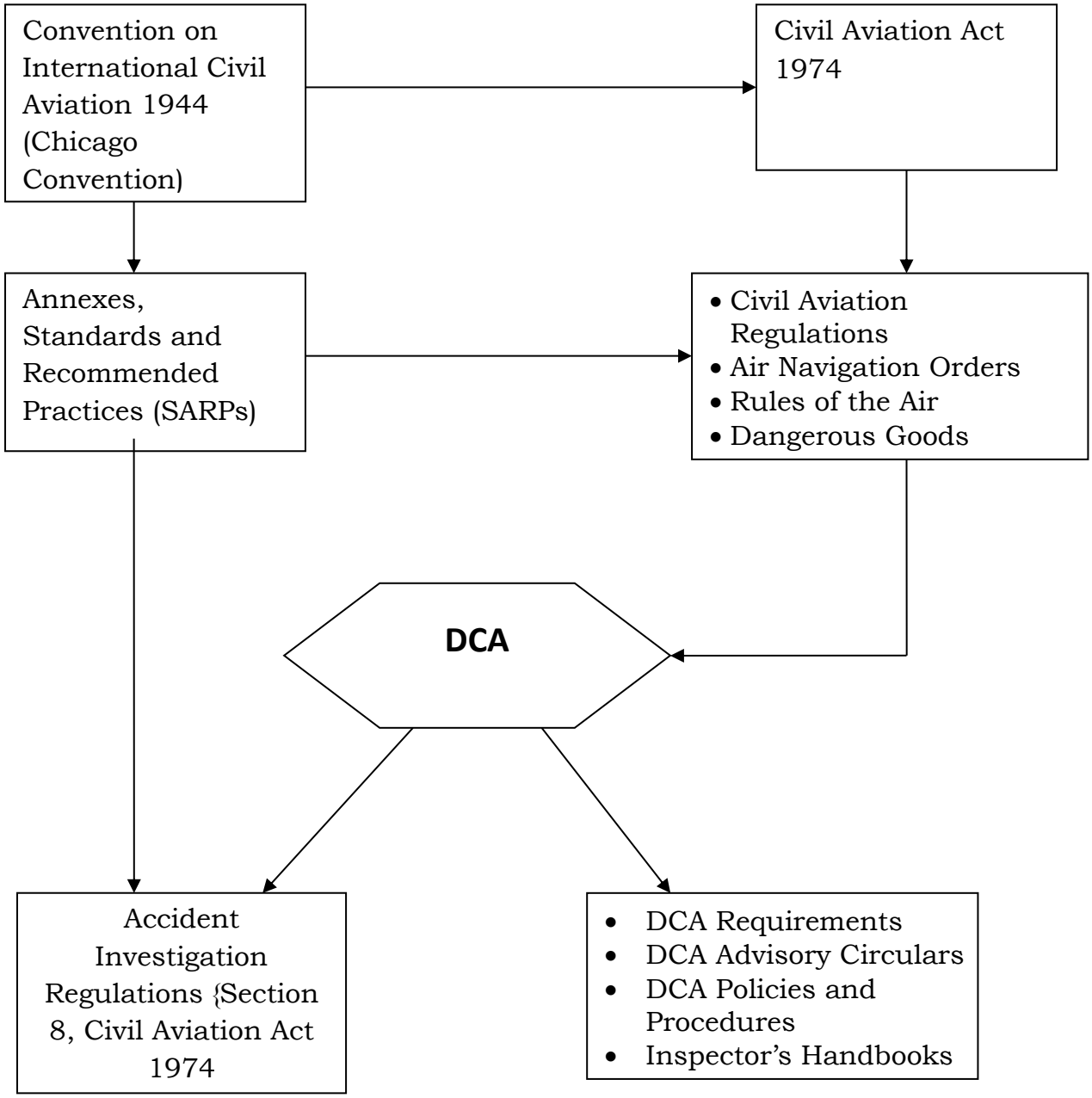
Appendix - C

STATE SAFETY PROGRAMME STRUCTURE



Appendix - D

REGULATORY FRAMEWORK



Appendix - E

EXTRACT FROM ICAO DOCUMENT 9734

SAFETY OVERSIGHT MANUAL PART A

CRITICAL ELEMENTS OF A SAFETY OVERSIGHT SYSTEM

ICAO has identified and defined the following critical elements of a State's safety oversight system:

CE-1 Primary aviation legislation

The provision of a comprehensive and effective aviation law consistent with the environment and complexity of the State's aviation activity and compliant with the requirements contained in the Convention on International Civil Aviation.

CE-2 Specific operating regulations

The provision of adequate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation and providing for standardized operational procedures, equipment and infrastructures (including safety management and training systems), in conformance with the Standards and Recommended Practices (SARPs) contained in the Annexes to the Convention on International Civil Aviation.

Note: The term "regulations" is used in a generic sense to include but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.

CE-3 State civil aviation system and safety oversight functions

The establishment of a Civil Aviation Authority (CAA) and/or other relevant authorities or government agencies, headed by a Chief Executive Officer, supported by the appropriate and adequate technical and non-technical staff and provided with adequate financial resources. The State authority must have stated safety regulatory functions, objectives and safety policies.

Note: The term "State civil aviation system" is used in a generic sense to include all authorities with aviation safety oversight responsibility which may be established by the State as separate entities, such as: CAA, Airport Authorities, Air Traffic Service Authorities, Accident Investigation Authority, and Meteorological Authority.

CE-4 Technical personnel qualification and training

The establishment of minimum knowledge and experience requirements for the technical personnel performing safety oversight functions and the provision of appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent (periodic) training.

CE-5 Technical guidance, tools and the provision of safety-critical information

The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and safety-critical information, as applicable, to the technical personnel to enable them to perform their safety oversight functions in accordance with established requirements and in a standardized manner. In addition, this includes the provision of technical guidance by the oversight authority to the aviation industry on the implementation of applicable regulations and instructions.

CE-6 Licensing, certification, authorization and approval obligations

The implementation of processes and procedures to ensure that personnel and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorization and/or approval to conduct the relevant aviation activity.

CE-7 Surveillance obligations

The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorization and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorized and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.

CE-8 Resolution of safety concerns

The implementation of processes and procedures to resolve identified deficiencies impacting aviation safety, which may have been residing in the aviation system and have been detected by the regulatory authority or other appropriate bodies.

Note: This would include the ability to analyse safety deficiencies,

forward recommendations, support the resolution of identified deficiencies, as well as take enforcement action when appropriate.

Department of Civil Aviation
SSR International Airport
Plaine Magnien
MAURITIUS

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Department of Civil Aviation Safety Policy

The Department of Civil Aviation of the Republic of Mauritius is committed to implementing, developing and improving strategies, management systems and processes to ensure that aviation operations uphold the highest level of safety performance and meet national and international standards.

Our Commitment is to:

- Develop and embed a safety culture across all aviation stakeholders that recognizes the importance and value of effective aviation safety management and acknowledges at all times that safety is paramount.
- Ensure that financial and human resources are sufficient for implementation, establishment and maintenance of a State Safety Programme.
- Clearly define, for all regulatory staff, their responsibilities and accountabilities for the implementation, establishment and maintenance of our State Safety Programme and its performance.
- Ensure that all regulatory staff are provided with adequate and appropriate aviation safety information and training, and that they are specialists in their functional areas and competent in safety regulation of operators and service providers.
- Establish a risk-based resource allocation strategy for all regulatory functions.
- Ensure that acceptable levels of safety for aviation operations within the Republic of Mauritius are being set and achieved, and expressed in terms of safety performance indicators and safety performance targets.
- Ensure that operators and service providers establish and maintain the safety management system in all their operations.

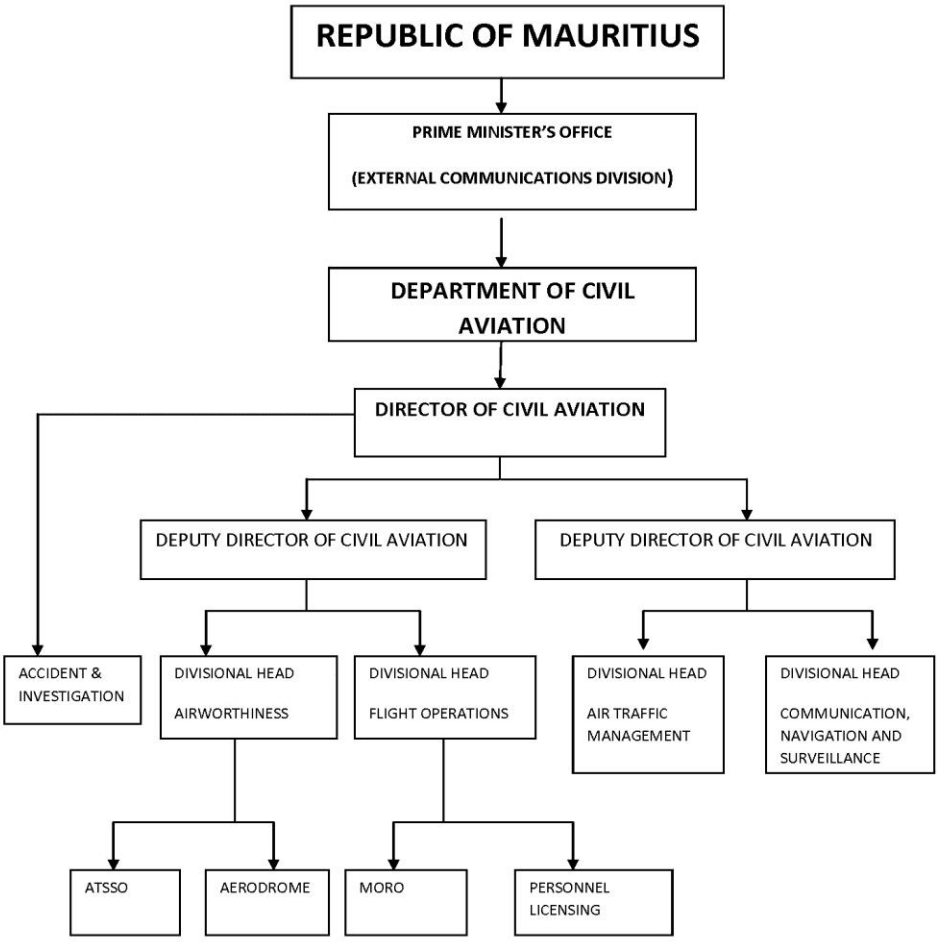
Sarupanand KINNOO
Ag Director of Civil Aviation

09 July 2013

DEPARTMENT OF CIVIL AVIATION - WINNER OF THE FOLLOWING AWARDS:

- *BronzeWinner of the African Association of Public Administration and Management (AAPAM) Innovative Management - awarded in November 2010;*
- *The Overall Winner of Best Anti-Corruption Framework 2008 Competition organised by ICAC & MQI with Special Award on Risk Management;*
- *Grand Winner of the Public Service Excellence Award for 2008; and*
- *Public Service Excellence Awards for 2006 & 2007 in the discipline of Effectiveness and Efficiency*

APPENDIX G


REPUBLIC OF MAURITIUS
PRIME MINISTER'S OFFICE
(EXTERNAL COMMUNICATIONS DIVISION)
DEPARTMENT OF CIVIL AVIATION
DIRECTOR OF CIVIL AVIATION
DEPUTY DIRECTOR OF CIVIL AVIATION
DEPUTY DIRECTOR OF CIVIL AVIATION
ACCIDENT & INVESTIGATION
DIVISIONAL HEAD AIRWORTHINESS
DIVISIONAL HEAD FLIGHT OPERATIONS
DIVISIONAL HEAD AIR TRAFFIC MANAGEMENT
DIVISIONAL HEAD COMMUNICATION, NAVIGATION AND SURVEILLANCE
ATSSO
AERODROME
MORO
PERSONNEL LICENSING

Appendix - H

Sample Acceptable Level(s) of Safety to be approved by the DCA

A. Aerodrome Operator

DCA and the aerodrome operator agree on an acceptable level of safety to be achieved by the aerodrome operator SMS:

(a) No more than one runway incursion per 40,000 aircraft movements (*safety indicator*); a 40 per cent reduction in a 12-month period (*safety target*);

The establishment of low visibility taxi procedures (*safety requirement*).

(b) 1.0 bird strike per 1, 000 aircraft movements (safety indicator) with a 50 per cent reduction in five years (safety target);

The establishment of wildlife/bird strike hazard assessment and reduction programme (*safety requirement*).

B. Aircraft Maintenance Organization

DCA and an aircraft maintenance organization (AMO) agree on an acceptable level of safety to be achieved by the AMO SMS:

(a) 200 major aircraft defect incidents per 100, 000 hours flown (safety indicator) with a 25 per cent reduction over the last three-year average (safety target);

C. Airline Operator

DCA and an airline operator agree on an acceptable level of safety to be achieved by the operator SMS:

(a) 0.5 fatal accidents per 100,000 departures (*safety indicator)*; a 40 percent reduction in five years (*safety target*);

The development of GPS approaches for airfields without ILS approaches (*safety requirement*).

(b) 50 aircraft incidents per 100, 000 hours flown (*safety indicator*) with a 25 per cent reduction in three years (*safety target*);

D. ATS Service provider

DCA and ATS provider agree on an acceptable level of safety to be achieved by the service provider SMS:

(a) No more than one runway incursion per 40,000 aircraft movements (*safety indicator*); a 40 per cent reduction in a 12-month period (*safety target*);

The establishment of low visibility taxi procedures (*safety requirements*).

(b) 40 airspace incidents per 100, 000 hours flown (safety indicators) with a 30 per cent reduction over the five-year moving average (safety target);