STATE SAFETY PROGRAMME (SSP) MANUAL

SSP MANUAL EDITION 2 2020

FOREWORD

Air transport has been identified as one of the important enablers for economic development in Rwanda. For the aviation industry to effectively and reliably serve this important purpose, aviation safety has to be strengthened at all levels.
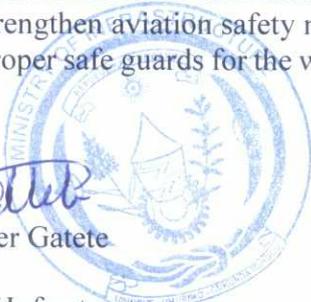
The Aviation industry in Africa is rapidly growing with potential to continue growing over the next decades. Rwanda's approach to keep pace with the rapidly growing industry, is to ensure effective safety management through effective safety oversight and safety management systems implementation in aviation.

The State Safety Programme Manual reflects Rwanda's Strategy to strengthen the effectiveness of safety management activities in Rwanda. It outlines our guiding principles, safety objectives, and the necessary processes to effectively implement this strategy.

The Ministry of Infrastructure, Rwanda Civil Aviation Authority and Aviation Accident Investigation Division are committed to working closely with our stakeholders to implement the SSP and strengthen aviation safety management while allowing growth and innovation. We must maintain proper safe guards for the well being of the flying public and our communities in general.

Amb. Claver Gatete

Minister of Infrastructure

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1. INTRODUCTION

Rwanda has established an effective and progressive aviation safety oversight system, in order to ensure safety in aviation industry and continuously comply with (ICAO) requirements. In specific terms, we have developed safety oversight capabilities that are commensurate with the size and complexity of our aviation activities. Through the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA), we proactively seek to address gaps in the implementation of Civil aviation regulations emanating from ICAO SARPs and mitigate new and emerging safety risks.

To this end, Rwanda is implementing a State Safety Programme (SSP) building on Safety oversight foundation based on global aviation Safety Plan (GASP) and requirements in Annex 19 to the Chicago Convention. This allows the integration of safety management activities across the industry and at the State level. Rwanda is moving towards a more proactive and predictive approach to systematically identify, prioritise and mitigate aviation safety risks before they result in accidents or incidents. That way we are better able to ensure a safe aviation environment to facilitate the continued growth of a dynamic aviation industry in an increasingly complex aviation landscape.

The International Civil Aviation Organisation (ICAO) defines safety oversight as a function by means of which States ensure effective implementation of the safety-related Standards and Recommended Practices (SARPs) and associated procedures contained in the Annexes to the *Convention on International Civil Aviation* and related ICAO documents. Safety oversight also ensures that the national aviation industry provides a safety level equal to, or better than, that defined by the SARPs. As such, an individual State's responsibility for safety oversight is the foundation upon which safe global aircraft operations are built.

This SSP Manual specifies the principles and processes underlying the following key pillars of safety management commonly referred to as components of safety management:

   I.   State safety policy and objectives;
  II.   State safety risk management;
 III.   State safety assurance; and
 IV.   State safety promotion.

This SSP Manual describes how safety management activities are condcuted in Rwanda. SSP is a continuos program, the manual is a living document that will be reviewed every 2 years to keep it relevant at all times. This manual has been approved by the Director General of Rwanda Civil Aviation Authority and the Minister of Infrastructure.

2. RWANDA AVIATION SYSTEM DESCRIPTION

Part of Rwanda's policy is embracing innovative Technology as an enabler for socio economic growth, this policy has not left the aviation sector behind. In addition to the traditional aviation system that existed in Rwanda, the use of unmanned Aircraft systems (UAS) for some important use cases will significantly affect our aviation system.

The following are the components of Rwanda's Aviation system that our SSP will put into consideration

a) The national Carrier RwandAir as an Air Operator that operates international commercial air transport and domestic air transport whose maintenance services are contracted from foreign Aircraft Maintenance Organizations (FAMOs) as well as Maintenance and Repair organizations (MROs)

b) Nine foreign Air Operators operating in Rwanda

c) Commercial Helicopter operator- domestic helicopter operations and helicopter flight training as well as fixed wing training, so it doubles as an aviation training organization

d) Air Navigation Service Provider who doubles as Aeronautical Meteorology Service Provider and manages both Civil and military Traffic as well as UA Traffic in the small Airspace of Rwanda

e) An Aerodrome operator managing one international Airport and three domestic Airports and falls under the same company (Rwanda Airport Company, RAC) who is also the provider of Air Navigation Service

f) Operators of Unmanned Aircraft Systems in certain use cases as per national policy

2.1. Challenges

2.1.1. Significant Growth in Air Traffic

The growth in air traffic introduces complexities and additional stresses to our aviation system. Rwanda Civil Aviation Authority (RCAA) will need to continue to facilitate high air traffic volumes, without compromising safety standards.

2.1.2. Increasing Complexity of our Aviation System

Rwanda's projected plan is to be a vibrant aviation hub serving various aviation needs. As Rwanda moves up the aviation value chain towards more technology and knowledge-based activities, further complexities will challenge conventional regulatory approaches, requiring new expertise.

The projected growth calls for more airport infrastructure development that will necessitate a comprehensive change management plan in terms of safety risk associated with such changes.

At the same time, Rwanda continues to facilitate the growing demand for unmanned aircraft (UA) operations for commercial and public purposes. Given our busy airspace and densely populated urban environment, it is critical to ensure that UA operations do not pose serious risks to manned aviation and public safety (Ground and Air risk mitigation).

2.1.3. Capacity

The capacity to regulate such a complex aviation system has to be enhanced proportionate to the growth rate. This can only be achieved through establishment of aviation training organizations that will provide adequate capacity building to match the growth sustainably.

Regulatory approaches are also changing in response to changing needs and aviation landscape. The evolving aviation environment necessitates performance-based regulation and data-driven regulatory approaches, leveraging predictive analysis and info-communication technology. The regulator's skill sets need to correspondingly expand, as we develop and implement new regulatory approaches.

3. STATE SAFETY POLICY AND OBJECTIVES

The management of civil aviation safety is one of the major responsibilities of Rwanda Civil Aviation Authority (RCAA) and Aviation Accident Investigation Division (AAID). Rwanda Civil Aviation Authority together with Aviation Accident Investigation Division which is under the Ministry of Infrastructure are committed to: developing, implementing, maintaining and constantly improving strategies and processes to ensure that all aviation activities under their jurisdiction achieve the highest level of safety performance, while meeting both national and international standards. This can be achieved through the implementation of the State Safety Programme (SSP).
Under the SSP, civil aviation service providers in Rwanda shall be required to demonstrate that their management systems adequately reflect a Safety Management System (SMS) approach. The expected result of this approach is improved safety performance in civil aviation.

All levels of management and staff within Rwanda Civil Aviation Organisations (both service providers and Oversight) are accountable for the delivery of the highest level of safety performance.

3.1. With the commitment from Top management and the Staff at all levels, Rwanda Civil Aviation Authority and Aviation Accident Investigation Division will:

a) Develop general rulemaking and specific operational policies that build upon safety management principles, based on a comprehensive analysis of the aviation system;

b) Consult with all segments of the aviation industry on issues regarding regulatory development;

c) Support the management of safety in Rwanda through an effective safety reporting and communication system;

d) Interact effectively with service providers in the resolution of safety concerns;

e) Conduct investigations of accidents and incidents to identify contributing factors and any possible failure within the aviation system, and to generate the necessary countermeasures to prevent recurrence.

f) Ensure that within Rwanda Civil Aviation Organisations, sufficient resources are allocated and personnel have the proper skills and are trained for discharging their responsibilities, both safety related and otherwise;

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

h) Comply with and, wherever possible, exceed international safety requirements and standards;

i) Promote and educate the civil aviation industry on safety management concepts and principles;

j) Oversee the implementation of SMS within aviation organizations;

k) Ensure that all activities under Rwanda Civil Aviation Authority oversight achieve the highest level of safety standards;

l) Establish provisions for the protection of safety data and safety information collected, stored and analysed for inclusion in the safety data collection and processing systems (SDCPS) against inappropriate use. This is aimed at ensuring that people are encouraged to provide essential safety-related information on hazards, and there is a continuous flow and exchange of safety management data between the Rwanda Civil Aviation Organisations and service providers;

m) Establish and measure the realistic implementation of our SSP against safety indicators and safety targets which are clearly identified; and

n) 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, wilful violation or criminal acts.

This policy must be understood, implemented and observed by all staff involved in safety oversight and safety management activities in the Rwanda civil aviation organisations.

o) Establish a coordination group with all parties that have responsibilities related to the implementation and maintenance of the SSP, including the military aviation authorities in addition to the Rwanda Civil Aviation Authority and the Aviation Accident Investigation Division. This coordination group shall have adequate representation from the parties involved.

Approved RCAA Level

Silas Udahemuka
Director General
Rwanda Civil Aviation Authority

Approved Ministry Level

Amb. Claver Gatete
Minister of Infrastructure

4. RWANDA'S AVIATION SAFETY LEGISLATIVE FRAMEWORK

Rwanda has promulgated a national safety legislative framework and specific regulations in compliance with international and national standards that define how management of safety is conducted. The following laws have been promulgated in Rwanda;

4.1. Law N°007/2019 of 13/04/2019 Establishing Rwanda Civil Aviation Authority

Rwanda has enacted the law establishing Rwanda Civil Aviation Authority Abbreviated as "RCAA" which determines its mission, responsibilities, organisation and functioning.

The mission of RCAA is to develop, implement and maintain a safe, secure and efficient civil aviation industry in Rwanda. To accomplish this mission, RCAA carries out the responsibilities stipulated in article 6 of this law.

The Supervising Authority of RCAA is the Ministry of Infrastructure as stipulated in article 7 of the law establishing Rwanda Civil Aviation Authority

4.2. Law N°20/2018 of 29/04/2018 Establishing Regulations Governing Civil Aviation

Rwanda has enacted a law establishing regulations governing civil aviation in Rwanda based on which Rwanda Civil Aviation Regulations (RCARs) are established and issued to the industry. The Ministry in charge of Air transport has promulgated regulations to address, at a minimum, national requirements emanating from the primary aviation legislation, for standardized operational procedures, products, services, equipment and infrastructure in conformity with the Annexes to the Convention on International Civil Aviation.

In addition to the RCARs that are issued based on the ICAO SARPs in the Annexes to the convention on international civil aviation, Rwanda Civil Aviation Technical Standards (RCATS) are issued whenever deemed necessary by Rwanda Civil Authority.

4.3. Ministerial Orders

Rwanda Civil Aviation Regulations are established by ministerial orders and implemented by the Rwanda civil aviation oversight authorities as requirements to be complied with by the aviation service providers.

4.4. Review of Legislation & Regulations

Rwanda Civil Aviation Authority and Aviation Accident Investigation Division have developed policies and procedures to review aviation safety legislation, regulations, guidance material, policies and procedures, to ensure that they remain effective and relevant to Rwanda's aviation system. The established civil aviation Regulations committee (CARC) does this.

The CARC monitors the regulations development process and oversees regulations development projects. The regulations development process is triggered by various changes such as the introduction of new or amended ICAO SARPs, changes to policies, industry feedback and new aviation developments. The CARC reviews proposed regulations and ensures that the regulations development process is adhered to. The Civil Aviation regulations include those specific to Safety Management Systems (SMS) and the SSP Implementation Team regularly reviews the SMS regulations and guidance materials, covering the entire ICAO SMS framework in two-year cycles. The SSP Administration coordinates the review of the regulations especially SMS regulations.

In addition, the CARC in coordination with the Drone Technical Advisory Committee (DTAC) reviews the UAS regulations to ensure they remain relevant to the operation and development of the UAS industry.

5. STATE SAFETY RESPONSIBILITIES AND ACCOUNTABILITIES

5.1. Ministry of Infrastructure

The law establishing Rwanda Civil Aviation Authority provides that the ministry of infrastructure will supervise RCAA in the performance of its responsibilities. Therefore, the ministry of Infrastructure plays the supervisory role in the implementation of State Safety Program as well as other activities related to development of air transport system in Rwanda. The implementation of State Safety Program is based on the level of effective implementation of critical elements of Rwanda's Safety oversight system (normally referred to as the SSP Foundation) the SSP builds on the existing prescriptive oversight system which is part of the SSP.

5.2. Rwanda Civil Aviation Authority (RCAA).

Rwanda Civil Aviation Authority is established by the law as an autonomous government entity responsible for oversight of all aviation matters in Rwanda. The law establishing regulations governing civil Aviation in Rwanda identifies Rwanda Civil Aviation Authority as the placeholder organization for the coordination of State Safety Program implementation activities and the Director General as the accountable executive for the SSP.

RCAA as an autonomous civil aviation Authority supervised by the ministry of infrastructure, has its responsibilities defined in the law establishing Rwanda Civil Aviation Authority.

The functions and duties of RCAA, which are set out in article 6 of the law establishing RCAA, include the following:

I.   To promote the development of air transport of people and goods and supervise the operations of persons and companies authorized to operate in the area of civil aviation.
II.   To monitor the compliance of the civil aviation industry with international legal instruments, laws and regulations.
III.   To issue permits, authorizations and licenses required in civil aviation in accordance with relevant governing laws and regulations.
IV.   To advise the Government on its relationship with the International Civil Aviation Organization.
V.   To advise the Government on air transport of people and goods;

VI. To advise the Government on all activities that accelerate the development of infrastructure of civil aviation industry in Rwanda.

VII. To represent Rwanda at the international level in respect of matters relating to civil aviation in its capacity as the national authority.

VIII. To collaborate with other organs to ensure the safety of civil aviation.

IX. To gather, analyse and use statistical data of airports and other civil aviation service providers.

X. To establish relations and collaborate with other regional and international bodies with similar mission.

5.2.1. Flight Safety Services

The Flight Safety Services is a Directorate in RCAA responsible for oversight of the Aviation service providers in order to ensure that they comply with all regulatory requirements issued to them through Rwanda Civil Aviation Regulations (RCARs). They are also responsible for ensuring that Rwanda Continues to comply with the ICAO SARPs. This oversight lays the foundation for SSP, which is aimed at establishing a vibrant Aviation Hub in Rwanda and the region through effective aviation safety management.

To carry out safety Oversight responsibilities, Flight Safety Services is organised in following departments;

5.2.1.1. Airworthiness Department

a) Conduct of safety oversight, and development and implementation of regulations relating to:

➢ Drafting and amendment of rules relating to the airworthiness of Aircraft
➢ Issuance, acceptance or validation of type certificate of aircraft, engine and propeller
➢ Approval and continued inspection of approved design and production organization of aircraft and parts
➢ Registration of aircraft
➢ Certification and approval of initial application of air operators (Airworthiness aspects)
➢ Continued inspection and surveillance of certificated air operators (airworthiness aspects)
➢ Issuance, acceptance or validation of noise certificate
➢ Issuance, renewal and continuing validation of the certificate of airworthiness
➢ Approval of maintenance program
➢ Approval of modification and mandatory inspections
➢ Approval of repairs
➢ Approval and continuing inspection of aviation maintenance organizations (AMOs)
➢ Monitoring and control of mandatory continuing airworthiness information (MCAI)

- ➢ Approval and continued inspection of approved maintenance training organizations and;
- ➢ Licensing of aircraft maintenance personnel

b) Ensuring compliance with the applicable annexes to the Chicago Convention

- ➢ Annex 7-Aircraft nationality and registration marks
- ➢ Annex 8- Airworthiness of Aircraft
- ➢ Annex 16- Environment protection
- ➢ Annex 19- Safety Management

5.2.1.2. Flight Operations Department

a). Conduct of safety oversight, development and implementation of regulations related to:

- ➢ Oversight of Operation of both national and foreign aircraft operating in Rwanda
- ➢ Helicopter Operations in Rwanda
- ➢ Oversight of qualification of flight simulation training Equipment
- ➢ Oversight of carriage of dangerous goods
- ➢ Oversight of unmanned aircraft systems operation
- ➢ Etc.

b). Ensuring compliance with relevant Annexes to the Chicago Convention:

- ➢ Annex 6- Operation of Aircraft
- ➢ Annex 18- Safe Transport of dangerous goods by Air
- ➢ Annex 19- Safety Management
- ➢ Etc.

5.2.1.3. Air Navigation Services Department

a). Conduct of safety oversight of the air navigation service provider and aeronautical meteorological services provider, as well as the development and implementation of regulations for Air Navigation Services; and

b). Ensuring compliance with relevant Annexes to the Chicago Convention:

- ➢ Annex 2- Rules of The Air
- ➢ Annex 3- Meteorological Service for International Air Navigation

- ➢ Annex 4- Aeronautical Charts
- ➢ Annex 5-Units of Measurements to be used in Air and Ground Operations
- ➢ Annex 10- Aeronautical Telecommunications
- ➢ Annex 11- Air Traffic Services
- ➢ Annex 12- Search and Rescue
- ➢ Annex 15- Aeronautical Information Services
- ➢ Annex 19- Safety Management

5.2.1.4. Personnel Licensing Department

a). The Personnel Licensing Department of the Flight Safety Services provides qualified licensing personnel to ensure the proper PEL licensing and provide policy and quality control of the medical licensing and designated representatives programs. To discharge its responsibilities, the PEL Office has to carry out many tasks, which are normally organized around five major functional areas: examinations (flight crew, aircraft maintenance personnel, air traffic controller, etc.), licensing, training, regulatory and administration.

b). Ensuring compliance with relevant annexes to the Chicago convention:

- ➢ Annex 1- Personnel Licensing
- ➢ Annex 19- Safety Management

5.2.1.5. Aerodrome and ground Aids Department

a). The Aerodrome and ground Aids department of Flight Safety Services is responsible for oversight of Aerodrome operator as well as development and implementation of regulations for aerodrome operations in Rwanda.

b). Ensuring compliance with the relevant annexes to the Chicago convention:

- ➢ Annex 14- Aerodromes
- ➢ Annex 19- Safety Management

5.2.2. The State Safety Program Implementation Team (SSP IT)

The SSP implementation team is a national-level committee established to coordinate SSP activities. It is chaired by the Aviation Adviser to the Director General and comprises of representatives from Aviation Accident Investigation Division (AAID) and relevant departments within RCAA involved in safety regulation.

The SSPI oversees the development and implementation of the SSP and reviews the level of safety performance and policies and practices related to SSP. In addition to the above, the SSPIT is responsible for coordinating with other entities whose activities affect the overall aviation Safety Program. The SSP Implementation team reports progress of SSP implementation to the Director General RCAA in Management meeting. Once the SSP is mature enough, the SSPIT will cease its activities and RCAA will establish a national aviation Safety Committee.

5.3. Coordination between RCAA and AAID

RCAA works closely with AAID in SSP activities in order to ensure its effectiveness. To achieve the effectiveness of SSP RCAA and AAID facilitate work by doing the following;

5.3.1. Classification of Occurrences

AAID and RCAA ensure consistency in the classification of occurrences involving Rwanda air operators and Rwanda-registered aircraft, and accurate reporting of information to ICAO under the Accident/Incident Data Reporting (ADREP) System using ECCAIRS V5.

5.3.2. Sharing of safety information

RCAA and AAID share the Safety Data Collection and Processing systems (SDCPS) in collecting safety data from the service providers through their individual SMSs, RCAA and AAID have two systems one for collecting both occurrences and Hazards (Safety Core) and ECCAIRS which is mainly used for collecting occurrences and reporting to ICAO by AAID when appropriate. The Air Operators, Aerodrome operators and Air Navigation Service Provider are required to use the Safety Core system in reporting occurrences. The service providers and operators to conduct hazard identification and safety risk management processes use the same tool. The SSP administration office has access to the database and can review these processes to verify whether the processes are done effectively. The information provided in the Safety Core is protected from

inappropriate use by the SSP office and AAID to ensure the continued availability of safety data and safety information. Safety managers of service providers who receive the data from the employees under their confidential reporting system enter the safety data. De-identification is done before sharing the safety data and information with the relevant users for safety management purposes.

5.3.3. Issuance of Safety recommendations

RCAA receives safety recommendations from AAID based on its investigations and other sources including foreign accident investigation authorities. RCAA is also informed of safety recommendations issued by AAID to the Rwanda aviation industry, so that this additional information can be used to support the conduct of safety oversight.

5.3.4. Technical Support for Investigation

RCAA provides technical experts to AAID as appropriate, upon request, to support the conduct of an investigation.

6. AVIATION ACCIDENT INVESTIGATION DIVISION (AAID)

AAID is responsible for conducting investigations into aircraft accidents and incidents in accordance with Annex 13 to the Chicago Convention. Its functions, which are set out in Law N°20/2018 of 29/04/2018 Establishing Regulations Governing Civil Aviation include the following:
  ➤ gathering, recording and analysis of all relevant information on the accident or incidents
  ➤ protection of certain accident or incident investigation records;
  ➤ issuance of safety recommendations, where appropriate;
  ➤ causes of the accident or incident, where necessary;
  ➤ the final and complete report

6.1. Accident and Incident Investigation

AAID's investigations are independent and separate from judicial or administrative proceedings. Through their investigations, AAID analyses the circumstances leading to the occurrences of accidents and serious incidents, identifies safety issues and makes recommendations to address these safety issues.

RCAA also conducts investigations of occurrences. Such investigations continue independently in parallel with AAID's investigations as much as possible. The investigations conducted by RCAA aim to expeditiously determine safety gaps to prevent reoccurrence, assess breaches of regulations and guidance material, and identify improvement areas in the safety regulations and oversight processes.

The investigations of RCAA shall not interfere with the investigations of AAID by denying them access to records necessary for effective investigation of incidents and accidents. When the two investigations are conducted in parallel, AAID has priority over information / records related to the investigation.

7. ENFORCEMENT POLICY AND FRAMEWORK

Compliance with Rwanda's aviation safety legislation and requirements by aviation organisations and persons is crucial to effective safety management. Through regular reviews and consultations with the industry, we ensure that our regulations are up to date and relevant. RCAA also provide guidance to the industry on how to achieve compliance.

In the event of non-compliance, our primary focus is to address the root cause of the contravention, and bring the individual or organisation back to compliance. Where necessary, RCAA takes immediate safety actions to address any imminent safety risk.

RCAA is committed to fostering a just culture in our aviation community. We will strive to create an environment of openness, fairness and trust in which people are encouraged to report or share safety-related information, including their own errors. Accountability is important to ensure integrity of the system, and unacceptable behaviours such as gross negligence and intentional and wilful acts to flout our rules, will have to be dealt with appropriately.

When considering whether enforcement action should be taken, we take into account: (i) type, counts and duration of contravention; (ii) circumstances of the contravention; (iii) adverse effect on aviation safety; (iv) aggravating and mitigating considerations; (v) potential efficacy of proposed actions; (vi) totality and parity principles.

Where warranted, RCAA may take sanctions against contraveners, ranging from verbal and written warnings, to administrative action on the Aviation Safety Instrument, to prosecution.

8. SAFETY RISK MANAGEMENT

8.1. Safety requirements for service providers SMS

Rwanda has established the controls, which govern how service providers will identify hazards and manage safety risks. These include the requirements, specific operating regulations and implementation policies for service providers' SMS. These controls will be periodically reviewed to ensure they remain relevant and appropriate to the service providers Aviation activities.
The Civil Aviation Regulations require the establishment of the Safety Management System (SMS) for service providers. The Civil Aviation law prescribes the oversight of service providers' SMS as one of the functions of RCAA. This is one of the vital elements of the SSP.

The Civil Aviation Regulations require that service providers establish a Safety Management System that:
  ➢ identifies actual and potential safety hazards;
  ➢ ensures the implementation of remedial action necessary to maintain agreed safety performance;
  ➢ provides for continuous monitoring and regular assessment of safety performance; and
  ➢ aims at a continuous improvement of the overall performance of the SMS

The Regulations require service providers to be responsible for continuous identification of hazards and evaluation and reduction of risk while performing its operations in order to eliminate hazards and manage risk at the established acceptable level. The regulations provide a framework for risk control, once they are integrated into the service provider's SMS.

The service providers' hazard identification process will include the following steps:
  ➢ reporting of hazards, events or safety concerns;
  ➢ collection and storage of safety data;
  ➢ analysis of the safety data; and
  ➢ distribution of the safety information distilled from the safety data.

Safety management principles affect most State aviation activities, starting with rulemaking and policy development. Under the SSP, safety rule making element is based on comprehensive analysis of aviation system in Rwanda. Safety policies are developed on the basis of identified safety hazards while safety risk management and safety oversight focus on the areas of higher safety risks and significant safety concerns. This creates conditions and means to combine the prescriptive and performance-based approaches to safety rulemaking, safety policy development, safety oversight and the establishment of acceptable level of safety perfomance (ALoSP). The Service Provider is responsible for the development of Safety Performance Indicators and Safety Performance Targets for their individual service provider's SMS and they must be acceptable to the authority through an agreement.

Rwanda shall also apply, as part of this State Safety Programme, basic safety management principles to the medical assessment process of licence holders, that as a minimum include:

a) routine analysis of in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk; and
b) continuous re-evaluation of the medical assessment process to concentrate on identified areas of increased medical risk.

The SSP Implementation Team will coordinate and, when necessary, participate in the safety risk management processes and provide advice, on the basis of the quality of collected information. Specifically, the Team will be tasked with the following:

a) identify risk through utilization of different evaluation processes;
b) assess identified risks and supporting data;
c) identify new and potential safety data sources and data handling methods;
d) assess mitigation actions;
e) share and coordinate safety information among Rwanda Aviation Organisations.
f) propose guidance and direction to the State on safety risk matters; and
g) contribute to and where possible improve the SSP of Rwanda.

8.2. Agreement on service provider's safety performance

Rwanda Civil Aviation Authority agrees with individual service providers on the safety performance of their SMS. The agreed safety performances of individual service providers SMS shall be reviewed annually to ensure they remain relevant and appropriate to the service providers activities.

As part of acceptance of each service providers' SMS, RCAA will agree on, and accept, safety performance of the service provider that includes Safety Targets. These Safety Targets will be commensurate to the complexity of individual service provider's specific operational contexts and the availability of individual service provider's resources to address safety risks.
The agreed Safety Targets will be reviewed annually to ensure they remain relevant
and appropriate to each service provider. The Agreement will be signed between the SSP accountable executive and the accountable executive of each service provider's SMS.

9. STATE SAFETY ASSURANCE

The safety assurance activities, as part of Rwanda SSP, is aimed at providing RCAA with assurance that its safety processes are functioning effectively and that Rwanda is on target to achieve its safety objectives via the collective efforts of the Rwanda's aviation industry.

RCAA Surveillance activities and safety data/information collection, analysis, sharing and exchange mechanisms are established to ensure that regulatory safety risk controls are appropriately integrated into a service provider's SMS. This provides confidence that the system is being practiced as designed, and the regulatory controls are having the intended effect on SRM. RCAA and AAID collect aviation safety data/information from many sources, including through surveillance processes, safety reporting programmes and Safety Core (SDCPS). The data is analysed by the relevant oversight departments, and the conclusions drawn from the analysis are used as the basis for well-informed safety decision-making with regard to surveillance activities and safety management in Rwanda's aviation system.

9.1. Prioritizing surveillance activities

Rwanda Civil Aviation Authority prioritizes Surveillance activities based on safety risk derived from the safety risk profile of each service provider.

A safety risk-based surveillance (SRBS) approach enables prioritization and allocation of Rwanda's safety management resources commensurate with the safety risk profile of each sector or individual service provider. Over time Rwanda Civil Aviation Authority will accumulate a clear picture of the service provider's safety abilities, particularly their management of safety risk. RCAA may choose to amend the scope and/or frequency of surveillance as we gain confidence and evidence of the service provider's safety capability effectiveness and continuous improvement.

Rwanda Civil Aviation Authority as part of SSP implementation, has provided a safety data collection and processing system to the service providers to assist in monitoring their safety performance through the data collected.

9.2. Data management Procedure

The SSP administration office has a procedure for exchange of safety data and Safety Information between the safety oversight departments and the SSP administration office for effective follow up on any identified deficiencies whether through surveillance or safety reporting under SMS. The SSP administration office extracts aviation safety data from **Safety Core** system and ECCAIRS which is shared using the following procedure;

➤ The SSP administration office analyses the extracted data and advise the relevant oversight department as soon as possible

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> The SSP office as a custodian of Safety data and Safety information will alert the relevant oversight department regarding any safety concern of a reccurring nature so as to prioritise inspections towards the area of that safety concern
> The relevant oversight department provides feedback to the SSP administration office when the concern is adressed;
> SSP administration office to conduct a close follow-up to actions taken on the reported safety concern;
> The SSP administration office to report Status of industry safety performance in RCAA management meetings.

The Data collected through surveillance activities by the oversight departments and entered into CASORT system shall be availed to the SSP administration office/department in order to be able to monitor aggregate aviation system safety performance. The data derived from the SMSs through Safety Core and the data derived from Surveillance activities shall be analysed by the SSP implementation team/National Aviation Safety Committee to produce information from the basis of which RCAA will Prioritise resources towards the areas of greater safety concern (**Data Driven Decision making**)

Rwanda Civil Aviation Authority is implementing a Quality Management System as a means of ensuring that the established procedures and processes are complied with by the departments concerned. Rwanda is committed to fulfilling its ICAO USOAP CMA obligations. The effectiveness of Rwanda's safety oversight function is monitored through regular audits carried out by either an appropriately trained internal audit team or a team of external consultants under RCAA QMS.

9.3. Safety Data Collection, Analysis and Exchange

RCAA and AAID collect, analyse and exchange safety data and information for the purpose of safety improvement. Safety information is also shared with service providers, regional safety oversight organization (CASSOA) and ICAO as appropriate. The sharing of Safety Data and Information shall always be authorized by the SSP Accountable Executice (DG RCAA).

9.4. Mandatory Occurrence Reporting

Safety Core system provides the platform for mandatory reporting by service providers to RCAA. The scope of safety data collection is not limited to aircraft accidents and incidents, but also safety hazards and threats. In this regard, RCAA and AAID have issued an advisory circular specifying the mandatory and voluntary safety reporting to the service providers. The Circular also encourages the reporting of potential safety deficiencies that could affect flight safety.

9.5. Safety Data and Information Analysis

Besides collecting data and information through the Safety Core, RCAA collects data and information from surveillance activities, de-identified information provided by AAID, accident and incident reports and other sources. RCAA SSP administration office analyses these data and information for the purposes of improving safety. Hazard identification and risk management are carried out for significant events and as required for safety risk management. Where the analysis of data and information requires expertise from other people other than those in SSP administration office, they will be invited to provide the required expertise in data analysis.

9.6. Acceptable Level of Safety Performance (ALoSP)

Based on the Service provider's Safety Performance indicators and Safety Performance targets, RCAA develops the aggregate State Level Safety Performance Indicators and associated targets. The acceptance of safety performance indicators and Targets will be in form of an agreement between RCAA and the Service Provider. The monitoring of these safety performance indicators will be done by the SSP administration office and provide a safety review report every end of the reporting period to the RCAA management.

9.7. Safety data driven targeting of oversight of areas of greater concern or need

RCAA 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 hazards, their consequences in operations, and the assessed safety risks.
Based on the analysed accident/incident data, hazard reporting and surveillance reports, RCAA will review existing oversight procedures and, if necessary, define new procedures that will prioritize auditing of those identified areas of greater safety concern or need. This data including information from aviation industry and other aviation safety agencies will be used to identify existing and emerging risks in Rwanda.

RCAA will ensure that service providers' hazard identification and safety risk management processes follow established regulatory requirements and that safety risk controls are appropriately integrated into the service providers' SMS. This will be achieved through oversight activities that include inspections, audits and surveys.
Information from the analysed safety data will be used to prioritize and focus the oversight activities on specific areas including those areas of greater safety concern or need, as identified by the analysis of data on hazards, their consequences in operations, and the assessed safety risks.

The findings of accident investigations are recorded in the AAID database, including recommendations on industry safety issues and required corrective actions. The AAID will

document on the annual report the risks identified by investigations and the associated safety actions undertaken in the previous year.

10. STATE SAFETY PROMOTION

Through the SSP, RCAA shall ensure that safety training, communication and dissemination of safety information takes place. This is a dual-track promotion; both within RCAA and AAID as well as among the service providers they oversee.

10.1. Internal training

RCAA provides training and fosters awareness and two-way communication of safety relevant information to support, within the Rwanda aviation organizations, the development of an organizational Safety culture that fosters an effective and efficient SSP.

Training of RCAA staff and AAID' staff has been an ongoing undertaking and has always received the attention it deserves. Rwanda Civil Aviation Authority has determined the minimum professional qualifications for technical personnel performing aviation safety oversight functions and other related activities. Initial, periodic theoretical and practical specialised trainings including supervisory courses are undertaken as required under the relevant human resource programmes.

However it is recognised that additional specific safety training is required to oversight aviation safety effectively. The SSP Implementation Plan includes proposals for specific SSP and SMS training programmes for all relevant staff during implementation period and beyond. In developing the training plans priority is given to training of personnel involved in implementation of SSP.

As the coordinator of the SSP, RCAA will develop programmes on SSP training for staff of all relevant departments that include training relevant to personnel of other Rwanda Aviation Organisations. The programmes will ensure that the appropriate personnel are qualified to perform SSP duties, as appropriate. The training programmes will be reviewed periodically to ensure they remain relevant to industry developments. The scope of the safety training shall be appropriate to the personnel's involvement in the SSP.

Safety training development will include a documented process to identify training requirements and training provided as well as a means to assess the effectiveness of training. Safety training will be delivered by persons with appropriate knowledge skills, and experience in the applicable subject area.

Internal training requirements will be identified for all relevant staff. However the training programmes may be structured as SMS/SSP courses and delivered to joint audiences.

Safety training will be developed in the following four levels:

a) Generic/Awareness Safety Training

The target audience will be all relevant Civil Aviation Authority Staff including other State Aviation Organisations' relevant staff. The training objectives will be to introduce SSP policy and objectives and SSP/SMS fundamentals. The training will include overview of safety roles, and introduction to safety risk management, including hazard reporting.

b) Initial Safety Training

The target audience will be RCAA safety technical staff and relevant technical staff of other Rwanda Aviation Organisations. The training objectives will include in-depth knowledge of safety risk management, with emphasis on hazard identification and safety risk assessment.

c) Advanced Safety Training
The target audience will be relevant RCAA middle and senior managers including relevant managers from other Rwanda Aviation Organisations. The training objectives will be to develope in-depth knowledge of Safety Assurance, including safety roles, responsibilities, and accountabilities regarding the Safety Assurance component of an SSP.

d) High Level Executive Briefing

The target audience will be the SSP accountable person. High level aviation accountable persons of relevant State Aviation Organisations should also attend this briefing. The training objective will be to provide a broad perspective of SSP.

e) Refresher Training

Refresher safety training will be conducted once a year to all appropriate staff. This may be a one-day internal refresher training programme. Refresher training may be delivered jointly with service providers as an SMS/SSP course. Attendance of relevant outsourced training may also be credited towards refresher training depending on course content.

10.2. Internal communication and dissemination of safety information

Collected safety information through the established mandatory and voluntary incidents and hazards reporting systems shall be communicated to the respective RCAA staff responsible for safety oversight of service providers. The information may be used for investigation or for

information only. When action is taken this shall be documented and stored for traceability and history.

Additionally, RCAA promotes two-way communication of relevant safety-related information amongst the Rwanda aviation organisations and support development of an organizational safety culture that promotes an effective and efficient SSP.

The following are the methods of communicating and disseminating safety-relevant information within the RCAA and relevant Rwanda Aviation Organizations:

For critical safety-relevant information:
a)   Confidential Letters;
b)   Secure Emails.

For non-critical safety-relevant information:
a)   CAA Intranet;
b)   Safety meetings and workshops

10.3. External training, Communication and Dissemination of Safety information

RCAA will provide education, and promote awareness of safety risks to support among service providers the development of an organizational safety culture that fosters an effective and efficient SMS. This will be achieved by undertaking the following:

RCAA will run seminars/ workshops for the industry to promote confidence among operational staff in encouraging and assessing SMS development and performance. The development of an active safety culture at all levels and in all functional areas in the aviation industry is seen as a key area of development.

RCAA encourages a combined audience of Rwanda Aviation Organisations and Service Providers so as to foster a harmonised safety culture.

The training programmes are conducted at three levels:

> High Level Accountable Managers' Briefings
> Generic/Awareness SMS Training
> Initial SSP/SMS Training

10.4. Communication and Dissemination of Information

All the annual or periodic safety reports produced by RCAA that address safety will be communicated to the service providers for their information and education. Any changes in the objectives or safety risk evaluation methods or any similar safety-related action or activity taken by RCAA will also be communicated to service providers.

RCAA will, in coordination with Aviation Accident Investigation Division conduct safety forum at least once a year with operators and service providers, in order to keep them advised of likely regulatory developments and brief on relevant safety information so as to develop the required safety culture.

Rwanda Civil Aviation Authority will establish the following methods of communication and dissemination of safety-relevant information nationally and internationally:

For critical safety-relevant information that pertains to a specific operator or service provider:
a)   Confidential Letters;
b)   Email system.

For safety-relevant information affecting the entire industry or of a non-critical nature:
a)   RCAA Website;
b)   Safety Alerts;
c)   Safety Newsletters;
d)   Safety Journal;
e)   NOTAMS;
f)   Aeronautical Information Circulars;
g)   AIP Supplements

11. APPENDICES

Appendix A: Reference Documents

- ➤ ICAO Doc 9859 SMM 4th Edition
- ➤ Annex 19
- ➤ The Law establishing Rwanda Civil Aviation Authority
- ➤ Law Establishing Regulations Governing Civil Aviation
- ➤ ICAO Doc 10004 (GASP)

11.1 Appendix B: Acronyms

AAID	Aviation Accident Investigation Division
ALoSP	Acceptable Level of Safety Performance
ATM	Air Traffic Management
AIP	Aeronautical Information Publication
AMO	Approved Maintenance Organization
CARC	Civil Aviation Regulations Committee
CASORT	Civil Aviation Safety Oversight and Reporting Tool
CASSOA	Civil Aviation Safety and Security Oversight Agency
ECCAIRS	European Coordination Center for Accident and Incident Reporting System
ICAO	International Civil Aviation Organization
SRM	Safety Risk Management

11.2 Appendix C: Definitions

Acceptable level of safety performance (ALoSP). The minimum level of safety performance of civil aviation in a State, as defined in its State safety programme, or of a service provider, as defined in its safety management system, expressed in terms of safety performance targets and safety performance indicators.

Accident. An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until suchtime as all such persons have disembarked, in which:

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

— being in the aircraft, or

— direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or

— direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

— adversely affects the structural strength, performance or flight characteristics of the aircraft, and

— would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

c) the aircraft is missing or is completely inaccessible.

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

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

Aerodrome certificate. A certificate issued by the appropriate authority under applicable regulations for the operation of an aerodrome.

Aeronautical Information Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

Air operator certificate (AOC). A certificate authorizing an operator to carry out specified commercial air transport operations.

Air traffic control service. A service provided for the purpose of:

a) preventing collisions:

   1) between aircraft, and

2) on the manoeuvring area between aircraft and obstructions; and

b) expediting and maintaining an orderly flow of air traffic.

Approved maintenance organization (AMO). An organization approved by a Contracting State, in accordance with the requirements of ICAO Annex 6, Part I, Chapter 8 — Aeroplane Maintenance, to perform maintenance of aircraft or parts thereof and operating under supervision approved by that State.

Note.— Nothing in this definition is intended to preclude that the organization and its supervision be approved by more than one State.

Approved training. Training conducted under special curricula and supervision approved by a Contracting State that, in the case of flight crew members, is conducted within an approved training organization.

Approved training organization (ATO). An organization that has been approved to perform aviation training by a State Civil Aviation Authority and operating under the supervision of that State.

Certification, A process performed by the appropriate authority in order to approve an established provider of Aviation related services.

Certified aerodrome. An aerodrome whose operator has been granted an aerodrome certificate.

Flight data analysis. A process of analysing recorded flight data in order to improve the safety of flight operations.

Hazard. A condition or an object with the potential to cause injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

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

Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident/Incident Reporting Manual (ADREP Manual) (Doc 9156).

Investigation. A process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations.

Level of safety. Degree of safety of a system, representing the quality of the system, safety-wise, expressed through safety indicators.

Licensing Authority. The Authority designated by a Contracting State as responsible for the licensing of personnel.

Note.— In the provisions of Annex 1, the Licensing Authority is deemed to have been given the following responsibilities by the Contracting State:

a) assessment of an applicant's qualifications to hold a licence or rating;

b) issue and endorsement of licences and ratings;

c) designation and authorization of approved persons;

d) approval of training courses;

e) approval of the use of flight simulation training devices and authorization for their use in gaining the experience or in demonstrating the skill required for the issue of a licence or rating; and

f) validation of licences issued by other Contracting States.

Maintenance. The performance of tasks required ensuring the continuing airworthiness of an aircraft or ground based equipment in the service of the Aviation sector including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

Maintenance organization's procedures manual. A document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

Maintenance programme. A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of aircraft or ground based equipment in the service of the Aviation sector to which it applies.

Maintenance release. A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organization's procedures manual or under an equivalent system.

Operations specifications. The authorizations, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.

Partner States. The parties to the Treaty for the Establishment of the East African Community i.e. The Republic of Burundi, The Republic of Kenya, The Republic of Rwanda, The Republic of Uganda, The United Republic of Tanzania.

Performance criteria. Simple, evaluative statements on the required outcome of the competency element and a description of the criteria used to judge whether the required level of performance has been achieved.

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Quality assurance. Part of quality management focused on providing confidence that quality requirements will be fulfilled.

Quality control. Part of quality management focused on fulfilling quality requirements.

Quality management. Coordinated activities to direct and control an organization with regard to quality.

Quality system. Documented organizational procedures and policies; internal audit of those policies and procedures; management review and recommendation for quality improvement.

Safety. The state in which the possibility of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and safety risk management.

Safety indicators. Parameters that characterize and/or typify the level of safety of the system.

Safety management system. A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Safety programme. An integrated set of regulations and activities aimed at improving safety.

Safety risk. Assessment, expressed in terms of predicted probability and severity, of the consequences of a hazard, taking as reference the worst foreseeable situation.

Note. — Typically, safety risks are designated through an alphanumeric convention that allows for their measurement.

Safety risk management. A generic term that encompasses the assessment and mitigation of the safety risks of the consequences of hazards that threaten the capabilities of an organization, to a level as low as reasonably practicable (ALARP).

Safety risk probability. The likelihood that an unsafe event or condition might occur.

Safety risk severity. The possible consequences of an unsafe event or condition, taking as reference the worst foreseeable situation.

Safety targets. Concrete safety objectives to be achieved.

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

State of Registry. The State on whose register the aircraft is entered.

Note.— In the case of the registration of aircraft of an international operating agency on other than a national basis, the States constituting the agency are jointly and severally bound to assume the obligations which, under the Chicago Convention, attach to a State of Registry. See, in this regard, the Council Resolution of 14 December 1967 on Nationality and Registration of Aircraft Operated by International Operating Agencies which can be found in Policy and Guidance Material on the Economic Regulation of International Air Transport (Doc 9587).

Target level of safety (TLS). A generic term representing the level of risk which is considered acceptable in particular circumstances.

Value of a safety indicator. Quantification of a safety indicator.
Value of a safety target. Quantification of a safety target.

11.3 Appendix D: Forms

11.4. Appendix E: Advisory Circulars