



MINISTRY OF WORKS AND TRANSPORT

NATIONAL AVIATION SAFETY PLAN 2022 – 2025

UGANDA CIVIL AVIATION AUTHORITY

Edition I

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RECORD OF AMENDMENTS

No.	Date Applicable	Date Entered	Entered by

FOREWORD

It gives me immense pleasure to communicate that Uganda has come up with a four-year National Aviation Safety Plan (2022-2025) which promotes and supports prioritization and continuous improvement of aviation safety in Uganda.

This first edition of the National Aviation Safety Plan (NASP) has been developed by conducting meetings and discussions with the stakeholders and assessing the global safety priorities. Uganda's NASP incorporates the Safety Enhancement initiatives (SEI) contained in the revised Abuja safety Targets (AST) and ICAO's Global Aviation Safety Plan (GASP 2020-2022). This NASP shall be reviewed upon revision of the GASP or as current circumstances may dictate.






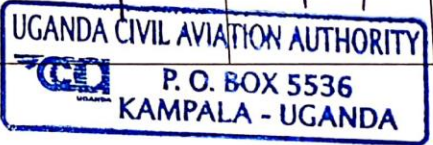
The NASP sets out a continuous improvement strategy, which helps to achieve objectives of the State through implementation of effective safety oversight and State Safety Programme. It recognizes that it is important for everyone in aviation to work closely and in a collaborative manner to identify existing and emerging safety risks to ensure that the most appropriate safety enhancement initiatives are adopted to address and reduce these risks.

Uganda Civil Aviation Authority (UCAA) and the Accident and Incident Investigation Unit (AIIU) will work closely with the aviation industry to keep aviation safe.




DIRECTOR GENERAL
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APPROVAL PAGE

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SECTION 1. INTRODUCTION

1.1 Overview of the NASP

Uganda is committed to enhancing aviation safety and to the resourcing of supporting activities. The purpose of this National Aviation Safety Plan (NASP) is to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a national aviation safety strategy. A safe aviation system contributes to the economic development of Uganda and its industries. The NASP promotes the effective implementation of Uganda's safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between Uganda and other States, regions and industry. All stakeholders are encouraged to support and implement the NASP as the strategy for the continuous improvement of aviation safety.

The NASP of Uganda is in alignment with the ICAO *Global Aviation Safety Plan* (GASP, Doc 10004) and the Abuja Safety Targets.

1.2 Structure of the NASP

This NASP presents the strategy for enhancing aviation safety for a period of three (04) years. It comprises six sections. In addition to the introduction, sections include: the purpose of the NASP, Uganda's strategic approach to managing aviation safety, the national operational safety risks identified for the period 2022-2025, other safety issues addressed in the NASP, and a description of how the implementation of the safety enhancement initiatives (SEIs) listed in the NASP is going to be monitored.

1.3 Relationship between the NASP and the State safety programme (SSP)

This NASP addresses operational safety risks identified in the ICAO GASP together with the AFI safety risks described in the Abuja declaration. Uganda is committed to fully implement an SSP by 2025 given that State's responsibilities for the management of safety comprise both safety oversight and safety management, collectively implemented through an SSP. Initiatives listed in this NASP address organizational challenges and aim to enhance organizational capabilities related to effective safety oversight.

1.4 Responsibility for the NASP development, implementation and monitoring

Uganda Civil Aviation Authority (UCAA) is responsible for the development, implementation and monitoring of the NASP, in collaboration with the Accident and Incident Investigation Unit (AIIU) and with the national aviation industry. The NASP was developed in consultation with national operators and other stakeholders, and in alignment with the 2020 -2022 GASP.

1.5 National safety issues, goals and targets

The NASP addresses the following national safety issues:

- 1) Inadequacies in the effective implementation of the Critical Elements (CE) of the safety oversight system.
- 2) Delayed State Safety Program (SSP) establishment and implementation.
- 3) Delayed operationalization of the newly established independent accident and incident investigation unit.
- 4) Occasional runway related accidents and serious incidents

To address the issues listed above and enhance aviation safety at the national level, the Uganda NASP contains the following goals and targets:

- 1) Goal 1: Achieve continuous improvement in overall EI of the State safety oversight system
- 2) Goal 2: Implement and maintain an effective SSP.
- 3) Goal 3: Strengthen aircraft accident and incident investigation capabilities
- 4) Goal 4: Achieve a continuous reduction of runway related accidents and serious incidents

1.6 Operational Context

1.6.1 General

On 30th January 2020, the WHO declared the outbreak of coronavirus disease (COVID-19) a Public Health Emergency of International Concern. As of today, nearly all the countries in the world have been affected, including Uganda where the first case was reported in March 2021. (www.health.go.ug)

After the year 2020, the aviation industry and the economy faced the worst crisis because of the COVID-19 pandemic. There was significant decline in the traffic volumes as well as the passenger numbers. The numerous lockdowns and restrictions instituted by the Ugandan government affected all industries in Uganda.

The tourism sector was the hardest hit by COVID-19 as the government issued travel warnings to people travelling to and out of Uganda. Tourism is one of the highest sources of foreign exchange in Uganda. It constitutes 7.7% of the country's GDP and employs close to 700,000 people. (www.pwc.com)

The pandemic also affected the job market, the employment conditions and other socio-economic factors. According to the International Labour Office, the unemployment rate grew by 1.1 to 6.5 % in 2020, compared to 5.4% in 2019 and will only slowly decrease to an expected 6.3% in 2021 and 5.7% in 2022. (www.ilo.org)

The evolution of the pandemic needs to be brought in this picture to complete the worldwide view. The start of the vaccination campaigns at the end of 2020 and the steady increase in vaccination rates in 2021 are strong indicators for a recovery soon.

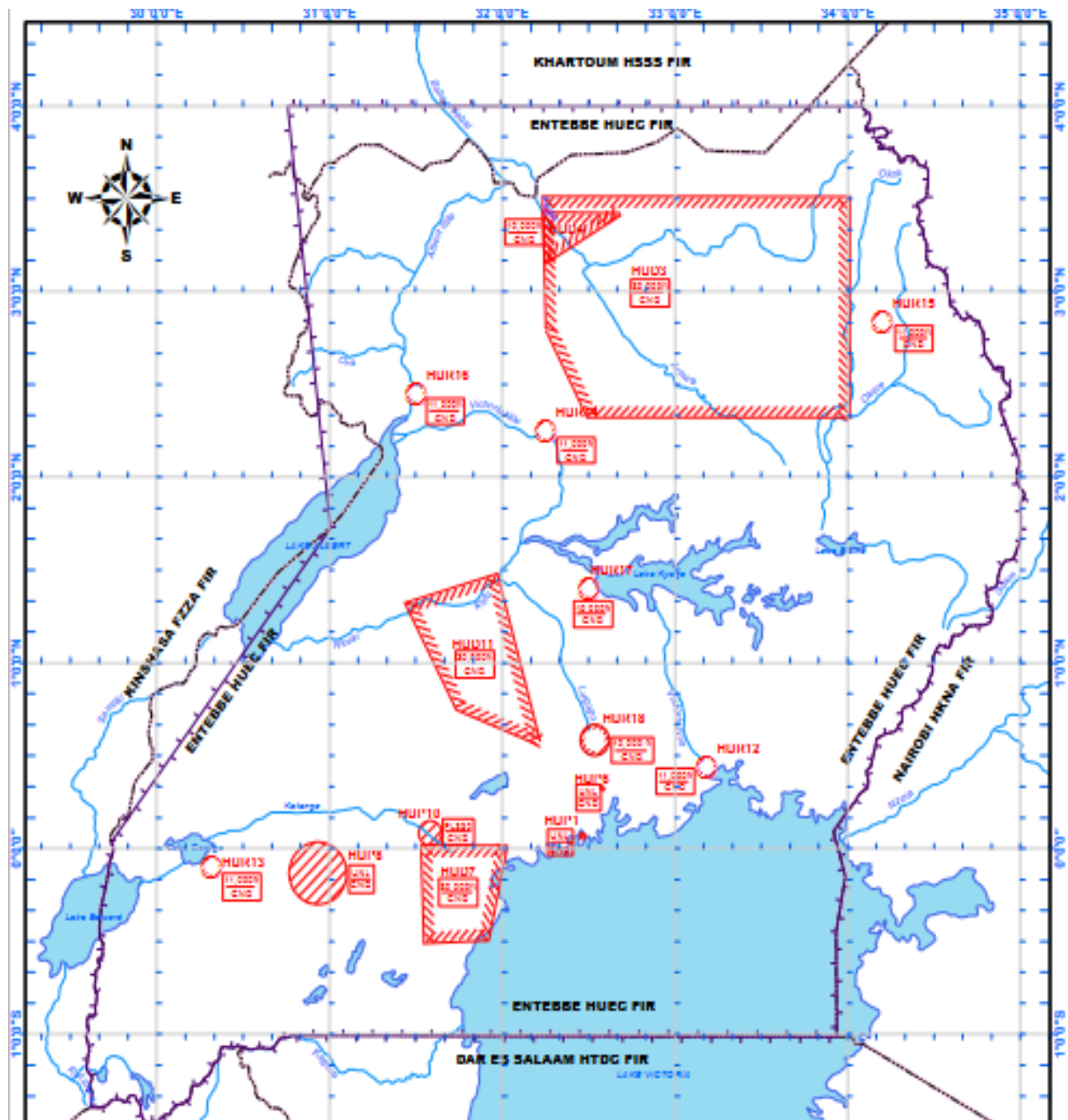
1.6.2 Aerodromes in Uganda

There are 16 licensed aerodromes in Uganda. Entebbe International Airport is the only international aerodrome which is currently undergoing certification at phase three. A second international aerodrome to serve the oil rich area of Kabaale in western Uganda is currently under construction.

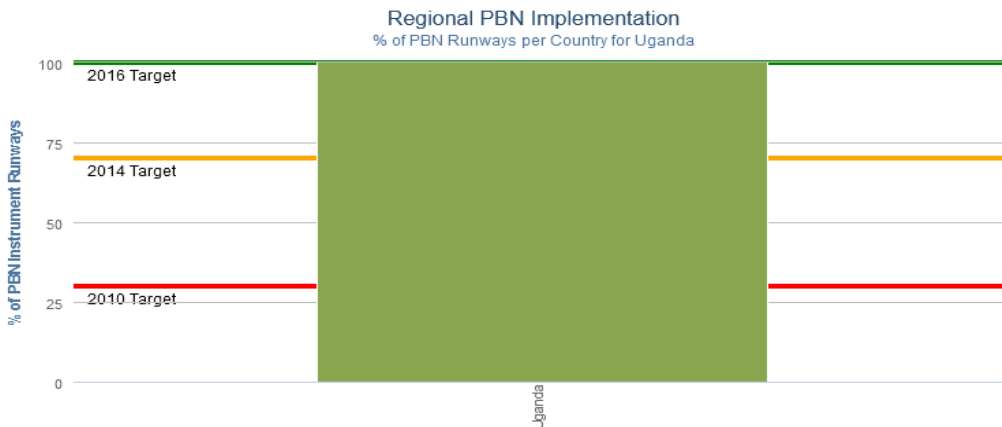
1.6.3 Airspace Design

The airspace of Uganda is classified into Class A, C, D, E and G. There are three (03) danger areas, five (05) prohibited and seven (07). There are no published flexible use airspaces. Nevertheless, there is a continuous and fluent civil-military coordination (*CAMP 2014 - 2034*)

Prohibited, Restricted and Danger Areas index Chart (AIP Uganda, 19th May 2022)



Air Traffic Services Route System- Index Chart (AIP Uganda, 19th May 2022)



Source: istars

1.6.5 Operators

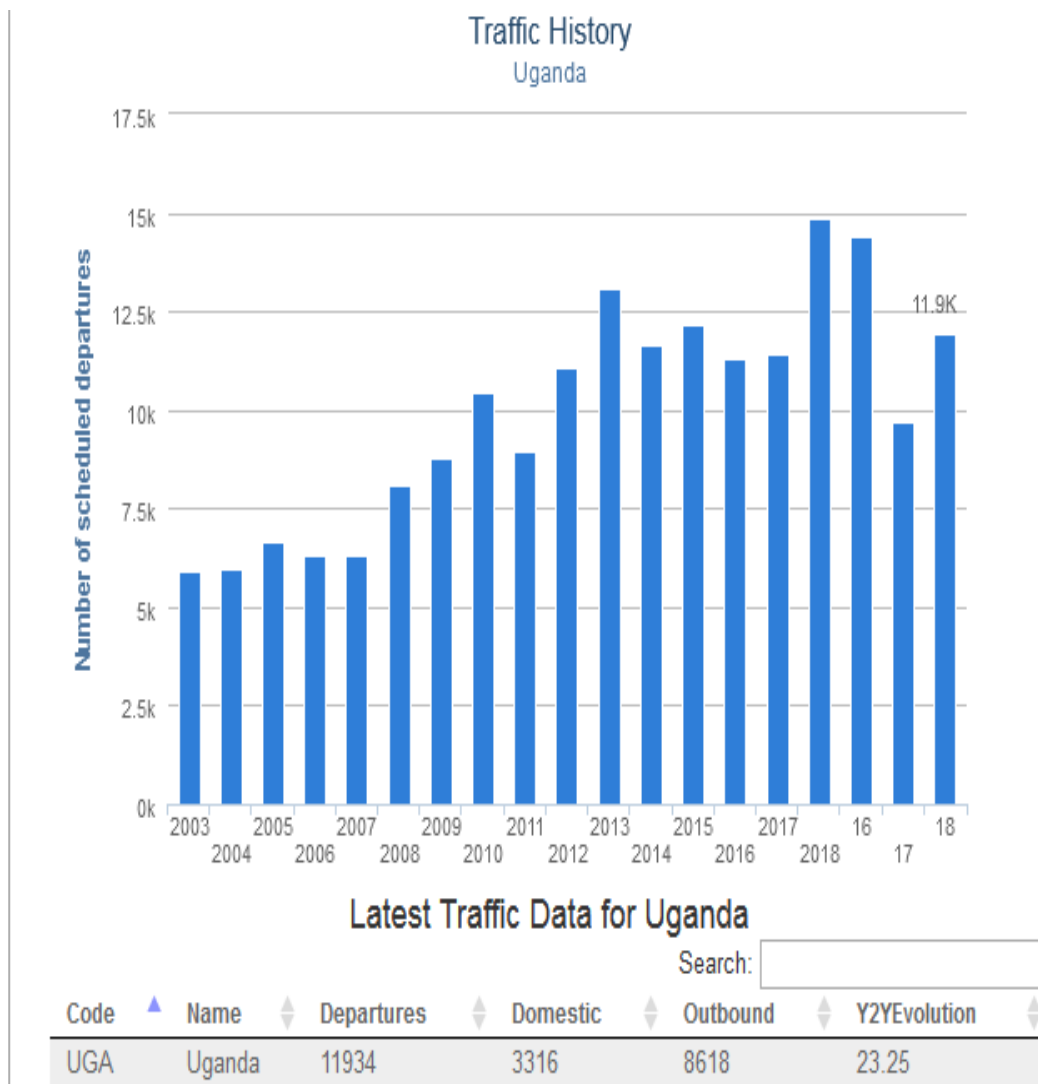
There are currently twelve (12) air operator certificates (AOCs) issued by Uganda and all conduct international commercial air transport operations. Uganda does not have domestic air taxi services operators. Uganda has three (03) helicopter operators. Uganda has a national carrier (Uganda Airlines) offering scheduled services from Entebbe to Kigali, Kenya, Johannesburg, South Sudan, UAE and Tanzania.

The foreign scheduled airlines operating currently into Uganda include: Air Tanzania, EgyptAir, Emirates Airline, Ethiopian Airlines, Flydubai, Kenya Airways, Qatar Airways, KLM Royal Dutch Airlines, Rwanda Air, Brussels Airlines, Tarco Aviation and Turkish Airlines.

There are eight (08) Approved Training Organisations and eight (08) Approved Maintenance Organisations in Uganda.

1.6.6 Air Traffic History

There were 230,160 movements in Uganda over the period of 2002 to 2012. The Air Transport Statistics of Uganda over the period of 2013 to 2018 is shown below based on iSTAR data.



1.6.7 International Traffic

Nearly 99% of the airport traffic is international, long haul routes are approximately 31% of the total passengers while short-medium haul account for 69% (*Uganda CAMP 2014-2034*).

1.6.8 Air Traffic Forecast

Total passengers at Entebbe International Airport (EIA) will grow from almost 1.4 million passengers in 2012 to more than 7.5 million passengers in 2033. Total aircraft movements and cargo will follow a similar trend from trend from 43,000 to 124,000 movements and from 56,000 to 172,000 tonnes respectively. (*Uganda CAMP 2014-2034*)

Traffic forecast Summary

	Total Movements	Total Passengers	Cargo Tones
2012	43,449	1,475,631	55,907
2018	55,500	2,377,100	77,100
2023	76,300	3,810,700	100,700
2033	123,700	7,667,700	172,100

Source: (CAMP 2014 – 2034)

SECTION 2. PURPOSE OF UGANDA’S NATIONAL AVIATION SAFETY PLAN

The GASP contains an aspirational safety goal to *achieve and maintain zero fatalities in commercial operations by 2030 and beyond*. This goal is deemed “aspirational” as it represents an ambition of achieving an even safer aviation system. The year 2030 has been selected as the time frame for reaching this goal as it is when the traffic volume is forecasted to double. It is also the target year presented in the UN SDGs Agenda for Sustainable Development. The GASP is aligned with the timelines of this agenda since the GASP goals contribute to the achievement of the UN SDGs. (GASP 2020-22)

The NASP is the master planning document containing the strategic direction of Uganda for the management of aviation safety for a period of three (04) years (2022 to 2025). This plan lists national safety issues, sets national aviation safety goals and targets, and presents a series of safety enhancement initiatives (SEIs) to address identified safety deficiencies and achieve the national safety goals and targets.

The Uganda Civil Aviation Master Plan addresses all aspects of air transport at the State level, with the objective of providing a clear and comprehensive planning and implementation strategy for the future development of the entire civil aviation sector. The NASP contains in-depth information specific to aviation safety aspects that are referenced in the Uganda Civil Aviation Master Plan (CAMP 2014-2034).

The NASP has been developed using international safety goals and targets and HRCs from the GASP (www.icao.int/gasp). The SEIs listed in the NASP support the improvement of safety at the wider regional and international levels and include several actions to address specific operational safety risks and recommended SEIs for individual States set out by the Abuja Safety Targets.

Uganda has adopted these SEIs and has included them in this plan. Cross-references are provided to the RASG AFI for individual SEIs where relevant.

SECTION 3. UGANDA’S STRATEGIC APPROACH TO MANAGING AVIATION SAFETY

The NASP presents the SEIs that were developed based on the organizational challenges (ORG) and operational safety risks (OPS), as presented in the ICAO global aviation safety roadmap, as well as State-specific issues identified by safety occurrence reports. This plan is developed and maintained by Uganda Civil Aviation Authority (UCAA) in coordination with all stakeholders and shall be updated at least every three (03) years.

The NASP includes the following national safety goals and targets, for the management of aviation safety, as well as a series of indicators to monitor the progress made towards their achievement. They are tied to the goals, targets and indicators listed in the GASP and the revised Abuja Safety Targets and include additional national safety goals, targets and indicators.

Goal	Target	Indicators	Link to GASP and Abuja Safety Targets (AST)
Goal 1: Achieve a continuous improvement in overall EI of the State safety oversight system	1.1 By 2024, reach an implementation score of 75 %. 1.2 By 2025, reach an implementation score of 85 %. 1.3 80 % of all PPQs satisfactory 1.4 80% of all CAPs completed 1.5 Entebbe International Airport to be certified by October 2022	1.1.1 Overall EI score for Uganda in 2023 1.1.2 Overall EI score for Uganda in 2024 1.1.3 Percentage of PPQs that are satisfactorily implemented 1.1.4 Percentage of CAPs completed with evidence	This goal is directly linked to Goal 2 and target 2.1 It is also linked to the revised AST 5.
Goal 2: Implement and Maintain an effective State Safety Program (SSP)	2.1 Implement foundation SSP by 2023 2.2 To have an effective SSP with the	2.1.1 The percentage of SSP foundation PQs deemed satisfactory	This goal is directly linked to Goal 3 and target 3.1 It is also linked to the revised AST 6.

Goal	Target	Indicators	Link to GASP and Abuja Safety Targets (AST)
	appropriate maturity level established 2.3 70% of service providers have implemented SMS	2.1.2 Percentage of service providers whose SMS have been accepted by the Authority	
Goal 3: Strengthen aircraft accident and incident investigation capabilities	3.1 Fully established AAIU by August 2022 3.2 Implement and maintain a mandatory reporting system in Uganda that can capture over 90% of mandatory incidents 3.3	3.1.1	This goal is directly linked to Goal 2 and target 2.1
Goal 4: Achieve a continuous reduction of runway related accidents and serious incidents	4.1 Maintain a decreasing trend of the national accident rate 4.2 Evolve EIA's runway safety team into a robust runway safety team by 2023.	4.1.1 Number of accidents occurring in Uganda per 10,000 departures 4.1.2 Percentage of accidents and serious incidents reported.	This goal is directly linked to Goal 1 and target 1.1 It is also linked to the revised AST 1
Goal 5: Increase collaboration at the regional level	5.1 By 2023, Uganda to contribute information on safety risks, including SSP SPIs to the AFI RASG	5.1.1 Frequency of contributing information on safety risks to AFI RASG and other stakeholders	This goal is directly linked to Goal 4 and targets 4.2 It is also linked to the revised AST 6.

Goal	Target	Indicators	Link to GASP and Abuja Safety Targets (AST)
Goal 6: Expand the use of industry safety programmes by industry	6.1 By 2024 all service providers to use globally harmonized SPIs as part of their SMS 6.2 By 2025, Increase the number of service providers participating in the corresponding ICAO-recognized industry assessment programmes	6.1.1 No. of service providers using globally harmonized metrics for their SPIs 6.2.1 No. of service providers participating in corresponding ICAO-recognized industry assessment programmes	This goal is directly linked to Goal 5 and targets 5.1 and 5.2 It is also linked to the revised AST 6,7 and 8
Goal 7: Ensure Uganda has the appropriate aviation infrastructure to support safe operations	7.1 By 2023, Uganda to implement the air navigation and airport core infrastructure	7.1.1 Percentage of navigation and airport core infrastructure elements implemented	This goal is directly linked to Goal 6 and targets 6.1 Its is also linked to the revised AST 14 and 10

The SEIs in this plan are implemented through Uganda's existing safety oversight capabilities and the service providers' SMS. SEIs derived from the ICAO global aviation safety roadmap were identified to achieve the national safety goals and targets presented in the NASP. Some of the national SEIs are linked to overarching SEIs at the regional and international levels and help to enhance aviation safety globally. The full list of the SEIs is presented in the appendix to the NASP.

The NASP also addresses emerging issues which include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete typical data- driven analysis. It is important that Uganda remains vigilant on emerging issues to identify potential operational safety risks, collect relevant data and proactively develop mitigations to address them. Appendix 3 of the NASP addresses the following emerging issues:

- 1) Safe integration of unmanned aircraft systems in the airspace
- 2) Risks arising from conflict zones
- 3) Disruptions due to Public Health crises like Covid-19 pandemic

SECTION 4. NATIONAL OPERATIONAL SAFETY RISKS

4.1 Introduction to Ugandan Operational Risks

The NASP includes SEIs that address national operational safety risks, derived from lessons learned from operational occurrences and from a data-driven approach. These SEI may include actions such as: rule-making; policy development; targeted safety oversight activities; safety data analysis; and safety promotion. Separate sections are provided to address commercial air transport and general aviation to make the information more accessible to stakeholders.

Uganda compiles quarterly safety occurrence reports that are shared with CASSOA for EAC regional data collection and analysis.

4.2 Summary of accidents and serious incidents

The summary of accidents and serious incidents that occurred in Uganda, and those for aircraft registered in Uganda involved in commercial air transport and aircraft involved in general aviation, is shown in the tables below.

Year	Fatal accidents	Non-Fatal accidents	Serious incidents
<i>Commercial air transport occurrences in Uganda</i>			
2008 – 2021	02	00	01
2022	00	00	01
<i>General Aviation aircraft occurrences in Uganda</i>			
2019 – 2021	00	00	00
2022	00	00	00

Year	Fatal accidents	Non-Fatal accidents	Serious incidents
<i>Occurrences involving commercial air transport aircraft registered in Uganda</i>			
2019 – 2021	00	00	02
2022	00	00	00
<i>Occurrences involving general aviation aircraft registered in Uganda</i>			
2019 – 2021	00	00	00
2022	00	00	00

4.3 Uganda HRC Occurrences

Although Uganda has experienced a very low rate of GASP HRC occurrences over the past decade, all GASP HRCs remain relevant to Uganda aviation. In this context, Uganda will actively manage these HRCs, by implementing strategies to seek to reduce the rate of incidents and accidents in cognizance of the global and regional initiative.

The following five (05) national high-risk categories of occurrences (HRCs) in Ugandan context were considered of the utmost priority because of the number of fatalities and risk of fatalities associated with such events. They were identified based on analyses from mandatory and voluntary reporting systems, accident and incident investigation reports, safety oversight activities over the past 10 years and on the operational safety risks described in the GASP. These HRCs are in line with those listed in the 2020-2022 edition of the GASP:

- 1) Runway Excursion (RE)
- 2) Mid Air Collision (MAC) or Air proximity
- 3) Runway Incursion (RI)
- 4) Loss of Control-Inflight (LOC-I)
- 5) Controlled Flight into terrain (CFIT)

In addition to the national operational safety risks listed above, the following additional categories of operational safety risks have been identified:

- 1) Wildlife and bird strikes
- 2) Aviation Procedures & Documentation
- 3) Emergency Response Planning

The aviation occurrence categories from the CAST/ICAO Common Taxonomy Team (CICTT) were used to assess risk categories in the process of determining national operational safety risks. The CICTT Taxonomy is found on the ICAO website at <https://www.icao.int/safety/airnavigation/AIG/Pages/Taxonomy.aspx>.

To address the national operational safety risks listed above, Uganda identified the following contributing factors leading to HRCs and will implement a series of SEIs, some of which are derived from the ICAO OPS roadmap, contained in the GASP:

HRC 1: Runway Excursion

A runway excursion is a veer off or overrun off the runway surface. The term “runway excursion” is a categorization of an accident or incident which occurs during either the take-off or landing phase. The excursion may be intentional or unintentional. For example, the deliberate veer off to avoid a collision brought about by a runway incursion. Runway excursions involve many contributing factors:

- 1) Contaminated runway
- 2) Unstable approach
- 3) Weather

HRC 2: Mid Air Collision

A mid-air collision refers to a collision between aircraft while both are airborne. Mid-air collisions can be the result of a level bust due to a loss of separation between aircraft. Mid-air collisions involve many contributing factors, including:

- 1) traffic conditions
- 2) air traffic controller workload
- 3) aircraft equipment;
- 4) flight crew training

HRC 3: Runway Incursion

A runway incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. Runway incursions involve many contributing factors, including:

- 1) Aerodrome design
- 2) Poor signage and markings
- 3) Use of non-standard phraseology
- 4) pilot and air traffic controller workload

HRC 4: Loss of control in flight (LOC I)

A loss of control in-flight (LOC-I) is an extreme manifestation of a deviation from intended flight path. Accidents categorized as LOC-I involve a loss of control in-flight that is not recoverable. LOC-I events involve many contributing factors that can be categorized as:

- 1) aeroplane systems-induced
- 2) environmentally induced
- 3) pilot/human-induced or any combination of these three

HRC 5: Controlled Flight Into Terrain (CFIT)

CFIT is an in-flight collision with terrain, water or obstacle without indication of loss of control. Accidents categorized as CFIT involve all instances where an aircraft is flown into terrain in a controlled manner, regardless of the crew's situational awareness. CFIT involve many contributing factors including:

- 1) procedure design and documentation
- 2) pilot disorientation
- 3) adverse weather

The full list of the SEIs is presented in the Appendix 1 and 2 to the NASP.

SECTION 5. OTHER SAFETY ISSUES

5.1 Critical Elements of a Safety Oversight System

In addition to the national operational safety risks listed in the NASP, Uganda has identified other safety issues and initiatives selected for the NASP. These are given priority in the NASP since they are aimed at enhancing and strengthening Uganda's safety oversight capabilities and the management of aviation safety at the national level.

The eight critical elements (CEs) of a safety oversight system are defined by ICAO. Uganda is committed to the effective implementation of these eight CEs, as part of its overall safety oversight responsibilities, which emphasize Uganda's commitment to safety in respect of its aviation activities. The eight CEs are presented in Figure 1 below.

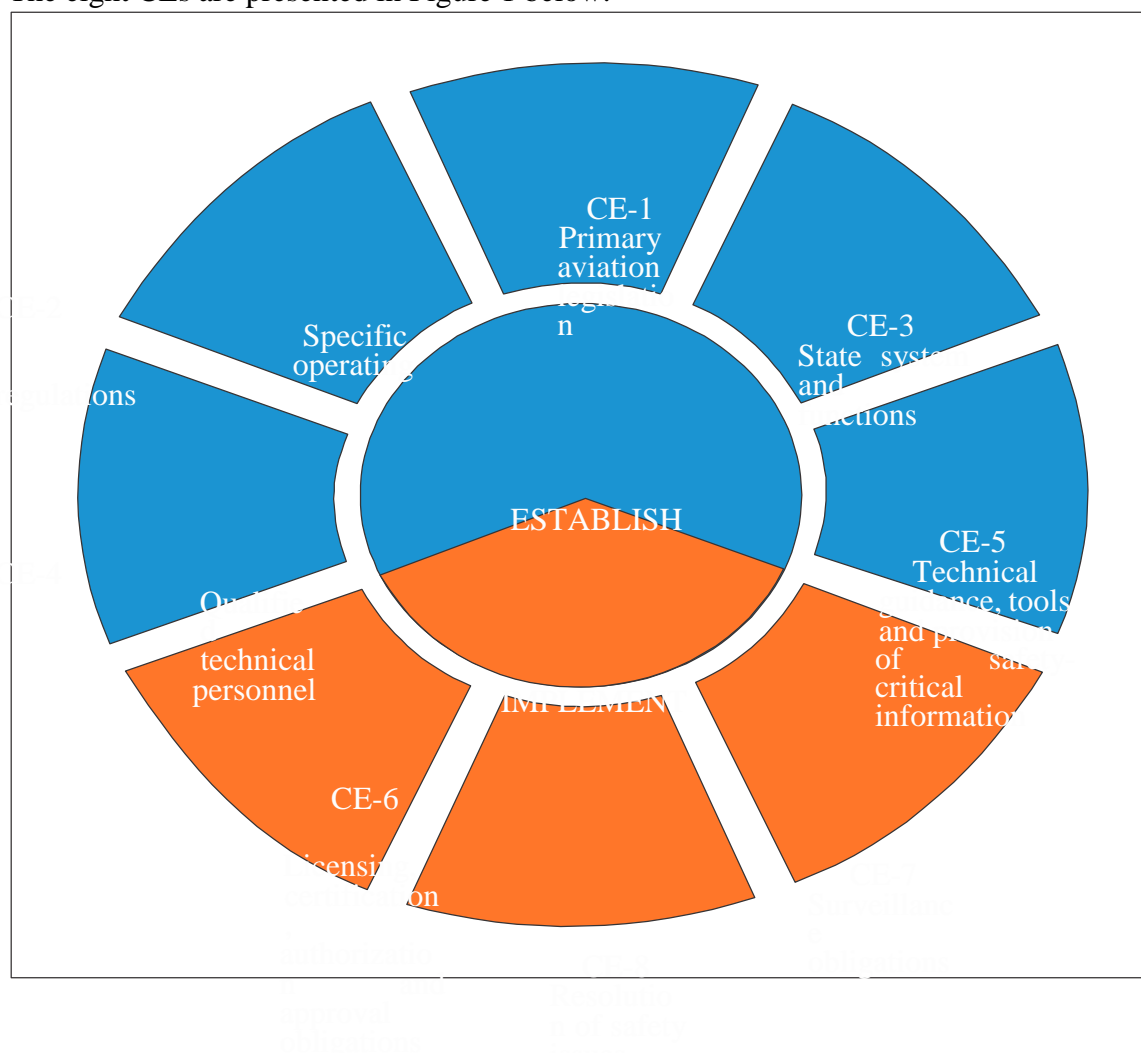
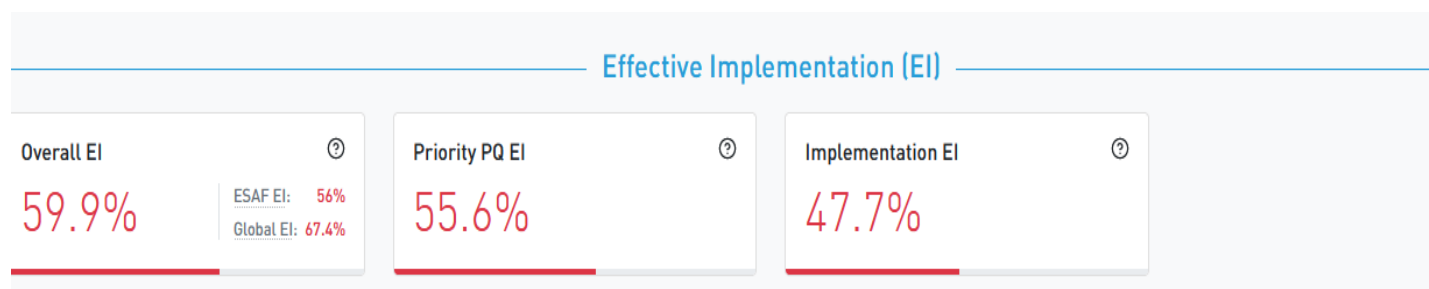


Figure 1. Critical elements of a State's safety oversight system

5.2 USOAP Results by Area and Critical Element

Uganda was first audited in 2008 and an ICVM conducted in 2014. The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Uganda's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA), have resulted in the following scores:



EI score by CE

CE -1	CE -2	CE -3	CE -4	CE -5	CE -6	CE -7	CE -8
70.37%	69.86%	67.92%	52.63%	83.51%	59.62%	36.67%	22.86%

EI score by audit area*

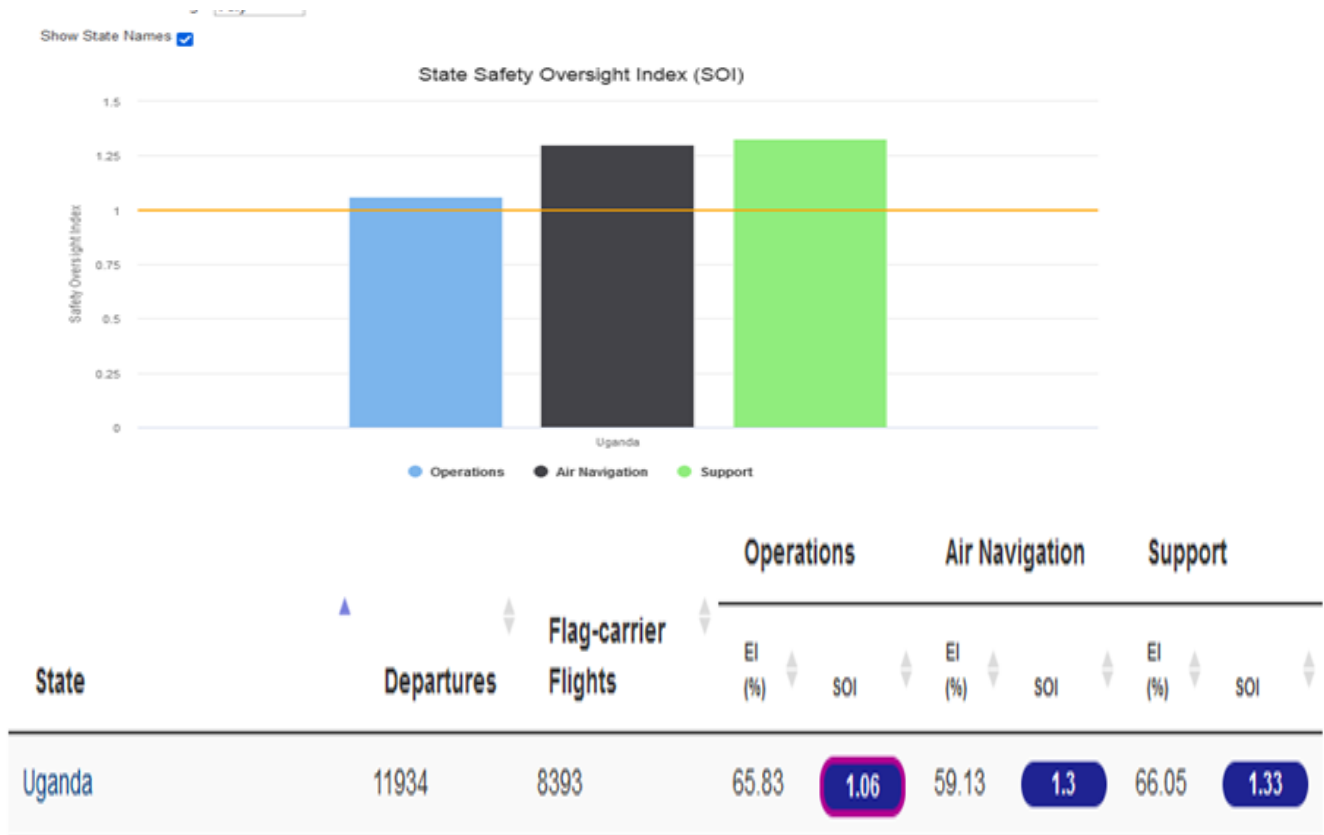
LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
42.86%	85.71%	62.86%	47.06%	81.82%	66.2%	42.31%	66.98%

* Eight audit areas pertaining to USOAP, i.e. primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG); personnel licensing and training (PEL); aircraft operations (OPS); airworthiness of aircraft (AIR); aircraft accident and incident investigation (AIG); air navigation services (ANS); and aerodromes and ground aids (AGA).

5.3 Safety Oversight Index (SOI)

The safety oversight index (SOI) of a State is an ICAO indicator of its safety oversight capabilities. Every State audited by ICAO has an SOI. It is a number greater than zero, where "1" represents a level at which the safety oversight capabilities of a State would indicate the minimum expected capabilities considering the number of departures as an indication of the size of that State's aviation system. The calculations conducted by ICAO of Uganda's SOI have resulted in the following scores:

Overall SOI score	Score in the area of Operations (PEL, AIR, OPS)	Score in the area of Air Navigation (AGA and ANS)	Score in the area of Support Functions (ORG and LEG)
1.23	1.06	1.3	1.33



Source: istars

The following three (04) other safety issues in the Ugandan context were considered of the utmost priority because they are systemic issues, which impact the effectiveness of safety risk controls. They were identified based on analysis from USOAP data, accident and incident investigation reports, safety oversight activities over the past 10 years, as well as on the basis of regional analysis conducted by RASG AFI. These issues are typically organizational in nature and relate to challenges associated with the conduct of States' safety oversight functions, implementation of SSP at the national level and the level of SMS implementation by national service providers. They take into consideration organizational culture, policies and procedures within UCAA, AAIU and those of service providers. These safety issues are in line with those listed in the 2020 -2022 edition of the GASP:

- 1) Lack of capability at national level to resolve safety issues. This was the area where Uganda received the lowest EI score in the 2014 ICVM and was therefore placed as a high priority.

- 2) Inadequate capability to meet Surveillance obligations. This was the second worst performing CE in the 2014 ICVM.
- 3) Inadequate qualification, experience, skills and training of technical personnel. This was the third worst performing CE in the 2014 ICVM.
- 4) Inadequate capability at nationality level to certify, approve, license and authorize service providers. This was the fourth worst performing CE in the 2014 ICVM.

To address the issues listed above, Uganda will implement a series of SEIs, some of which are derived from the ICAO ORG roadmap, contained in the GASP. The full list of the SEIs is presented in the Appendix 1 and 2 to the NASP.

SECTION 6. MONITORING IMPLEMENTATION

Uganda will continuously monitor the implementation of the SEIs listed in the NASP and measure safety performance of the national civil aviation system, to ensure the intended results are achieved, using the mechanisms presented in the appendix to this plan.

In addition to the above, Uganda will review the NASP every 03 years or earlier, if required, to keep the identified operational safety risks, safety issues and selected SEIs updated and relevant. UCAA will periodically review the safety performance of the initiatives listed in the NASP to ensure the achievement of national safety goals and targets. If required, Uganda will seek the support of the industry, RASG AFI and CASSOA to ensure the timely implementation of SEIs to address safety deficiencies and mitigate risks. Through close monitoring of the SEIs, Uganda will adjust the NASP and its initiatives, if needed, and update the NASP accordingly.

Uganda will use the indicators listed in Section 3 of this plan to measure safety performance of the civil aviation system and monitor each national safety target. A periodic annual safety report will be published to provide stakeholders with relevant up-to-date information on the progress made in achieving the national safety goals and targets, as well as the implementation status of the SEIs.

In the event that the national safety goals and targets are not met, the root causes will be presented. If Uganda identifies critical operational safety risks, reasonable measures will be taken to mitigate them as soon as practicable, possibly leading to an unscheduled revision of the NASP.

Uganda will adopt a standardized approach to provide information at the regional level, for reporting to the RASGs. This allows the region to receive information and assess operational safety risks using common methodologies.

Any questions regarding the NASP and its initiatives, and further requests for information, may be addressed to the following:

SSP Coordinator
Directorate of Safety, Security and Economic Regulation
Uganda Civil Aviation Authority
P.O. Box 5536 Kampala
Tel: +256 414 352001
Email: ssp@caa.co.ug
Website: www.caa.go.ug

Appendix 1:

Detailed Safety Enhancement Initiatives: Operational Safety Risks

HRC 1: RUNWAY EXCURSION (RE)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents							
Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/ indicators	Priority	Monitoring Activity
Mitigate contributing factors to RE accidents and incidents AST-1	1A. The State to implement the following RE safety actions - a) Ensure the establishment and implementation of a State runway safety programme and runway safety teams	Q4-2022/23	UCAA	UCAA (Regulator) AAIU Aerodrome Operators ANSP Airforce Air operators UGATCA UPA	Documented Runway safety program Documented runway safety team Wide representation of stakeholders on runway safety team	High	Surveillance activities Follow up meetings
	b) Ensure effective and timely reporting of meteorological and aerodrome conditions (e.g. runway surface condition in accordance to the ICAO global reporting format in Annex 14, Volume I, braking action and revised declared distances)	Q1 2022/23	UCAA	UCAA (Regulator) Aerodrome Operators ANSP	Report format Time reporting of	High	Surveillance activities Follow up meetings

HRC 1: RUNWAY EXCURSION (RE)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/ indicators	Priority	Monitoring Activity
Mitigate contributing factors to RE accidents and incidents AST-1	c) Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	Q2 2022/23	UCAA	UCAA (Regulator) Aerodrome Operator ANSP	Certificate issued	High	Surveillance activities Follow up meetings
	d) Ensure that procedures to systematically reduce the rate of unstabilized approaches to runways are developed and used	Q3 2023/4	UCAA	UCAA (Regulator) ANSP Air Operators	Documented procedures	Medium	Investigation Reports
	1B. The industry to implement the following RE safety actions:	Q2 2023/24	Aerodrome Operators	Aerodrome Operators	Minutes of meetings	High	Surveillance activities
	a) Active participation in runway safety programmes and runway safety teams			Air Operators ANSP	Runway safety activities		Follow up meetings
	b) Effective and timely reporting of meteorological and aerodrome conditions (e.g. runway surface condition in accordance with the ICAO global reporting format in	Q1 2022/23	Aerodrome operators	UCAA (Regulator) Aerodrome Operators ANSP	Report format Time of reporting	High	Surveillance activities Follow up meetings

HRC 1: RUNWAY EXCURSION (RE)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/ indicators	Priority	Monitoring Activity
Mitigate contributing factors to RE accidents and incidents AST-1	Annex 14, Volume I, braking action and revised declared distances)						
	c) Procedures to systematically reduce the rate of unstabilized approaches to runways	Q3 2023/4	ANSP	UCAA (Regulator) ANSP Air Operators	Documented procedures	Medium	Investigation Reports
	2. Validate the effectiveness of the SEIs through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies)	Annually every Q4	UCAA	UCAA (Regulator) AAIIU	Safety data analysis reports	High	Data Analysis
	3. Identify additional contributing factors, for example: a) Ineffective SOPs b) Failure to adhere to the appropriate SOPs c) Long/floated/bounced/firm/off-centre/crabbed landing d) Inadequate approach procedures design e) Inadequate regulatory oversight	Q1 – Q4		Aerodrome Operators Air Operators ANSP	Investigation reports		Investigation s

HRC 1: RUNWAY EXCURSION (RE)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/ indicators	Priority	Monitoring Activity
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for RE	Annually every Q4					
	5.) Conduct continuous evaluations of the performance of the SEIs				Evaluation reports		Evaluations

HRC 3: MID-AIR COLLISION (MAC)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to MAC accidents and incidents	1A. The State to implement the following MAC safety actions: a) Establish guidance and regulations to ensure aircraft are equipped with airborne collision avoidance system (ACAS), in accordance with Annex 6	Q2 2022/23	UCAA	CAA Inspectors CASSOA	Promulgated Regulations	High	Review of Regulations
	b) Ensure adherence to ACAS warning procedures	Q4 2022/23	UCAA	CAA Inspectors Air Operators ANSP	Investigation reports – Corrective action implemented	High	Investigation reports review and follow up
	c) Promote the improvement of air traffic control (ATC) systems, procedures, and tools to enhance conflict management	Q1 2023/24	UCAA	CAA Inspectors ANSP	Investigation reports – Corrective action implemented	Medium	Investigation reports review and follow up

HRC 3: MID-AIR COLLISION (MAC)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	d) Promote the improvement of communications systems and procedures, such as controller-pilot datalink	Q1 2024/25	UCAA	CAA Inspectors ANSP UGATCA UPA	Documented procedures	Medium	Follow up meetings
Mitigate contributing factors to MAC accidents and incidents	1B. The industry to implement the following MAC safety actions: a) Equip aircraft with ACAS	Q3 2022/23	Air operators	Air Operators ANSP	Aircraft equipage	High	Surveillance activities Follow up meetings
	b) Consider the implementation of STCA, including STCA suitable for terminal areas	Q3 2022/23	ANSP	ANSP Air Operators	ATS Alerting Systems installed	High	Surveillance activities Follow up meetings
	c) Improve ATC systems, procedures, and tools to enhance conflict management - this can include predictability of aircraft trajectories, so that conflicts can be predicted and resolved at an earlier	Q3 2022/23	Q3 2022/23	ANSP CAA Inspectors Air Operators	Approved procedures	Medium	Follow up meetings

HRC 3: MID-AIR COLLISION (MAC)							
Goal: Achieve a continuous reduction of operational safety risks							
Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to MAC	stage, using medium term conflict detection (MTCD) and similar systems						
	d) Improve communications systems and procedures, such as controller-pilot datalink	Q1 2024/25	UCAA	CAA Inspectors ANSP UGATCA UPA	Documented procedures	Medium	Follow up meetings
	2. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations (apply safety management methodologies)	Annually every Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Safety data analysis reports	High	Data Analysis

HRC 3: MID-AIR COLLISION (MAC)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
accidents and incidents	<p>3. Identify additional contributing factors, for example:</p> <p>a) Traffic conditions - traffic density, complexity, mixture of aircraft types and capabilities, etc.</p> <p>b) ATC performance related to workload, competence, teamwork, procedures, commitment, etc., as well as the influence of air navigation services providers' (ANSP) safety management</p> <p>c) Flight crew training and corporate culture with workload, competence, teamwork, procedures, commitment etc., and the influence of aircraft operator's safety management</p> <p>d) ATC systems - flight data processing, communication, short term conflict alert (STCA), etc., as well as the interaction with the human operators and the</p>	Q1 – Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Investigation reports	High	Investigations

HRC 3: MID-AIR COLLISION (MAC)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	aircraft systems, and the procurement policy of the ANSP e) Aircraft equipment - autopilots, transponders and ACAS, but also aircraft performance (e.g. rate-of-climb) and their physical size f) Navigation infrastructure - both coverage and quality g) Surveillance - both coverage and quality h) Flight plan processing - efficiency and reliability of flight plan submission, approval and distribution i) Airspace - complexity of airspace design, route layout, extent of controlled or uncontrolled airspace, proximity of military operational or training areas, etc. j) Flight in adverse environmental conditions that may influence						

HRC 3: MID-AIR COLLISION (MAC)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	conflict management and collision avoidance						
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for MAC	Annually every Q4	UCAA	UCAA (Regulator) ANSP Air Operators ATOs	Reviewed SEIs	High	Follow up meetings
	5. Conduct continuous evaluations of the performance of the SEIs	Q1 – Q4	UCAA	AAIU UGATCA UPA	Evaluation Reports		Evaluation

HRC 3: RUNWAY INCURSION (RI)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents							
Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to RI accidents and incidents AST - 1	1A. The State to implement the following RI safety actions: a) Ensure the establishment and implementation of a State runway safety programme and runway safety teams	Q4-2022/23	UCAA	UCAA (Regulator) AAIU Aerodrome Operators ANSP Airforce Air operators UGATCA UPA	Documented Runway safety program Documented runway safety team Wide representation of stakeholders on runway safety team	High	Surveillance activities Follow up meetings
	b) Promote the establishment of policy, procedures and training that supports situational awareness for controllers, pilots, and airside vehicle drivers	Q1-2023/24	UCAA	UCAA (Regulator) AAIU Aerodrome Operators ANSP Airforce Air operators UGATCA UPA	Documented policies and procedures Meeting minutes Publications	Medium	Follow up meetings

HRC 3: RUNWAY INCURSION (RI)

Goal: Achieve a continuous reduction of runway related accidents and serious incidents

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	c) Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	Q2 2022/23	UCAA	UCAA (Regulator) Aerodrome Operator ANSP	Certificate issued	High	Surveillance activities Follow up meetings
	d) Ensure the use of standard phraseologies in accordance with applicable State regulations and ICAO provisions (e.g., Doc 9432, Manual of Radiotelephony)	Q2 2023/24	UCAA	UCAA (Regulator) Aerodrome Operator ANSP Air Operators UGATCA UPA	Documented procedures Training certificates	Medium	Follow up meetings Investigation reports
	e) Ensure the identification and publication in the aeronautical information publication (AIP) of hot spots at aerodromes	Q1 2023/24	UCAA	UCAA (Regulator) ANSP Aerodrome Operator	AIP extract	Medium	Follow up meetings

HRC 3: RUNWAY INCURSION (RI)

Goal: Achieve a continuous reduction of runway related accidents and serious incidents

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to RI accidents and incidents AST - 1	1B. The industry to implement the following RI safety actions: a) Active participation in a runway safety programme and runway safety teams	Q2 2023/24	Aerodrome Operators	Aerodrome Operators Air Operators ANSP	Minutes of meetings Runway safety activities	High	Surveillance activities Follow up meetings
	b) Policy, procedures, and training that support situational awareness for controllers, pilots, and airside vehicle drivers	Q1-2023/24	Aerodrome Operator Air Operators ANSP	UCAA (Regulator) AAIU Aerodrome Operators ANSP Airforce Air operators UGATCA UPA	Documented policies and procedures Training records Publications	Medium	Follow up meetings
	c) Use of standard phraseologies in accordance with applicable State regulations and ICAO provisions (e.g. Doc 9432, Manual of Radiotelephony)	Q2 2023/24	Aerodrome Operator Air Operators ANSP	UCAA (Regulator) Aerodrome Operator ANSP Air Operators	Documented procedures Training certificates	Medium	Follow up meetings Investigation reports

HRC 3: RUNWAY INCURSION (RI)							
Goal: Achieve a continuous reduction of runway related accidents and serious incidents Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to RI accidents and incidents				UGATCA UPA			
	d) Identification and publication in the AIP of hot spots at aerodromes	Q1 2023/24	Aerodrome Operator	UCAA (Regulator) ANSP Aerodrome Operator	AIP extract	Medium	Follow up meetings
	e) Suitable strategies to remove or mitigate hazards associated with identified hot spots	Q1 2023/24	Aerodrome operator	ANSP Aerodrome Operator	Risk assessment	Medium	Follow up meetings Investigation reports
	2. Validate the effectiveness of the SEIs through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies)	Annually every Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Safety data analysis reports	High	Data Analysis

HRC 3: RUNWAY INCURSION (RI)

Goal: Achieve a continuous reduction of runway related accidents and serious incidents

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
AST – 1 Mitigate contributing factors to RI accidents and incidents AST – 1	3. Identify additional contributing factors, for example: a) Operations in low visibility conditions b) Complex or inadequate aerodrome design c) Complexity of traffic (multiple simultaneous line-ups) d) Conditional clearances e) Simultaneous use of intersecting runways f) Late issue of or late changes to departure clearances g) Phraseology use (e.g. non-standard vs. standard, call-sign confusion) h) Concurrent use of more than one language for ATC communications i) English language competence despite the introduction by ICAO of a system of validating competence in aviation English	Q1 – Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Investigation reports	High	Investigations

HRC 3: RUNWAY INCURSION (RI)

Goal: Achieve a continuous reduction of runway related accidents and serious incidents

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to RI accidents and incidents AST - 1	j) Inadequate manoeuvring area driver training and assessment programme						
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for RI	Annually every Q4	UCAA	UCAA (Regulator) ANSP Air Operators ATOs AAIU UGATCA UPA	Reviewed SEIs	High	Follow up meetings
	5. Conduct continuous evaluations of the performance of the SEIs	Q1 – Q4	UCAA		Evaluation Reports		Evaluation

HRC 4: LOSS OF CONTROL IN FLIGHT (LOC I)							
Goal: Achieve a continuous reduction of operational safety risks Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metris/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to LOC-I accidents and incidents	1A. The State to implement the following LOC-I safety actions: a) Require upset prevention and recovery training in all full flight simulator type conversion and recurrent training programmes	Q1 2024/25	UCAA (Regulator)	CAA Inspectors CASSOA Air Operators UPA	Regulatory provisions	Medium	Follow up meetings
	b) Require more time devoted to training for the pilot monitoring role	Q1 2024/25	UCAA	CAA Inspectors Air operators UPA	Regulatory provisions	Medium	Follow up meetings
	1B. The industry to implement the following LOC-I safety actions: a) Aircraft upset prevention recovery training in all full flight simulator type conversion and recurrent training programmes	Q2 2024/25	Air Operators	Air Operators UPA ATOs	Approved Training programmes	Medium	Evaluation of Pilot Training programmes

HRC 4: LOSS OF CONTROL IN FLIGHT (LOC I)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metris/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to LOC-I accidents and incidents	b) More time devoted to training multi-crew pilots for the monitoring role	Q2 2024/25	Air Operators	Air Operators UPA ATOs	Approved Training programmes	Medium	Evaluation of Pilot Training programmes
	c) Training on manual aircraft handling of approach to stall and stall recovery (including at high altitude)	Q3 2024/25	Air Operators	Air Operators UPA ATOs	Approved Training program Training records	Medium	Surveillance Activities
	d) Recurrent training on flight mechanics	Q4 2024/25	Air Operators	Air Operators UPA ATOs	Approved Training program Training records	Medium	Surveillance Activities
	2. Validate the effectiveness of the SEIs in the industry through MORs and VORs systems and accident/incident investigations (apply safety management methodologies)	Annually every Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Safety data analysis reports	High	Data Analysis

HRC 4: LOSS OF CONTROL IN FLIGHT (LOC I)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metris/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to LOC-I accidents and incidents	3. Identify additional contributing factors, for example: a) Distraction b) Adverse weather c) Complacency d) Inadequate standard operating procedures (SOPs) for effective flight management e) Insufficient height above terrain for recovery f) Lack of awareness of or competence in procedures for recovery from unusual aircraft attitudes g) Inappropriate flight control inputs in response to a sudden awareness of an abnormal bank angle	Q1 – Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Investigation reports	High	Follow up meetings

HRC 4: LOSS OF CONTROL IN FLIGHT (LOC I)							
Goal: Achieve a continuous reduction of operational safety risks Target: Maintain a decreasing trend of the national accident /serious incident rate							
Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metris/Indicators	Priority	Monitoring Activity
Mitigate contributing factors to LOC-I accidents and incidents	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for LOC-I, for example: a) Increase the effectiveness of regulatory oversight b) Improve regulations	Annually every Q4	UCAA	UCAA (Regulator) ANSP Air Operators ATOs AAIU UGATCA UPA	Reviewed SEIs	High	Follow up meetings
	5. Conduct continuous evaluations of the performance of the SEIs	Q1 – Q4	UCAA		Evaluation Reports		Evaluation

HRC 5: CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metrics/ Indicators	Priority	Monitoring Activity
Mitigate contributing factors to CFIT accidents and incidents	1A. The State to implement the following CFIT safety actions:	Q1 2024/25	UCAA (Regulator)	CASSOA CAA Inspectors Air operators	Regulatory Requirements	Medium	Follow up meetings
	a) Ensure aircraft are equipped with terrain awareness and warning system (TAWS) in accordance with Annex 6	Q1 2024/25	UCAA (Regulator)	CASSOA CAA Inspectors Air Operators	Signed Advisory circular	Medium	Follow up meetings
	b) Issue a Safety Advisory to increase adherence to TAWS warning procedures	Q2 2024/25	UCAA (Regulator)	ANSP CAA Inspector Air Operators	Approved flight procedures	Medium	Follow up meetings
	c) Consider the implementation of continuous descent final approaches (CDFA)	Q2 2024/25	UCAA (Regulator)	ANSP CAA Inspector Air operators	Approved flight procedures	Medium	Follow up meetings

HRC 5: CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metrics/ Indicators	Priority	Monitoring Activity
	e) Ensure the timeliness of updates and accuracy of Electronic Terrain and Obstacle Data (eTOD)	Q1 2024/25	UCAA (Regulator)	Aerodrome operator ANSP CAA Inspector	eTOD data accuracy and validity	High	Surveillance Activities
Mitigate contributing factors to CFIT	2. Validate the effectiveness of the safety enhancement initiatives (SEIs) presented in this roadmap through the analysis of mandatory occurrence reporting (MORs) and voluntary occurrence reporting systems (VORs) and accident/incident investigations (apply safety management methodologies)	Annually every Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Safety data analysis reports	High	Data Analysis

HRC 5: CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metrics/ Indicators	Priority	Monitoring Activity
accidents and incidents	3. Identify additional contributing factors, for example: a) Flight in adverse environmental conditions b) Approach design and documentation (e.g., approaches with vertical guidance (APV) or localizer performance with vertical guidance (LPV) approaches) c) Phraseology used (standard vs. non-standard) d) Pilot fatigue and disorientation	Q1 – Q4	UCAA	Air Operators ANSP Aerodrome Operators CAA Inspectors Accident investigators	Investigation reports	High	Follow up meetings
Mitigate contributing factors to CFIT accidents and incidents	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for CFIT	Annually every Q4	UCAA	UCAA (Regulator) ANSP Air Operators ATOs AAIU UGATCA UPA	Reviewed SEIs	High	Follow up meetings

HRC 5: CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Goal: Achieve a continuous reduction of operational safety risks

Target: Maintain a decreasing trend of the national accident /serious incident rate

Safety Enhancement Initiative	Actions	Timelines	Responsible Entity	Stakeholders	Metrics/ Indicators	Priority	Monitoring Activity
	5. Conduct continuous evaluations of the performance of the SEIs	Q1 – Q4	UCAA		Evaluation Reports		Evaluation

Appendix 2:

Detailed Safety Enhancement Initiatives: Organizational Safety Risks

UCAA (Regulator)

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-1 — Consistent implementation of ICAO SARPs at the national level	1B — Address all priority protocol questions (PQs) of the USOAP CMA	Q3 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	Priority PQ EI	High	Review of State dashboard on ICAO OLF
	1C — Establish primary aviation law and regulations, to empower the competent authority to conduct regulatory oversight, this includes separation of oversight functions and service provision functions (CE-1 and CE-2)	Q3 2022/23	UCAA (Regulator)	CAA Inspectors MoWT MoJCA	Regulatory Requirements	High	PQ self - assessment
	1D — Increase the level of compliance with ICAO SARPs and the EI of CEs at the national level (CE-1 to CE-5)	Q3 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	Effective Implementation by Critical Element	High	Filling Compliance Checklist and Review of State dashboard on ICAO OLF

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	1E — Establish a process for the identification of differences with ICAO SARPs (CE-2)	Q2 2022/23	UCAA	CAA Inspectors Aircraft Investigators	Approved TGM on identification of differences	High	Review of status of CC/EFOD
SEI-2 — Development of a comprehensive regulatory oversight framework	2A — Establish and maintain an independent regulatory oversight authority, which includes separation of oversight functions from service provision functions where these exist within the authority (CE-3)	Q3 Q2 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	Approved organization Structure	High	Follow up meeting
	2B — Develop an effective system to promulgate technical guidance and tools, and provide safety-critical information needed for technical personnel to effectively perform their safety oversight functions (CE-5)	Q4 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	TGM distribution lists and acknowledgement of receipt of the TGMs	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	2C — Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory oversight (see SEI-5) (CE-3 and CE-4)	Q2 2023/24	UCAA	UCAA HR	Technical personnel recruitments and turnover rates Training policy	High	Follow up meetings
SEI-3 — Establishment of an independent accident and incident investigation authority,	3A — Establish an independent accident and incident investigation authority, as per Annex 13 requirements (CE-1 and CE-3)	Q3 2022/23	MoWT AAIIU	Accident Investigators	Regulatory framework Organisation structure Resources	High	Follow up meetings
	3B — Develop an effective system to promulgate technical guidance and tools, and provide safety-critical information needed for technical personnel to effectively conduct accident and incident investigations (CE-5)	Q4 2022/23	AAIIU	CAA Inspectors	TGM distribution lists and acknowledgement of receipt of the TGMs	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
consistent with Annex 13 — Aircraft Accident and Incident Investigation	3C — Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support accident and incident investigations (see SEI-5) (CE-3 and CE-4)	Q2 2023/24	AAIIU	AAIIU HR	Technical personnel recruitments and turnover rates Training policy	High	Follow up meetings
SEI-5 — Qualified technical personnel to support effective safety oversight	5B — Identify the gaps in qualified technical personnel and training requirements necessary to implement the oversight mandate (CE-4)	Q2 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	Skills gap analysis	High	Follow up meetings
	5E — Establish human resource plans to support hiring and retention of the appropriate number of qualified technical personnel required (CE-4)	Q1 2022/23	UCAA HR	CAA HR	Approved HR and recruitment plans	High	Follow up meetings
	5C — Establish a compensation scheme for the attraction and retention of qualified technical personnel (CE-4)	Q1 2022/23	UCAA HR	CAA HR	Approved HR and compensation plans	High	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	5F — Implement training policies and programmes for technical personnel and verify that the type and frequency of training successfully completed (i.e. initial, recurrent, specialized and on-the-job training) are sufficient to acquire /maintain the required qualifications and level of competence corresponding to the assigned duties and responsibilities of technical personnel (CE-4)	Q2 2022/23	UCAA HR	CAA HR	Approved manual HR and Training programmes Training plans and records	High	Follow up meetings
	6A — Based on the identified safety deficiencies, establish a mechanism to identify collaborators and develop an action plan for the resolution of those deficiencies (CE-1 to CE-5)	Q3 2022/23	UCAA (Regulator)	CAA Inspectors Accident Investigators	Approved TGM on resolution of Safety Issues	High	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-6 — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	6E — Establish a process via RASG and/or RSOO for a mentoring/collaboration system, including providing State/industry assistance as well as sharing of best practices and internal follow-up actions (CE-1 to CE-5, emphasis on CE-3)	Q1 2024/25	UCAA	CAA Inspectors CASSOA	Documented process	Medium	Follow up meeting
	6G — Establish and implement a process for the development and promulgation of technical guidance, tools and the provision of safety-critical information, in collaboration with other States, RSOO, ICAO and/or other stakeholders, with the understanding that these materials need to be tailored to each State's national regulations and operational environments (CE-5)	Q1 2022/23	UCAA	CAA inspectors CASSOA	Documented process	Medium	Follow up meeting
	7A — Update USOAP corrective action plan items	Q1 2022/23	UCAA (Regulator)	NCMC CAA Inspectors Accident Investigators	Percentage of CAP update	High	Review of ICAO USOAP OLF dash board

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-7 — Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records	7B — Complete and submit the self-assessment checklist based on USOAP CMA priority PQs	Q2 2022/23	UCAA	CAA Inspectors Accident Investigators	Percentage of PQ self-assessment completed	High	Review of ICAO USOAP OLF dashboard
	7C — Complete and submit the State Aviation Activity Questionnaire (SAAQ)	Q3 2022/23	UCAA	CAA Inspectors Accident Investigators	Percentage of PQ SAAQ completed	High	Review of ICAO USOAP OLF dashboard
	7D — Complete and submit the compliance checklists on electronic filing of differences system	Q3 2022/23	UCAA	CAA Inspectors Accident Investigators	Percentage of CC/EFOD completed	High	Review of ICAO USOAP OLF dashboard
	7E — Update documents and records, as required, in a timely manner	Q1-Q4 2022/23	UCAA	CAA Inspectors Accident Investigators	Evidence compiled and uploaded on the OLF	High	Review of ICAO USOAP OLF dashboard
SEI-8 — Consistent implementation of ICAO SARPs at the national level	8B — Increase the level of compliance with ICAO SARPs and the EI of CEs at the national level (all CEs, emphasis on CE-6 to CE-8)	Q1-Q4 2022/23	UCAA (Regulator)	NCMC CAA Inspectors	EI by Critical Element	High	Review of ICAO USOAP OLF dashboard
SEI-9 — Continued implementation	9A — Implement licensing, certification, authorization, and approval processes (CE-6)	Q2 2022/23	UCAA (Regulator)	CAA Inspectors	Certificates, licenses, authorizations, and approvals	High	Review of ICAO USOAP OLF dashboard

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
of and compliance with ICAO SARP's at the national level	9B — Implement regulatory oversight and enforcement processes (CE-7 and CE-8)	Q2 2023/24	UCAA	CAA Inspectors	Certificates, licenses, authorizations, and approvals	High	Follow up meetings
	9C — Establish a system to resolve safety concerns identified via accident and incident investigations, surveillance activities, safety reports and other means (CE-8)	Q2 2022/23	UCAA	CAA Inspectors Accident Investigators	Approved policy and procedures	High	Follow up meetings
SEI-10 — Strategic allocation of resources to enable effective safety oversight	10A — Use SEI-1 and SEI-5 to identify resource requirements (CE-6 to CE-8)	Q1 2022/23	UCAA	CAA Inspectors	Approved Budgets	High	Follow up meetings
	10B — Leverage regional groups such as the RASG to identify additional resources	Q2 2024/25	UCAA	DSSER	Correspondences	Medium	Follow up meetings
SEI-11 — Strategic collaboration with key	11A — Based on the identified safety deficiencies, establish a mechanism to identify collaborators and develop an action plan for the resolution of those deficiencies (CE-6 to CE-8)	Q3 2023/24	UCAA (Regulator)	DSSER CAA Inspectors	Correspondences CAP	Medium	Review of ICAO USOAP OLF dashboard

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
aviation stakeholders to enhance safety in a coordinated manner	11C — Provide assistance via RASG and/or RSOO to other States for the conduct of surveillance activities (CE-7)	Q2 2024/25	UCAA	UCAA	Correspondences	Low	Review of ICAO USOAP OLF dashboard
	11D — Use technical guidance, tools, and safety-critical information, developed in collaboration with other States, RSOO, ICAO and/or other stakeholders, to enable technical personnel to perform their safety oversight functions effectively (CE-6 to CE-8)	Q3 2022/23	UCAA	CAA Inspectors	EI by Critical Element	High	Review of ICAO USOAP OLF dashboard
SEI-12 — Continued provision of the primary source of safety information to ICAO by updating all relevant documents and	12A — Update USOAP corrective action plan items	Every Q2	UCAA (Regulator)	NCMC CAA Inspectors	Latest date of self-assessment update	High	Review of ICAO USOAP OLF dashboard
	12B — Update and submit the self-assessment checklist based on USOAP CMA priority PQs	Every Q2	UCAA (Regulator)	NCMC CAA Inspectors	Latest date of self-assessment update	High	Review of ICAO USOAP OLF dashboard
	12C — Update and submit the State aviation activity questionnaire (SAAQ)	Every Q2	UCAA (Regulator)	NCMC CAA Inspectors	Latest date of SAAQ update	High	Review of ICAO USOAP OLF dashboard

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
records as progress is made	12D — Update and submit the compliance checklists (CCs) on the electronic filing of differences (EFOD) system	Every Q2	UCAA (Regulator)	NCMC CAA Inspectors	Latest date of CC/EFOD update	High	Review of ICAO USOAP OLF dashboard
SEI-13 — Start of SSP implementation at the national level	13A — Secure State-level commitment to improve safety	Q2 2022/23	UCAA (Regulator)	SSP Steering Committee MoWT AAIU DG	Signed SSP policy	High	Gap Analysis review
	13B — Conduct initial SSP gap analysis (checklist) then the detailed SSP self-assessment	Q1 2022/23	UCAA (Regulator)	SSP Steering Committee	Completed Gap Analysis	High	Gap Analysis review
	13C — Establish an SSP implementation team	Q2 2022/23	UCAA (Regulator)	SSP Steering Committee MoWT AAIU DG	Signed SSP policy	High	Gap Analysis review
	13D — Develop an implementation plan for the SSP	Q2 2022/23	UCAA (Regulator)	SSP Steering Committee MoWT AAIU DG	Signed SSP policy	High	Gap Analysis review
	13E — Issue SMS regulations for service providers and verify SMS implementation	Q1 2022/23	UCAA (Regulator)	UCAA MoWT AAIU MoJCA	Promulgated Civil Aviation (Safety Management) Regulations	High	Fill compliance Checklist for Annex 19

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-14 — Strategic allocation of resources to start SSP implementation	14A — Establish a process for planning and allocation of resources to enable SSP implementation and identify areas where resources are needed	Q3 2022/23	UCAA (Regulator)	National SSP Implementation Committee SSP Steering Committee	Approved SSP manual	High	Follow up meeting
	14B — Obtain resources from national and appropriate authorities' leadership and stakeholders within the State to support SSP implementation	Q3 2022/23	UCAA (Regulator)	National SSP Implementation Committee Strategic planning department SSP Steering Committee	Budget Allocations - AAIU - UCAA	High	Follow up meeting
	14D — Work with RSOO, other States and other organizations, as appropriate to train qualified technical personnel to fulfil their duties and responsibilities regarding SSP implementation	Q2 2022/23	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Training records Correspondences	High	Follow up meeting
	15A — Identify areas where collaboration/support is needed as part of the SSP implementation plan (see SEI-14)	Q2 2022/23	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Correspondences	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-15 — Strategic collaboration with key aviation stakeholders to start SSP implementation	15B — Identify relevant collaborators from key aviation stakeholders, including other States that are implementing or have implemented an SSP	Q3 2022/23	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Correspondences	High	Follow up meeting
	15C — Develop an action plan to address the elements identified as missing or deficient during the SSP gap analysis (see SEI-13B)	Q3 2022/23	CAA (Regulator)	National SSP Implementation Committee SSP Steering Committee	Correspondences	High	Follow up meeting
	15E — Develop a process to provide training on SSP to relevant staff, in collaboration with RSOO and/or other States (e.g. initial, recurrent and advanced) (see SEI-14D)	Q2 2022/23	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Training records Correspondences	High	Follow up meeting
	15F — Establish and implement a process for sharing technical guidance, tools and safety-critical information related to SSP (e.g. advisory circulars, staff instructions, safety performance indicators), in collaboration with other States, RASG, RSOO, ICAO and/or other stakeholders	Q3 2024/25	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Correspondences	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-16 — Strategic collaboration with key aviation stakeholders to complete SSP implementation	16A — Work with collaborators (identified in SEI-15) to execute the action plan for implementation	Q3 2024/25	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Correspondences	High	Follow up meeting
	16B — Work with collaborators to ensure all elements of the SSP are present, suitable, operational, and effective	Q3 2024/25	CAA (Regulator)	National SSP Implementation Committee CASSOA SSP Steering Committee	Correspondences	High	Follow up meeting
	16C — Establish a system for the continuous improvement of the SSP, in collaboration with all relevant stakeholders	Q3 2022/23	CAA (Regulator)	National SSP Implementation Committee SSP Steering Committee	Approved SSP manual	High	SSP gap Analysis review
	16D — Serve as a champion State to promote best practices among other States	Q4 2024/25	CAA (Regulator)	SSP Steering Committee DSSER	RASG reports Correspondences	Medium	Follow up meeting
SEI-17 — Establishment of safety risk management at the national level (step 1)	17A — Establish a legal framework related to the protection of safety data, safety information and other related sources	Q2 2022/23	UCAA (Regulator)	National SSP Implementation Committee SSP Steering Committee	CAA Act provision	High	Follow up meeting
	17B — Establish a State mandatory occurrence reporting system	Q3 2022/23	AAIU	AAIU	Approved Procedure	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
				SSP Steering Committee Service provider's SMS	Number of Mandatory reports made		
	17C — Develop a safety database for monitoring system safety issues and hazards, in line with the principles of Doc 9859 — Safety Management Manual	Q4 2022/23	AAIUU	AAIUU SSP Steering Committee	Approved Procedure Updated safety database of	High	Follow up meeting
	17D — Establish and maintain a process to identify hazards from collected safety data	Q3 2022/23	UCAA	SSP Steering Committee	Approved Procedure Number of hazards identified	High	Follow up meeting
	17E — Establish and utilize a process to ensure the assessment of safety risks associated with identified hazards	Q3 2022/23	UCAA	SSP Steering Committee	Approved Procedure Number of risks assessed	High	Follow up meeting
	17F — Establish a State confidential voluntary safety reporting system providing data to the safety database (see SEI-17C)	Q3 2022/23	UCAA	UCAA SSP Steering Committee Service provider's SMS	Approved Procedure Number of Voluntary reports made	High	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-18 — Establishment of safety risk management at the national level (step 2)	18B — Develop safety performance measurement methodologies, aligned with the regional safety metrics, using the established safety risk management process (see SEI-17E)	Q3 2022/23	UCAA	National Implementation Committee SSP Steering Committee Service provider's SMS	Approved Procedure	High	Follow up meeting
	18D — Ensure the establishment of mandatory safety reporting systems by service providers	Q3 2022/23	UCAA	CAA Inspectors AAIU SSP Steering Committee Service provider's SMS	Regulatory requirement Guidance Material for service providers Number of Mandatory reports made	High	Surveillance activities
	18E — Encourage establishment of voluntary safety reporting systems as part of service providers' SMS	Q3 2022/23	UCAA	CAA Inspectors AAIU SSP Steering Committee Service provider's SMS	Guidance Material for service providers Number of voluntary reports made	High	Surveillance activities
	18F — Promote safety awareness and the two-way communication, sharing and exchange of safety-relevant information within the State's aviation organizations and encourage sharing of safety information with industry within the State	Q4 2022/23	UCAA	CAA Inspectors AAIU SSP Steering Committee Service provider's SMS	Guidance Material for service providers Number of voluntary and mandatory reports made	Medium	Surveillance activities

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-19 — Acquisition of resources to increase the proactive use of risk modelling capabilities	19A — Identify resources needed to support safety intelligence collection and processing, advanced data analysis, risk modelling and information-sharing capabilities	Q4 2024/25	UCAA (Regulator)	National SSP Implementation Committee SSP Steering Committee	Budget provisions	Low	Follow up meetings
	19C — Ensure that the Civil Aviation Safety Inspector workforce is trained to perform safety oversight of service providers that have implemented SMS	Q2 2022/23	UCAA	SSP Steering committee CAA Inspectors	SSP Training program SSP training Plan	High	Skills gap analysis
SEI-20 — Strategic collaboration with key aviation stakeholders to support the	20A — Identify areas where collaboration/support is needed to ensure that stakeholders understand and implement safety culture concepts to fully embrace an open, just culture and non-punitive safety reporting	Q4 2023/24	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Reports Minutes of minutes	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
proactive use of risk modelling capabilities	20D — Collaborate with national and industry stakeholders to establish a mechanism for the regular sharing and exchange of safety information, analyses, safety risk discoveries /lessons learned and best practices within a confidential and non-punitive environment	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Correspondences Agreements	Low	Follow up meetings
SEI-21 — Advancement of safety risk management at the national level	21A — Establish data sharing connectivity and integration among the State’s aviation safety databases, including the mandatory occurrences reporting system, voluntary safety reporting systems, safety audit reports and aviation system statistics (traffic counts, weather information, EI scores, etc.)	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Correspondences Agreements	Low	Follow up meetings
	21B — Develop risk modelling capabilities to support monitoring system safety issues and accident /incident prevention	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Correspondences Agreements	Low	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	21C - Encourage information-sharing with industry	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Correspondences Agreements	Medium	Follow up meetings
Detailed Safety Enhancement Initiatives: Organizational Safety Risks INDUSTRY							
SEI-1 — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	1B — Provide input to States, as applicable, for the development of national regulations (CE-2)	Q2 2022/23	UCAA (Regulator)	CAA Inspectors Industry CASSOA	Civil Aviation (Safety Management) Regulations Correspondences	Medium	Follow up meetings
	1C — Participate in regional activities for sharing of best practices, mentoring, and conducting follow-up actions (CE-3)	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee CASSOA	Correspondences	Medium	Follow up meetings
	1D — Address high-risk categories of occurrences, as applicable, in coordination with States and regions (see OPS roadmap)	Q4 2024/25	UCAA	National SSP Implementation Committee SSP Steering Committee Service providers	Correspondences Agreements	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-2 — Improvement of industry compliance with applicable regulations	2A — Work together within industry to ensure compliance with applicable regulations (CE-6 to CE-8)	Q2 2022/23	CAA (Regulator)	SSP Steering committee CAA Inspectors	Distributed Civil Aviation Regulations Distributed TGMs	High	Follow up meetings
	2B — Encourage service providers to participate in the corresponding, ICAO recognized industry assessment programmes (CE-8)	Q4 2024/25	UCAA	CAA Inspectors SSP Steering Committee CASSOA	Correspondences	Medium	Follow up meetings
SEI-3 — Allocation of industry resources to enable effective safety oversight	3A — Identify resources that are available to support roadmap safety enhancement initiatives for States and regions (all CEs, emphasis on CE-6 to CE-8)	Q4 2024/25	CAA (Regulator)	SSP Implementation Committee SSP Steering committee Industry	Correspondences	Low	Follow up meetings
	3B — Participate in regional and international government /industry collaborative safety enhancement initiatives	Q4 2024/25	CAA (Regulator)	SSP Implementation Committee SSP Steering committee Industry	Correspondences	Low	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-5 — Improvement of industry compliance with applicable SMS requirements	5A — Implement a safety management system (SMS) commensurate to the size and complexity of the service provider, as required by national regulations and Annex 19	Q3 2022/23	UCAA (Regulator)	SSP Implementation Committee CAA Inspectors Industry	Number of SMS accepted	High	SMS acceptance
	5C — Utilize available guidance material (e.g. from States or non-governmental organizations) to assist with SMS implementation	Q4 2022/23	Industry	SSP Implementation Committee CAA Inspectors Industry	Guidance material received and implemented	High	Surveillance activities
SEI-6 — Resources for service providers to	6A — Work in collaboration with the State and industry associations to advance SMS implementation and identify expectations that cannot be efficiently resourced	Q2 2023/24	Industry	SSP Implementation Committee CAA Inspectors Industry	Correspondences	Medium	Follow up meetings
	6B — Identify areas where resources are needed as part of the SMS implementation plan developed following the SMS gap analysis	Q3 2022/23	Industry	CAA Inspectors Industry	Correspondences	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
effectively implement SMS	6D — Obtain commitment from the accountable executive within the service provider for the necessary resources to enable SMS implementation	Q3 2022/23	UCAA (Regulator)	SSP Implementation Committee CAA Inspectors Industry	Number of SMS with Safety policy signed by Accountable executive	High	Surveillance activities
SEI-7 — Strategic collaboration with key aviation stakeholders to complete SSP implementation	7A — Help identify relevant collaborators from the key aviation stakeholders involved in implementing SSP	Q3 2022/23	CAA (Regulator)	SSP Steering committee National SSP Implementation Committee AAIU	Correspondences	Medium	Follow up meetings
	7B — Work with collaborators to support an action plan for SSP implementation: Support SSP through sharing and supporting harmonization of SMS within industry	Q3 2022/23	CAA (Regulator)	SSP Steering committee National SSP Implementation Committee AAIU Industry	Correspondences	Medium	Follow up meetings
	7C — Support RASG and/or RSOO efforts to establish a mentoring system, including providing assistance to States/industry, as well as	Q4 2023/24	CAA (Regulator)	SSP Steering committee National SSP Implementation Committee AAIU	Correspondences	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	sharing of best practices to support SSP implementation			CASSOA			
	7D — Provide input to the process for sharing technical guidance, tools and safety-critical information related to SSP and SMS (e.g. advisory circulars, staff instructions, safety performance indicators), in collaboration with States, RASG, RSOO, ICAO and/or other stakeholders	Q4 2023/24	CAA (Regulator)	SSP Steering committee National SSP Implementation Committee AAIU CASSOA	Correspondences	Medium	Follow up meetings
SEI-8 — Establishment of safety risk management at the service provider level (step 1)	8A — Establish mandatory safety reporting systems	Q2 2022/23	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety occurrence reports	High	Surveillance activities
	8B — Provide information from the service provider to the State mandatory safety reporting system, as required	Q2 2022/23	Industry	Air operators ANSP Aerodrome Operators	Safety occurrence reports	High	Surveillance activities

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
				AMOs ATOs			
	8C — Establish internal mechanisms related to the protection of safety data, safety information and related sources for the purpose of safety improvement	Q4 2023/24	Industry	CAA Inspectors National SSP Implementation Committee AAIU	Correspondences	Medium	Follow up meetings
	8D — Establish voluntary and confidential hazard /occurrence reporting systems as part of the SMS	Q4 2023/24	Industry	CAA Inspectors National SSP Implementation Committee AAIU	Correspondences	High	Follow up meetings
	8E — Establish and maintain a safety database for technical personnel to monitor system safety issues within the service provider	Q2 2022/23	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety occurrence reports	High	Surveillance activities

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	8F — Establish and utilize a safety risk management process	Q2 2022/23	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety occurrence reports	High	Surveillance activities
SEI-9 — Establishment of safety risk management at the service provider level (step 2)	9A — Develop safety performance measurement methodologies, aligned with harmonized safety metrics within industry, via the established safety risk management process	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety Performance indicators and Targets	Medium	Surveillance activities
	9B — Develop safety performance indicators and associated targets/alert settings, via the established safety risk management process	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety Performance indicators and Targets	Medium	Surveillance activities

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	9C — Encourage the use of globally harmonized metrics for the development and monitoring of safety performance indicators, as part of the service providers' SMS	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety Performance indicators and Targets	Medium	Surveillance activities
SEI-10 — Allocation of industry resources to support continuous improvement of SSP and SMS	10A — Ensure competent technical personnel are allocated, at the service provider level, to support the requirements of the SSP infrastructure	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs	Safety Performance indicators and Targets	Medium	Surveillance activities
	10B — Provide safety analysis results from service providers to support the SSP	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs SSP Implementation Committee	Safety data analysis reports	Medium	Surveillance activities

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI-11 — Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities	11A — Work with industry stakeholders to leverage best practices with safety information analysis	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs Industry associations	Correspondences	Medium	Follow up meeting
	11B — Share safety risk identification with stakeholders for mitigation and monitoring strategies	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs Industry associations	Correspondences	Medium	Follow up meeting
SEI-12 — Advancement of safety risk management at the service provider level	12A — Verify that a legal framework related to the protection of safety data, safety information and other related sources is implemented and effective	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs Industry associations	Correspondences	Medium	Follow up meeting

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	12B — Develop risk modelling capabilities to support the monitoring of system safety issues and accident /incident prevention	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs Industry associations AAIU	Correspondences	Medium	Follow up meeting
	12C — Monitor safety information exchange networks for continuous improvements	Q4 2024/25	Industry	Air operators ANSP Aerodrome Operators AMOs ATOs Industry associations	Correspondences	Medium	Follow up meeting

Appendix 3:

Detailed Safety Enhancement Initiatives: Emerging Safety Risks

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
Safe integration of unmanned aircraft systems in the airspace	Review unmanned aircraft systems regulations and collaborate with all stakeholders to ensure safe integration of unmanned aircraft into the airspace	Q2 2022/23	UCAA (Regulator)	CAA Inspectors UAS Operators ANSP Aerodrome operators Air operators	Civil aviation (UAS) regulations, 2022	High	Follow up meeting
	Develop technical guidance material to enable compliance with the unmanned aircraft systems regulations	Q3 2022/23	UCAA (Regulator)	CAA Inspectors UAS Operators	Correspondences and UCAA website	High	Follow up meeting
	Increase frequency of stakeholder engagements to ensure the compliance with unmanned aircraft systems regulations and to facilitate exchange and sharing of information	Q3 2023/24	UCAA (Regulator)	UCAA UAS Operators ANSP Aerodrome operators Air operators	Correspondences	Medium	Follow up meetings
Manage risks arising from conflict zones	Promote the sharing and exchange of information on potential conflict zones	Q3 2024/25	UCAA (Regulator)	UCAA Industry	Correspondences, publications and UCAA website	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	Focus system oversight activities on service providers to ensure that their contingency planning is robust and effective.	Q3 2023/24	UCAA (Regulator)	CAA Inspectors	Robust contingency plans	Medium	Surveillance activities
Manage risks arising from disruptions due to Public Health crises like Covid-19 pandemic - Decreased competency of flight crew and air traffic controllers	Review and implement flight crew reactivation and induction training programmes to mitigate COVID -19 related risks.	Q2 2023/24	Air Operators	Air operators UCAA (Regulator) UPA	Flight crew training programs and records	High	Surveillance activities
	Review the selection criteria, training requirements and oversight processes for Authorized Flight Examiners, to improve their capabilities and consistency of their assessments prior to the introduction of competency based training.	Q2 2024/25	UCAA	UCAA (Regulator) Flight examiners UPA	Civil Aviation Regulations reviewed Technical guidance material	Medium	Follow up meetings
	Review flight crew training regulations and collaborate with Uganda air operators to fully implement competency-based flight crew training to improve abilities to handle uncertain, unprecedented and unexpected in-flight situations	Q2 2024/25	UCAA	UCAA (Regulator) Air operators	Civil Aviation Regulations reviewed Correspondences	Medium	Follow up meetings

Safety Enhancement Initiatives	Actions	Timelines	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
	Focus on safety oversight activities on the ANSP to ensure that operational and safety processes are robust and air traffic control officer manning is adequate and that personnel proficiencies are monitored as operations ramp up.	Q4 2022/23	UCAA	UCAA Inspectors ANSP	ANSP procedures manual Training records	High	Surveillance activities
Manage risks arising from disruptions due to Public Health crises like Covid-19 pandemic - Decrease of organizational focus on safety	Increase safety promotion activities through training and awareness through the State Safety Programme	Q2 2024/25	UCAA	SSP Steering committee UCAA Inspectors Industry	Correspondences Safety workshops, meetings Safety publications	Medium	Follow up meetings

Appendix 4: Abbreviations

AAIU – Aircraft Accident and Incident Investigation Unit

CASSOA – Civil Aviation Safety and Security Oversight Organisation

CAMP – Civil Aviation Master Plan

EIA – Entebbe International Airport

GASP – Global Aviation Safety Plan

NASP – National Aviation Safety Plan

RASP – Regional Aviation Safety Plan

RASG – Regional Aviation Safety Group

SEI – Safety Enhancement Initiative