



# **National Aviation Safety Plan Sri Lanka 2023 - 2025**





**NATIONAL AVIATION SAFETY PLAN OF SRI LANKA**  
**1<sup>ST</sup> EDITION, 2023-2025**

Issued by the Civil Aviation Authority of Sri Lanka.

[illegible][illegible]



# CIVIL AVIATION AUTHORITY OF SRI LANKA

## LIST OF EFFECTIVE PAGES

Page no.	Rev. no	Effective date	Page no.	Rev. no	Effective date	Page no.	Rev. no	Effective date
i	00	31-12-2022	8-3	00	31-12-2022	App A-31	00	31-12-2022
ii	00	31-12-2022	9-1	00	31-12-2022	App A-32	00	31-12-2022
iii	00	31-12-2022	AppA-1	00	31-12-2022	App A-33	00	31-12-2022
iv	00	31-12-2022	AppA-2	00	31-12-2022	AppA-34	00	31-12-2022
V	00	31-12-2022	AppA-3	00	31-12-2022	App B-1	00	31-12-2022
Vi	00	31-12-2022	AppA-4	00	31-12-2022	App B -2	00	31-12-2022
Vii	00	31-12-2022	App A -5	00	31-12-2022	App B -2	00	31-12-2022
Viii	00	31-12-2022	App A -6	00	31-12-2022	App B -3	00	31-12-2022
ix	00	31-12-2022	App A-7	00	31-12-2022	App B -4	00	31-12-2022
1-1	00	31-12-2022	App A-8	00	31-12-2022	App B -5	00	31-12-2022
1-2	00	31-12-2022	App A-9	00	31-12-2022	App B -6	00	31-12-2022
1-3	00	31-12-2022	App A-10	00	31-12-2022	App B -7	00	31-12-2022
1-4	00	31-12-2022	App A-11	00	31-12-2022	App B -8	00	31-12-2022
2-1	00	31-12-2022	App A-12	00	31-12-2022	App B -9	00	31-12-2022
2-2	00	31-12-2022	App A-13	00	31-12-2022	App B-10	00	31-12-2022
3-1	00	31-12-2022	App A-14	00	31-12-2022	App B-11	00	31-12-2022
3-2	00	31-12-2022	App A-15	00	31-12-2022	App B-12	00	31-12-2022
4-1	00	31-12-2022	App A-16	00	31-12-2022	App B-13	00	31-12-2022
4-2	00	31-12-2022	App A-17	00	31-12-2022	App B-14	00	31-12-2022
4-3	00	31-12-2022	App A-18	00	31-12-2022	App B-15	00	31-12-2022
5-1	00	31-12-2022	App A-19	00	31-12-2022	App B-16	00	31-12-2022
6-1	00	31-12-2022	App A-20	00	31-12-2022	App B-17	00	31-12-2022
6-2	00	31-12-2022	App A-21	00	31-12-2022	App B-18	00	31-12-2022
6-3	00	31-12-2022	App A-22	00	31-12-2022	App B-19	00	31-12-2022
6-4	00	31-12-2022	App A-23	00	31-12-2022	App B-20	00	31-12-2022
6-5	00	31-12-2022	App A-24	00	31-12-2022	App B-21	00	31-12-2022
6-6	00	31-12-2022	App A-25	00	31-12-2022	App B-22	00	31-12-2022
7-1	00	31-12-2022	App A-26	00	31-12-2022	App B-23	00	31-12-2022
7-2	00	31-12-2022	App A-27	00	31-12-2022	App B-24	00	31-12-2022
7-3	00	31-12-2022	App A-28	00	31-12-2022	App B-25	00	31-12-2022
8-1	00	31-12-2022	App A-29	00	31-12-2022	App B-26	00	31-12-2022
8-2	00	31-12-2022	App A-30	00	31-12-2022	App B-27	00	31-12-2022



**CIVIL AVIATION AUTHORITY OF SRI LANKA**

[illegible]

Section: List of Effective Pages	Page: iii	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



**CIVIL AVIATION AUTHORITY OF SRI LANKA**

## HISTORY OF REVISION

[illegible]

## CONTENTS

Record of Revision .....	i
List of Effective Pages .....	ii
History of Revision .....	iv
ABBREVIATIONS .....	vii
Definition .....	ix
1. INTRODUCTION .....	1-1
1.1 Overview of the NASP .....	1-1
1.2 Structure of the NASP .....	1-2
1.3 Relationship between the NASP and the State Safety Programme (SSP) .....	1-2
1.4 Responsibility for the NASP development, implementation and monitoring .....	1-2
1.5 Operational Context .....	1-2
2. ROLES AND RESPONSIBILITIES .....	2-1
2.1 Role of ICAO .....	2-1
2.2 Role of the ICAO Asia Pacific (APAC) region .....	2-1
2.3 Role of Sri Lanka .....	2-1
2.3.1 Role of Sri Lanka aviation stakeholders .....	2-1
2.3.2 Role of industry and industry participants .....	2-1
2.4 Key participants .....	2-2
3. CHALLENGES AND PRIORITIES IN SAFETY PLANNING .....	3-1
3.1 Global challenges and priorities .....	3-1
3.1.1 Global organizational challenges .....	3-1
3.1.2 Global operational safety risks .....	3-1
3.2 Regional challenges and priorities .....	3-1
3.3 National risks and challenges .....	3-2
4. NATIONAL SAFETY ISSUES, GOALS AND TARGETS .....	4-1
4.1 Operational (OPS) Safety Risks .....	4-1
4.2 Organizational (ORG) challenges .....	4-1
4.3 National Goals and Targets .....	4-1
4.4 Acceptable level of safety performance .....	4-3
4.5 Sri Lanka's safety goals and their alignment with global and regional goals .....	4-4
5. PURPOSE OF SRI LANKA'S NATIONAL AVIATION SAFETY PLAN .....	5-1
6. SRI LANKA'S STRATEGIC APPROACH TO MANAGING AVIATION SAFETY .....	6-1
7. NATIONAL OPERATIONAL SAFETY RISKS .....	7-1
8. OTHER SAFETY ISSUES .....	8-1
9. MONITORING IMPLEMENTATION .....	9-1
10. APPENDIX A - SRI LANKA OPS ROADMAP .....	App A-1





**CIVIL AVIATION AUTHORITY OF SRI LANKA**

11. APPENDIX - B - SRI LANKA ORG ROADMAP ..... App B-1

Section: Table of Content	Page: vi	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

## ABBREVIATIONS

AAIB	Aircraft Accident Investigation Bureau
ACAS	Airborne Collision Avoidance System
ADs	Airworthiness Directives
AGA	Aerodrome and Ground Aid
AIP	Aeronautical Information Publication
ALoSP	Acceptable level of safety performance
AMO	Approved Maintenance Organization
AMP	Aircraft Maintenance Programme
ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
AOC	Air Operators Certificate
AP RASP	Asia Pacific Regional Aviation Safety Plan
APV	Approaches with vertical guidance
ARC	Abnormal Runway Contact
ATM	Air Traffic Management
ATS	Air Traffic Services
ATC	Air Traffic Control
ATO	Approved Training Organizations
CAMO	Continuing Airworthiness Management Organization
CAASL	Civil Aviation Authority of Sri Lanka
CAP	Corrective action plan
CART	Council Aviation Recovery Task Force
CAST	Commercial Aviation Safety Team
CE	Critical element
CFIT	Controlled flight into terrain
CICTT	CAST/ICAO Common Taxonomy Team
CMA	Continuous Monitoring Approach
COSCAP-SA	Cooperative Development of Operational Safety and Continuing Airworthiness Programme - South Asia
CRM	Crew Resource Management
DGCA	Director General of Civil Aviation
EI	Effective Implementation
EU-SA APP	EU - South Asia Aviation Partnership Project
FMs	Flight Movements
GANP	Global Air Navigation Plan
GASP	Global Aviation Safety Plan
GSAG	Ground Safety Action Group
GPWS	Ground Proximity Warning System
HRCs	High Risks Categories
ICAO	International Civil Aviation Organization



## CIVIL AVIATION AUTHORITY OF SRI LANKA

iSTARS	integrated Safety Trend Analysis and Reporting System
LOC-I	Loss of control in-flight
MAC	Mid air collision
MPD	Maintenance Programme Document
MEL	Minimum Equipment List
NASP	National Aviation Safety Plan
ORG	Organizational
PANS	Procedures for Air Navigation Services
PCDS	Position Competency Development Scheme
PQ	Protocol question
RAIO	Regional Accident and Incident Investigation Organization
RASG	Regional Aviation Safety Group
RE	Runway Excursion
RI	Runway Incursion
RPAS	Remotely Piloted Aircraft System
RSOO	Regional Safety Oversight Organization
SAFE	Safety Fund
SARPs	Standards and Recommended Practices
SEI	Safety enhancement initiatives
SMS	Safety management system
SOPs	Standard Operating Procedures
SOR	Scheme of Recruitment
SPI	Safety performance indicator
SSC	Significant safety concern
SSP	State Safety Programme
USOAP	Universal Safety Oversight Audit Programme
WS	Wildlife Strike

## DEFINITION

**Acceptable level of safety performance (ALoSP).** The level of safety performance agreed by State authorities to be achieved for the civil aviation system in a State, as defined in its State safety programme, expressed in terms of safety performance targets and safety performance indicators.

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

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

-being in the aircraft, or

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

-direct exposure to jet blast,

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

b) the aircraft sustains damage or structural failure which:

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

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

c) the aircraft is missing or is completely inaccessible.

**Contributing factors.** Actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident. The identification of contributing factors does not imply the assignment of fault or the determination of administrative, civil or criminal liability.

**Critical elements (CEs).** The critical elements of a safety oversight system encompass the whole spectrum of civil aviation activities. They are the building blocks upon which an effective safety oversight system is based. The level of effective implementation of the CEs is an indication of a State's capability for safety oversight.

**Effective implementation (EI).** A measure of the State's safety oversight capability, calculated for each critical element, each audit area or as an overall measure. The EI is expressed as a percentage.

Section: Definition	Page: ix	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## CIVIL AVIATION AUTHORITY OF SRI LANKA

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

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

**Operator** shall have the same meaning as given in Section 124 of the Civil Aviation Act no 14 of 2010.

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

**Safety data.** A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety.

*Note: Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:*

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

**Safety enhancement initiative (SEI).** One or more actions to eliminate or mitigate operational safety risks or to address an identified safety issue.

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

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

**Safety objective.** A brief, high-level statement of safety achievement or desired outcome to be accomplished by the State safety programme or service provider's safety management system.

*Note.— Safety objectives are developed from the organization's top safety risks and should be taken into consideration during subsequent development of safety performance indicators and targets.*

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

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

**Safety performance indicator.** A data-based parameter used for monitoring and assessing safety performance.

Section: Definition	Page: x	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## CIVIL AVIATION AUTHORITY OF SRI LANKA

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

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

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

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

**Service providers.** A Service Provider appointed under Section 6 of the Civil Aviation Act, No. 14 of 2010 and includes any licensed entity engaged in the implementation of a SMS.

**Significant safety concern (SSC).** Occurs when the State allows the holder of an authorization or approval to exercise the privileges attached to it, although the minimum requirements established by the State and by the Standards set forth in the Annexes to the Convention are not met, resulting in an immediate safety risk to international civil aviation.

**State Safety Programme (SSP).** An integrated set of regulations and activities aimed at improving safety.

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

**System.** An organized, purposeful structure that consists of interrelated and interdependent elements and components, and related policies, procedures and practices created to carry out a specific activity or solve a problem.

Section: Definition	Page: xi	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## 1. INTRODUCTION

### 1.1 Overview of the NASP

The purpose of the National Aviation Safety Plan (NASP) of Sri Lanka is to continually reduce fatalities, safety risks to aircraft, infrastructure 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 Sri Lanka and the industries. The NASP promotes the effective implementation of Sri Lanka's safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between Sri Lanka and other States, regions and aviation industry. The 1<sup>st</sup> Edition of the NASP is applicable for commercial air transport operation. All stakeholders are encouraged to support and implement the NASP as the strategy for the continuous improvement of aviation safety.

Safety is always one of the considerations of the Government of Sri Lanka and Aviation authorities to ensure the continued confidence in our aviation industry. The National Aviation Safety Plan (NASP) 2023–2025 complements the State Safety Programme (SSP) of Sri Lanka. It identifies initiatives that are being undertaken to reduce the risks associated with air operations in Sri Lanka and details the strategic direction for the management of aviation safety in the short, medium and long term. This first issue of the NASP presents the national strategy and roadmap of actions through Safety Enhancement Initiatives for enhancing aviation safety for the period 2023 to 2025. The Safety enhancement initiatives (SEIs) defined by the NASP of Sri Lanka are not only to support the improvement of safety domestically, but within the Asia-Pacific region and globally.

The NASP of Sri Lanka is in alignment with the ICAO Global Aviation Safety Plan 2023 – 2025 (GASP) and the Asia Pacific Regional Aviation Safety Plan 2023–2025 (AP-RASP), in recognition that aviation activities are global in nature. The NASP is subject to ongoing amendments aligned to the review, development and publication of the GASP, the AP-RASP and the SSP of Sri Lanka.

Thereby with the establishment of the NASP, Sri Lanka is committed to enhancing aviation safety and resourcing of supporting activities.

P.A. Jayakantha  
Director General of Civil Aviation &  
Chief Executive Officer

Section: Section 1	Page: 1-1	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## 1.2 Structure of the NASP

This NASP presents the strategy for enhancing aviation safety in Sri Lanka for a rolling plan of 3 years and will be amended as required. It comprises of nine sections, namely, Introduction, Roles and responsibilities, Challenges and priorities in safety planning; National safety issues, goals and targets; Purpose of Sri Lanka's NASP; Sri Lanka's strategic approach to managing aviation safety; National Operational safety risks; Other safety issues and Monitoring implementation. The safety enhancement initiatives (SEIs) listed in the NASP will be monitored.

## 1.3 Relationship between the NASP and the State Safety Programme (SSP)

NASP addresses operational safety risks identified in the ICAO GASP and the AP –RASP. Sri Lanka is committed to fully implement SSP by 2028 as State's responsibility 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

The Civil Aviation Authority of Sri Lanka (CAASL) is responsible for the development, implementation and monitoring of the NASP, in collaboration with Ministry of Civil Aviation, Service Providers, Operators and national aviation industry. The NASP has been developed in consultation with Service Providers and national operators and in alignment with the GASP 2023 – 2025 Edition and the AP- RASP 2023 - 2025.

## 1.5 Operational Context

There are 4 certified international aerodromes out of five civil aerodromes in Sri Lanka. In addition, 11 water aerodromes are in operation at present. The airspace of Sri Lanka is classified into Class A, C, D, E and G.

The highest number of aircraft movements 67,158 was reported in 2018. There are currently 08 Air Operator Certificates (AOCs) issued by the DGCA - Sri Lanka including 02 international commercial air transport operators. General aviation includes fixed wing and rotor wing operations.

Common challenges in Sri Lanka include topography, meteorology, infrastructure, and socio-political issues.

The following table summarizes the main sectors of the Sri Lanka civil aviation system from 2020 to 2022.

Sector	2020	2021	2022
<b><u>Aerodromes</u></b>			
ICAO certified aerodromes	3	3	4
Nationally licenced	2	2	1





# CIVIL AVIATION AUTHORITY OF SRI LANKA

Sector	2020	2021	2022
<b><u>Airlines</u></b>			
Local Airlines engaged in domestic air services	7	5	6
Local Airlines engaged in international air services	2	2	2
International Foreign Airlines	39	36	45
<b><u>Training Organizations</u></b>			
Flying Schools	8	8	7
Type Rating Training Organizations	3	2	1
Maintenance Training Organizations	4	4	4
Civil Aviation Training Centers	1	1	1
<b><u>Air Navigation</u></b>			
Air Navigation Service Providers	1	1	1
<b><u>Registration and Airworthiness of Aircraft</u></b>			
Large Aircraft (Maximum take-off weight 5700kg & above)	29	25	27
<b><u>Small Aircraft (Maximum take-off weight less than 5700kg)</u></b>			
Light Transport Aircraft	42	43	43
Ultra-Light Aircraft	2	1	1
Helicopter	9	7	7
Hot Air Balloons	6	4	4
<b><u>Synthetic Training Devices Flying Devices</u></b>			
Local full flight Simulators – A 320/A 330	3	3	3
ATC Simulator	1	1	1
<b><u>Personnel Licensing</u></b>			
Student Pilot Licenses issued	114	211	145
Private Pilot Licenses issued	87	173	135
Commercial Pilot Licenses issued	183	306	245
Air Transport Pilot Licenses issued	315	448	384
Air Traffic Control Licenses issued	49	54	45
Aircraft Maintenance Engineer Licenses issued	1	2	0



# CIVIL AVIATION AUTHORITY OF SRI LANKA

Sector	2020	2021	2022
Aircraft Maintenance Licenses issued	145	81	179
Flight Dispatcher License /Flight Operation Officer Licenses issued	0	1	0
Cabin Crew Member Certificates issued	106	176	253
Flying Instructors	9	11	13
Assistant Flying Instructors	7	8	9
Ground Instructors License issued	10	17	25
Flight Examiners	5	5	6
Designated Check Pilots	20	20	19
Civil Aviation Medical Examiners/ Medical Assessors	6	6	6

*Table 01: Main sectors of the Sri Lanka civil aviation system*



## 2. ROLES AND RESPONSIBILITIES

### 2.1 Role of ICAO

ICAO is responsible for coordinating and monitoring the implementation of the GASP at a global and regional level. Through the GASP, ICAO seeks to promote global collaboration to enhance aviation safety. ICAO also coordinates a series of Regional Aviation Safety Groups (RASG) and Regional Aviation Safety Teams (RAST), to facilitate the sharing of information, resources and expertise among States.

### 2.2 Role of the ICAO Asia Pacific (APAC) region

ICAO has established a series of regions (groups of States and/or entities) around the world to promote collaboration on aviation safety enhancement within a specific geographic area. Sri Lanka is part of the ICAO Asia Pacific (APAC) region. Each ICAO region produces a Regional Aviation Safety Plan (RASP) that presents the strategic direction for the management of aviation safety within the region. While RASPs generally align with the GASP, they are designed to focus on regional priorities and specific risks. The AP-RASP is the main aviation safety planning document for the APAC region. RASGs are the main drivers of safety planning and implementation within a given region, and serve to integrate global, regional, State and industry efforts in continuing to enhance aviation safety. In the APAC region, the AP-RASP is overseen by the Regional Aviation Safety Group – Asia Pacific (RASG-APAC). The RASG-APAC is tasked with developing, implementing and delivering the AP-RASP. The RASG-APAC is supported by the Asia Pacific Regional Aviation Safety Team (APRAST), comprising representatives from Asia Pacific States.

### 2.3 Role of Sri Lanka

Sri Lanka has developed and will implement the NASP through this document to support the SSP. The NASP has considered national challenges and priorities, GASP and RASP expectations of States, and address any significant safety concerns as a priority. The CAASL is responsible for the development, implementation and monitoring of the NASP, in collaboration with Ministry in charge of Civil Aviation and other stake holders.

#### 2.3.1 Role of Sri Lanka aviation stakeholders

The SSP of Sri Lanka defines the roles and responsibilities of the Government agencies that manage aspects of the civil aviation system. Each SSP stakeholder is responsible for implementing specific SEIs indicated in NASP and actions assigned to them. SSP stakeholders are required to provide regular updates on the status and progress of SEIs and associated actions to the relevant SSP coordination Committee meetings. SSP stakeholders may prepare a dedicated safety plan, or align existing plans, to complement the NASP and articulate how they will meet their obligations. This ensures SEIs and actions assigned to an SSP agency are appropriately managed and issues are escalated to the relevant SSP coordination Committee meetings as required.

#### 2.3.2 Role of industry and industry participants

Industry and industry participants are expected to actively support implementation of the NASP, and are encouraged to identify and undertake relevant supporting actions. Industry should engage in Safety Management System (SMS) implementation to continually identify hazards and address operational safety risks. Industry is encouraged to work collaboratively with all SSP stakeholders on safety information exchange, safety monitoring and safety oversight programs. Industry should

Section: Section 2	Page: 2-1	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## CIVIL AVIATION AUTHORITY OF SRI LANKA

develop their own indicators consistent with the NASP safety goals and targets, to ensure industry safety strategies align with the NASP. Industry should adopt a harmonized approach in developing SMS indicators and targets. The CAASL will continue to encourage and educate aviation industry stakeholders on existing aviation safety framework. The voluntary confidential and self-reporting frameworks, and the operation of a just culture approach to safety regulation requires the commitment of relevant aviation authorities. This will also contribute to ongoing efforts to improve industry trust with increased levels of industry reporting, to safety improvements in aviation system of Sri Lanka.

### 2.4 Key participants

The stakeholders contributing to the NASP (SSP stakeholders) includes government organizations, service providers and operators as follows;

- 1) Ministry in charge of the subject of Civil Aviation
- 2) Civil Aviation Authority of Sri Lanka
- 3) Certified Aerodrome Operators
- 4) Air Navigation Service Provider
- 5) Air Operator Certificate Holders
- 6) Continuing Airworthiness Management Organizations & Approved Maintenance Organizations
- 7) Aviation Fuel Service Provider
- 8) Ground Handler Licence Holder
- 9) Department of Meteorology
- 10) Sri Lanka Air Force as an aerodrome, airspace user and a recipient of Air Navigation Services

Each SSP stakeholder is responsible for implementing particular NASP action items as assigned in Appendix A and Appendix B.

Section: Section 2	Page: 2-2	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

### 3. CHALLENGES AND PRIORITIES IN SAFETY PLANNING

#### 3.1 Global challenges and priorities

The GASP outlines the safety challenges and priorities that ICAO considers to be of concern to the international aviation community, identified on the basis of safety data collected from proactive and reactive activities. In response to these challenges, ICAO develops and prioritizes global SEIs to reduce the risk associated with aviation activities. The GASP identifies two broad categories of challenges and associated initiatives that States are required to address through a NASP and SSP.

##### 3.1.1 Global organizational challenges

Organizational challenges are systemic issues concerning organizational culture, policies and procedures on the effectiveness of safety risk controls. Organizations can include State aviation agencies and service providers (including ATM services providers, aerodrome operators and aircraft operators). ICAO has identified effective safety oversight and effective safety management as requirements to addressing organizational challenges.

##### 3.1.2 Global operational safety risks

Operational safety risks arise during the delivery of a service or the conduct of an aviation activity. The GASP has identified five High Risk Categories (HRCs) of occurrences based on global fatalities, fatality rates and the number of accidents and incidents as follows;

1. Controlled flight into terrain (CFIT);
2. Loss of control in-flight (LOC-I);
3. Mid-air collision (MAC);
4. Runway excursion (RE); and
5. Runway incursion (RI).

The GASP has detailed specific ‘roadmaps’ (action plans) on organizational challenges and operational safety risks to support States in achieving the GASP goals.

#### 3.2 Regional challenges and priorities

The diversity of the APAC region, coupled with the severe operational and financial impacts on the aviation industry as a result of the COVID-19 pandemic, and the expected gradual recovery in aviation activity in the region, poses significant challenges for regional aviation safety.

The RASG-APAC, through the 2023–2025 AP- RASP has established the following regional goals:

- I. Reduction in Operational Risks;
- II. Improvements in Safety Oversight and Compliance;
- III. Consistent and effective safety management system (SMS) and SSP;
- IV. Data-driven regulatory oversight; and
- V. Enhanced aviation infrastructure (physical and institutional).

Section: Section 3	Page: 3-1	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## CIVIL AVIATION AUTHORITY OF SRI LANKA

In addition, the RASP Organizational Roadmap also includes the challenges of an increasingly complex aviation system, an increased need for capability and capacity building, and the limited collection of and use of safety data for decision-making.

### 3.3 National risks and challenges

The aviation system of Sri Lanka is rapidly changing in light of economic, social and technological developments. Sri Lanka adopts a forward-looking approach to identify emerging aviation trends and associated hazards where possible, and assess risks and implement effective mitigation strategies.

Although Sri Lanka has experienced a very low rate of GASP HRC occurrences over the past decade, in line with GASP & RASP, Sri Lanka will actively manage these HRCs through identification of precursor events which contribute to these HRCs, by implementing strategies to further reduce the rate of incidents and accidents.

For context, in 2018 ICAO measured the effective implementation (EI) of the eight Critical Elements (CE) by Sri Lanka as part of its Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP CMA) is shown in Table 06 in Section 8.

National safety risks & challenges are described in Section 4 of the NASP.

Section: Section 3	Page: 3-2	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

## 4. NATIONAL SAFETY ISSUES, GOALS AND TARGETS

The NASP addresses the nine Operational safety risks which includes 5 HRCs defined by GASP –ICAO as given below;

### 4.1 Operational (OPS) Safety Risks

- 1) Controlled Flight into Terrain (CFIT)
- 2) Loss of Control - In Flight (LOC-I)
- 3) Mid Air Collision (MAC)
- 4) Runway Excursion (RE)
- 5) Runway Incursion (RI)
- 6) Abnormal Runway Contact (ARC) including Hard Landing and Tail Strike
- 7) Wildlife Strikes (WS) with damage to aircraft
- 8) Ground occurrences resulting in damage to aircraft
- 9) Aircraft significant system failure contributing to safety of the flight

### 4.2 Organizational (ORG) challenges

- 1) Effective State Safety Oversight System
  - i. Phase 1 – Establishment of effective safety oversight framework
  - ii. Phase 2 – Implementation of an effective safety oversight system
- 2) Effective SSP implementation
- 3) Lack of independent aircraft accident investigation authority.
- 4) Advance data analysis & risk modelling
- 5) Effective SMS implementation.
- 6) Appropriate development and utilization of air navigation and airport core infrastructure to support safe operations.
- 7) Retention of competent, qualified & skilled staff in industry

### 4.3 National Goals and Targets

In order to address the issues & challengers listed above and to enhance safety at the national level, the 2023 to 2025 NASP contains the following goals and targets:

#### OPERATIONAL ROADMAP

##### Goal 1

**Achieve a continuous reduction of operational safety risks.**

Goal 1 seeks to achieve continuous reduction of operational safety risks faced by Sri Lanka SSP stakeholders and reflects the ICAO HRCs.



## CIVIL AVIATION AUTHORITY OF SRI LANKA

Target 1.1	No fatal accident (CAT)
Target 1.2	No ground fatalities as a result of an aviation accident
Target 1.3	No accident with aircraft structural damage (CAT)
Target 1.4	50% reduction of serious incidents
Target 1.5	No RI occurrences
Target 1.6	No RE occurrences
Target 1.7	No ARC occurrences

### ORGANISATIONAL ROADMAP

<b>Goal 2</b>	<b>Strengthen safety oversight capabilities of Sri Lanka based on data driven approach</b>
---------------	--

Goal 2 seeks to improve Sri Lanka's organizational ability and oversight capabilities. Sri Lanka will continue to effectively implement the eight ICAO CEs and ensure the State oversight and governance structure is appropriate to meet State organizational challenges.

Target 2.1	Sri Lanka to improve the score of 87.9% for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:  By 2025 – up to 89 percent By 2028 – up to 93 percent By 2030 – up to 95 percent
Target 2.2	100% completion of all Priority PQs (self-assessment)
Target 2.3	Sri Lanka to ensure no Significant Safety Concerns (SSCs) raised under the USOAP Continuous Monitoring Approach (CMA).
Target 2.4	100% Safety surveillance achieved against the schedule.
Target 2.5	Develop and maintain a mechanism for data collection, analysis and sharing among all stake holders by 2025
Target 2.6	Sri Lanka to establish an independent accident and incident investigation Bureau (AAIB) as required by ICAO, Annex 13 by 2025.
<b>Goal 3</b>	<b>Implement effective SMS and SSP</b>

Goal 3 seeks to ensure the continued effectiveness and improvement of Sri Lanka's SSP, in achieving aviation safety goals and service providers' level of SMS implementation.

Target 3.1	Sri Lanka to implement the foundation of SSP by 2023.
Target 3.2	Sri Lanka to attain 100% SSP PQs implementation at "present" level by 2025. - 40% completion by 2023 - 100% completion by 2025
Target 3.3	Sri Lanka to implement an effective SSP at maturity level "present & effective" by 2028 - 40% completion by 2025 - 100% completion by 2028





## CIVIL AVIATION AUTHORITY OF SRI LANKA

Goal 4	<b>Increase collaboration at the regional level</b>
Goal 4 seeks support from APAC States to improve safety performance and outcomes through enhanced collaboration.	
Target 4.1	Sri Lanka to achieve Goal 2 and 3, may use a regional safety oversight mechanism or other safety oversight organizations' ICAO recognized functions in seeking assistance to strengthen the safety oversight capabilities.
Target 4.2	Sri Lanka to share information on operational safety risks, including SSP Safety Performance Indicators (SPIs), and emerging issues to Asia Pacific Regional Aviation Safety Group (AP- RASG) on request.
Goal 5	<b>Expand the use of industry programmes and safety information sharing networks by service providers</b>
Goal 5 seeks to increase industry participation with relevant industry programmes, as well as harmonize service providers' performance indicators. This would facilitate improvements in safety risk management at the national, regional and global level and foster better engagement. Industry programmes often encourage service providers to strive for higher levels of safety than otherwise required by States, though do not replace State safety oversight.	
Target 5.1	Sri Lanka to establish a national safety information sharing networks by 2025.
<b>Goal 6:</b>	<b>Ensure Sri Lanka has the appropriate infrastructure (physical and institutional) to support safe operations</b>
Goal 6 seeks to ensure that Sri Lanka has the appropriate infrastructure to support safe operations. It is linked to State's obligations under the ICAO Global Air Navigation Plan (GANP) and seeks ongoing investment in Sri Lanka's air navigation and airport core infrastructure to maintain compliance with safety standards.	
Target 6.1	Sri Lanka to implement the Air Navigation Plan and airport infrastructure development by 2025.

Table 02: Goals and Targets of the NASP 2023-2025

### 4.4 Acceptable level of safety performance

Each safety goal contributes to an overall acceptable level of safety performance for Sri Lanka. Sri Lanka's acceptable level of safety performance, or the sum output of Sri Lanka's safety goals, is:

***"No accidents involving commercial air transport that result in serious injuries or fatalities, no serious injuries or fatalities to third parties as a result of aviation activities and improving safety performance across all sectors."***

#### 4.5 Sri Lanka's safety goals and their alignment with global and regional goals

	Goal 1:	Goal 2:	Goal 3:	Goal 4:	Goal 5:	Goal 6:
<b>GASP</b>	Achieve a continuous reduction of operational safety risks	Strengthen States' safety oversight capabilities	Implement effective State safety programmes (SSPs)	Increase collaboration at the regional level	Expand the use of industry programmes and safety information sharing networks by service providers	Ensure the appropriate infrastructure is available to support safe operations
<b>RASP</b>	Reduction in Operational Risks;	Improvements in Safety Oversight and Compliance	Consistent and effective SMS and SSP	Data-driven regulatory oversight		Enhanced aviation infrastructure (physical and institutional).
<b>NASP</b>	Achieve a continuous reduction of operational safety risks	Strengthen safety oversight capabilities of Sri Lanka based on data driven approach	Implement effective SMS and SSP	Increase collaboration at the regional level	Expand the use of industry programmes and safety information sharing networks by service providers	Ensure Sri Lanka has the appropriate infrastructure (physical and institutional) to support safe operations

Table 03: Safety goals and their alignment.



## 5. PURPOSE OF SRI LANKA'S NATIONAL AVIATION SAFETY PLAN

The NASP is the master planning document containing the strategic direction of Sri Lanka for the management of aviation safety for a period of 3 years (2023 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 National Civil Aviation Policy of Sri Lanka 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 National Civil Aviation Policy of Sri Lanka.

The NASP has been developed using international safety goals and targets and HRCs from both the GASP and the AP-RASP. 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 safety risks and recommended SEIs for individual States set out in the AP- RASP. Sri Lanka has adopted these SEIs and has included them in this plan.

Section: Section 5	Page: 5-1	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

## 6. SRI LANKA'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 local specific issues identified by past data. This plan is developed and maintained by Civil Aviation Authority of Sri Lanka, in coordination with all stakeholders and is updated at least every 3 years.

The NASP includes the following national safety goals and targets, for 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 AP-RASP and include additional national safety goals, targets and indicators.

Safety Goal	Safety Performance Target	Safety Performance Indicators	Link to GASP and RASP
<b>1. Achieve a continuous reduction of operational safety risks</b>	1.1. No fatal accident (CAT)	A. Fatal accident (CAT) per 10,000 take offs and landings	This goal is directly linked to Goal 1 and Target 1.1 of the GASP and linked to Goal 1 and Targets T1, T2 and T3 of the RASP.
	1.2. No ground fatalities as a result of an aviation accident	B. Number of ground fatalities per year	
	1.3. No accident with aircraft structural damage (CAT)	C. Accident with aircraft structural damage (CAT) per 10,000 take offs and landings .	
	1.4. 50% reduction of serious incidents	D. Serious incident (CAT) per 10,000 take offs and landings.	
	1.5. No RI occurrences.	E. Number of RI per 10,000 take offs and landings.	
	1.6. No RE occurrences	F. Number of RE per 10,000 take offs and landings.	
	1.7. No ARC occurrences	G. Number of ARC per 10,000 take offs and landings.	



Safe and Efficient Skies for all

## CIVIL AVIATION AUTHORITY OF SRI LANKA

<b>2. Strengthen the State's safety oversight capabilities based data driven approach</b>	<p>2.1 Sri Lanka to improve its score for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: by 2025 – up to 89 per cent by 2028 –up to 93 per cent by 2030 – up to 95 per cent</p> <p>2.2 100% completion of all Priority PQs self-assessment</p>	<p>A. Achieving of overall EI score as per the timelines.</p> <p>B. Percentage of required corrective action plans (CAPs) submitted by Sri Lanka (using OLF).</p> <p>C. Percentage of completed CAPs.</p> <p>D. Percentage of filling of differences.</p> <p>E. Number self - assessments completed for priority PQs by Sri Lanka.</p>	<p>This goal is directly linked to Goal 2 and Target 2.1 of the GASP and linked to Goal 2 and Target 10 of the RASP.</p>
	<p>2.3 Sri Lanka to ensure no Significant Safety Concerns (SSCs) raised under the USOAP Continuous Monitoring Approach (CMA).</p>	<p>A. Number of ICAO significant safety concern Audit findings.</p>	<p>This goal is directly linked to GASP Goal 2 and APRASP Target T8</p>
	<p>2.4 100% Safety surveillance achieved against schedule</p>	<p>Safety surveillance events completed per year.</p>	<p>This goal is directly linked to GASP Goal 2</p>
	<p>2.5 Develop and maintain a mechanism for data collection, analysis and sharing among all stake holders by 2025.</p>	<p>Number of MOR received each year Number of Voluntary reports each year Industry Safety data reports Surveillance Reports per year</p>	<p>This goal is directly linked to GASP Goal 2</p>
	<p>2.6 Sri Lanka to establish an independent accident and incident investigation authority (AAIB) as</p>	<p>A. Establishment of an independent accident and incident investigation Bureau</p>	<p>This goal is directly linked to Goal 6 of GASP and Goal 5; Target 19 of APRASP.</p>



Safe and Efficient Skies for all

## CIVIL AVIATION AUTHORITY OF SRI LANKA

	required by ICAO Annex 13 by 2025.	(AAIB) as required by ICAO Annex 13.	
<b>Goal 3: Implement effective State safety programmes (SSPs) and Safety Management System (SMS)</b>	3.1: Sri Lanka to implement the foundation of SSP by 2023.	A. Foundational SSP PQs self-assessment (%) B. Percentage of satisfactory SSP foundational PQs	This goal is directly linked to Goal 3 and Target 3.1 of the GASP and Target T12 of AP-RASP.
	3.2: Sri Lanka to attain 100% SSP PQs implementation at “present” level by 2025.  - 40% completion by 2023 - 100% completion by 2025	A. Number of completed SSP PQs (self-assessment) by 2023. B. Number of completed SSP PQ (self-assessment) by 2025.	This goal is directly linked to Goal 3 and Target 3.1 of the GASP and Target T12 of AP-RASP.
	3.3 Sri Lanka to implement an effective SSP at maturity level “present & effective” by 2028.  - 40% completion by 2025 -100% completion by 2028	A. Number of SSP PQ effectively implemented by 2025. B. Number of SSP PQ effectively implemented by 2028.	This goal is directly linked to Goal 3 and Target 3.2 of the GASP and Target T13 of AP-RASP.
<b>Goal 4: Increase collaboration at the regional level</b>	4.1: Sri Lanka to achieve Goal 2 and 3, may use a regional safety oversight mechanism or other safety oversight organizations’ ICAO recognized functions in seeking assistance to strengthen the safety oversight capabilities.	A. Sri Lanka has requested assistance from EU-SA in the following areas; a. Aerodrome Regulation b. Operations c. Personnel Licensing	This goal is directly linked to Goal 4 and Target 4.1 of the GASP and Goal 2 of AP-RASP.
	4.2: Sri Lanka to share information on operational safety risks, including SSP Safety Performance Indicators (SPIs),	A. Sri Lanka to share information on safety risks to RASGs	This goal is directly linked to Goal 4; Target 4.2 of the GASP and Goal 4; T14 of AP-RASP.

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	and emerging issues to Asia Pacific Regional Aviation Safety Group (AP-RASG) on request.	<p>B. Sri Lanka sharing its SSP SPIs with RASGs</p> <p>C. Sri Lanka forwarding information on safety matters to ICAO, RASGs, States or other stakeholders.</p>	
<b>Goal 5: Expand the use of industry programmes and safety information sharing networks by service providers</b>	5.1: Establish a national safety information sharing networks by 2025.	<p>A. Establishment of safety data collection and processing systems (SDCPS) to facilitate participation in a safety information-sharing network.</p> <p>B. Number of service providers &amp; Operators contributing to an SDCPS or a safety information sharing network.</p> <p>C. Percentage of service providers participating in the corresponding ICAO-recognized industry assessment programmes.</p>	This goal is directly linked to Goal 5 and Target 5.1 of the GASP.
<b>Goal 6: Ensure Sri Lanka has the appropriate infrastructure (physical and institutional) to support safe operations</b>	6.1: Sri Lanka to implement the Air Navigation Plan and airport infrastructure development by 2025.	<p>A. Implementation of first phase of Air Navigation Plan by end of 2024.</p> <p>B. Completion of Terminal II development project by end of 2025.</p>	This goal is directly linked to Goal 6; Target 6.1 of GASP and Goal 5 of APRASP.

Table 04: National safety goals, targets and indicators

The SEIs in this plan are implemented through Sri Lanka's existing safety oversight capabilities, operators and 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



## CIVIL AVIATION AUTHORITY OF SRI LANKA

and help to enhance safety globally. The full list of the SEIs is presented in the Appendix A and B to the NASP.

The NASP will also addresses emerging issues. Emerging issues 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 Sri Lanka remain vigilant on emerging issues to identify potential safety risks, collect relevant data and proactively develop mitigations to address them. The NASP will addresses the following emerging issues as required, which were identified by analysis of past data.

**Volatility in the geopolitical and economic environment** – With many airlines having a global footprint they are naturally at risk of facing external factors, such as political tension and economic conjectures. In the commercial aviation sector, political stability and sustained economic growth are known to be major factors that drive long-term growth in air traffic.

In regard to the geopolitical landscape, the aviation industry in Sri Lanka, may also face a series of challenges in the near future. A potential economic slowdown could be one of these major challenges for the industry. A slowdown could ultimately cause airlines in Sri Lanka to review order intake strategies and postpone or cancel current aircraft orders. If orders are cancelled, multiple issues may arise for the aviation industry as a whole.

**Managing the supply chain** – As new aircraft deliveries in the coming years are set to keep the supply chain extremely busy, suppliers will have to increase efforts to ensure timely deliveries whilst maintaining quality standards and controlling costs. Therefore, this will leave suppliers vulnerable and could lead to the risk that companies may have disputes with suppliers or subcontractors related to work specifications, quality of supply or customer concerns.

**Foreign currency and commodity price fluctuations** - With currency exchange rates continuing to fluctuate, given that a large amount of aviation companies operate on both a national and international basis, and that their revenues are earned in a variety of currencies, they are vulnerable to these fluctuations. Additionally, the currency fluctuation affects payables and receivables denominated in foreign currencies. Fluctuation in commodity prices can also lead to issues in the aviation supply chain, resulting in late deliveries and an increased probability of failure by smaller suppliers.

To address the issues listed above, Sri Lanka 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 to the NASP.

Section: Section 6	Page: 6-5	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## 7. NATIONAL OPERATIONAL SAFETY 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, in order to make the information more accessible to stakeholders.

Sri Lanka publishes an annual safety data in it's Annual Report and published in the CAASL website [www.caa.lk]. The summary of accidents and serious incidents that occurred in Sri Lanka and those for aircraft registered in Sri Lanka involved in commercial air transport are shown in the table below.

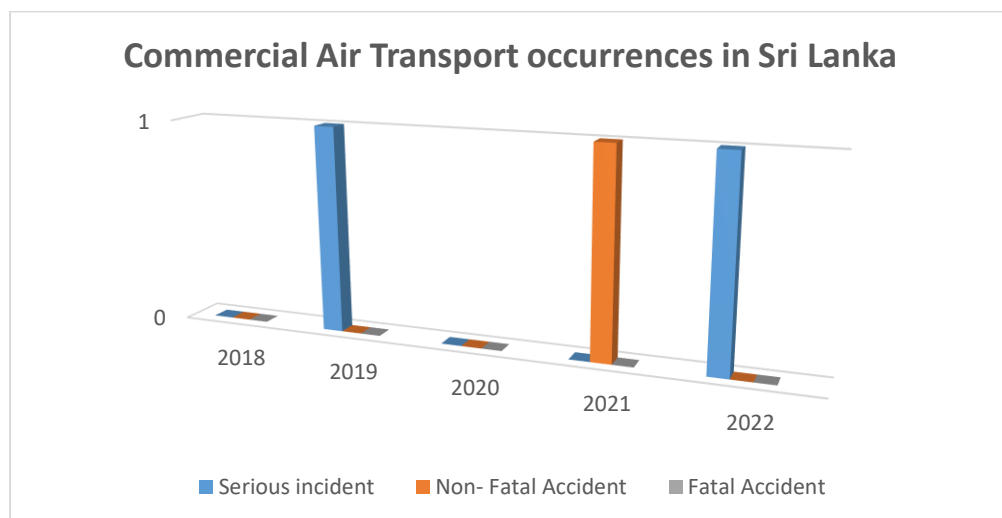


Figure 01: CAT occurrences within the territory of Sri Lanka

### Commercial air transport occurrences within the territory of Sri Lanka

Occurrence Category	2018	2019	2020	2021	2022
Serious incident	0	1	0	0	1
Non- Fatal Accident	0	0	0	1	0
Fatal Accident	0	0	0	0	0

Table 05: Safety data from 2018 to 2022

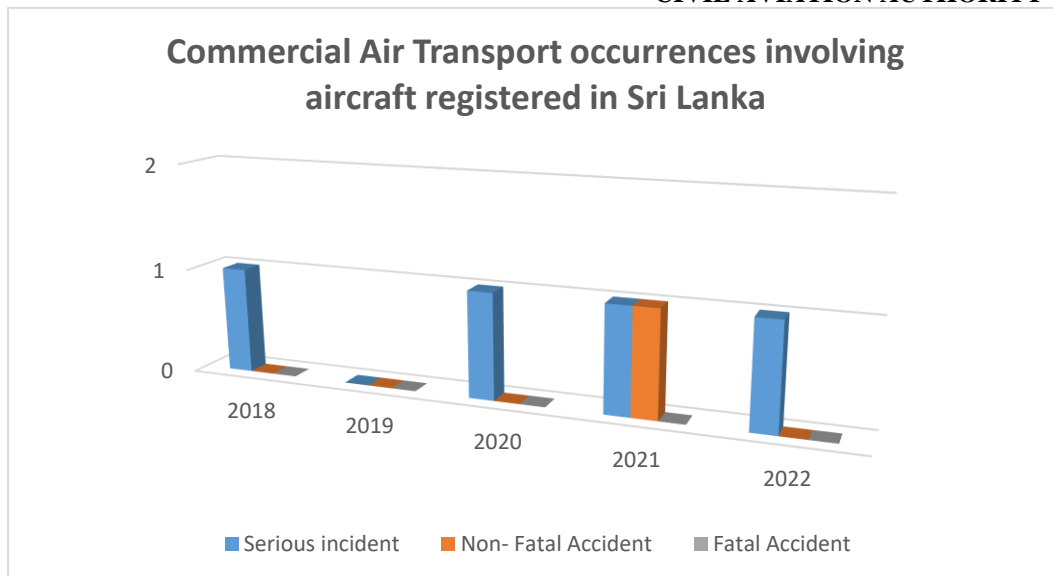


Figure 02: CAT occurrences involving aircraft registered in Sri Lanka

**Commercial air transport occurrences involving aircraft registered in Sri Lanka**

	2018	2019	2020	2021	2022
Serious incident	1	0	1	1	1
Non- Fatal Accident	0	0	0	1	0
Fatal Accident	0	0	0	0	0

Table 06: Safety data from 2018 to 2022

The following 09 national high-risk categories of occurrences (HRCs) in the context of Sri Lanka were considered of the utmost priority because of the risk 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 03 years, the SSP (if applicable to the State), as well as on the basis of regional analysis conducted by ICAO-APAC and on the operational safety risks described in the GASP. These HRCs are in line with those listed in the 2023-2025 edition of the GASP, as well as the RASP of APAC.

1. Controlled Flight into Terrain (CFIT)
2. Loss of Control – In flight (LOC-I)
3. Mid Air Collision (MAC)
4. Runway Excursion (RE)
5. Runway Incursion (RI)
6. Abnormal Runway Contact (ARC) including Hard Landing and Tail Strike
7. Wildlife Strike (WS) with damage to aircraft
8. Ground occurrences resulting in damage to aircraft
9. Aircraft significant system failure contributing to safety of the flight



## CIVIL AVIATION AUTHORITY OF SRI LANKA

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

- 1) Drones operations, fireworks and kite flying in the vicinity of aerodromes
- 2) Laser light interferences
- 3) Human Factors

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, CAASL 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 and AP-RASP.

### **HRC 1: Controlled Flight into Terrain (CFIT)**

1. Critical terrain and rapidly deteriorating weather condition.
2. Violation of SOP
3. Improper pilot response to stall warning.
4. Excess load on the front bench seat in the helicopters.
5. Loss of situational awareness of pilots.
6. Insufficient operational oversight from the organization.
7. Inadequate pre-flight planning and lack of consideration on individual load while preparing load and trim sheet

### **HRC 2: Loss of Control – In flight LOC-I**

1. Violation of SOP by pilots
2. Inadequate pre-flight planning and lack of consideration on individual hand and load checked baggage while preparing load and trim sheet.
3. Inadequate training requirements relating to engine malfunction and proper loading of aircraft.
4. Insufficient oversight by regulatory especially in the field of periodic check of load sheet.
5. Insufficient wildlife control programme.

### **HRC 3: Mid Air Collision (MAC)**

1. Traffic Volume and pattern
2. Adequate trainings to ATCOs and Pilots
3. Lack of SOPs/MOUs for effective coordination
4. Violations of existing MOUs/SOPs and agreements

### **HRC 4: Runway Excursion (RE)**

1. Loss of Situational awareness
2. Violation of SOP by pilots

Section: Section 7	Page: 7-3	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## CIVIL AVIATION AUTHORITY OF SRI LANKA

3. Lack of training (before landing in contaminated runway, and CRM)
4. Lack of procedures (to operate in contaminated runway)
5. Lack of experience of pilot for night flying
6. Poor runway surface maintenance activities
7. Lack of information dissemination

### **HRC 5: Runway Incursion (RI)**

1. Loss of Situational awareness of ATCs and pilots
2. Violation of SOP by ATCs and pilots
3. Lack of training (communication and CRM)
4. Insufficient wildlife control programme

### **HRC 6: Abnormal Runway Contact (ARC) including Hard Landing and Tail Strike**

1. Violation of SOPs
2. Lack of training
3. Inadequate weather information

### **HRC 7: Wildlife Strike (WS) with damage to aircraft**

1. Birds inhabiting airport and surrounding areas
2. Inadequate bird scaring activities
3. Insufficient wildlife control programme in Aerodrome.
4. Violation of regulations (slaughter houses near of airports/within 3 km of airport)
5. Lack of study on wildlife habitat management near aerodromes.

### **HRC 8: On ground occurrences resulting in damage to aircraft**

1. Loss of Situational awareness of ground staff
2. Violation of SOP
3. Improper communication among ground staff, crew and ATC
4. Lack of training
5. Aging of Ground equipment

### **HRC 9: Aircraft significant system failure contributing to safety of the flight**

1. Improper maintenance checks.
2. Inadequate SOPs
3. Aging of the aircraft
4. Inability to oversee operations due to poor training, operational procedures
5. Inability to replace components timely

Note: The full lists of the OPS and ORG SEIs are presented in the Appendix A & B to the NASP of Sri Lanka.

Section: Section 7	Page: 7-4	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

## 8. OTHER SAFETY ISSUES

In addition to the national operational safety risks listed in the NASP, Sri Lanka 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 Sri Lanka'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. CAASL is committed to the effective implementation of these eight CEs, as part of its overall safety oversight responsibilities, which emphasize CAASL's commitment to safety in respect of its aviation activities. The eight CEs are presented in Figure 03 below.

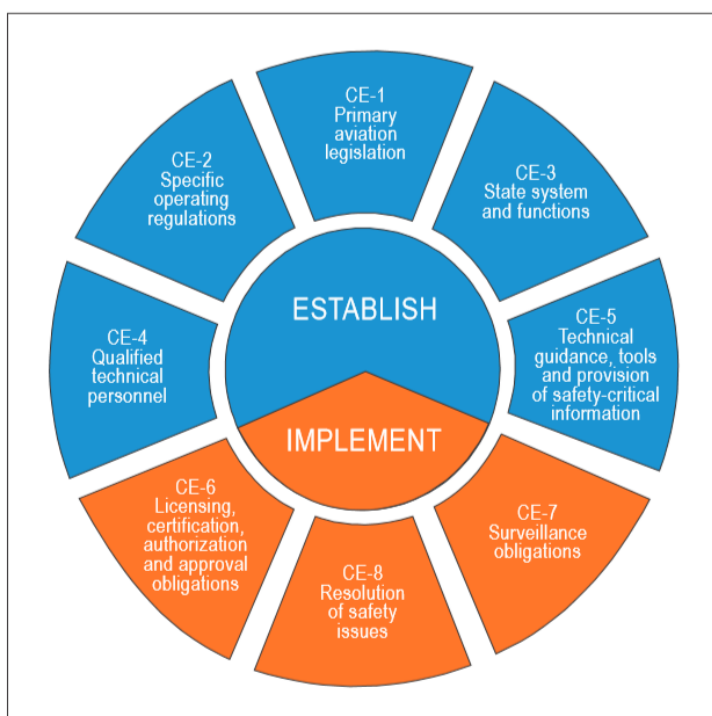


Figure 03: Critical elements of a State's Safety Oversight system

The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Sri Lanka's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Programme (USOAP) conducted in 2018, have resulted in the following scores:

Overall EI score							
EI score by CE (%)							
CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
96.43	82.05	91.38	80	96.12	93.22	73.96	84.62
EI score by audit area							
LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
100	100	89.29	87.29	91.84	90	75.45	91.67

Table 07: EI Score



## CIVIL AVIATION AUTHORITY OF SRI LANKA

The safety oversight index (SOI) of a State is an ICAO indicator of its safety oversight capabilities. Every State audited by ICAO has a SOI. It is a number greater than zero, where number “one” 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 Sri Lanka’s SOI have resulted in the following scores:

Overall SOI score	Score in the area of Operations	Score in the area of Air Navigation	Score in the area of Support Functions
<b>1.80</b>	1.45	1.94	2

*Table 08: Safety Oversight Index of Sri Lanka*

Following 3 CEs have been 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. 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 air operators and service providers. These safety issues are in line with those listed in the 2023 to 2025 edition of the GASP, as well as 2023 to 2025 edition of the AP-RASP:

- 1) Lack of independent aircraft accident and incident investigation organization at the national level.
- 2) Critical Elements based on EI scores for Sri Lanka
  - I. Surveillance Obligations (CE -7): This was the CE where Sri Lanka received the lowest EI score during the most recent ICAO USOAP audit. Therefore this CE was placed as a high priority issue to resolve.
  - II. Qualified Technical Personnel (CE -4): This was the CE where Sri Lanka received the second lowest EI score during the most recent ICAO USOAP audit.
  - III. Specific Operating Regulations (CE -2): This was the third lowest CE of Sri Lanka identified during the most recent ICAO USOAP audit and was therefore placed as a high priority issue to resolve.

Note: APAC region has lower EI scores for CE-4 on Technical personnel qualifications and training, and CE-7: Surveillance Obligations and CE8 on Resolution of safety concerns. Therefore, those CEs have been placed as high priority issues to resolve in the regional level under APRASP. Sri Lanka has put specific emphasis on resolution of safety concerns.

**Global COVID-19 pandemic** – Post COVID-19, it is now vital that trust is rebuilt among passengers as airlines and aviation authorities are focusing on taking credible measures towards sustainability.

**Ageing aircraft fleet** – With many aircraft reaching the end of their life-cycles, there is a possibility of airlines immediately incurring unexpected, high maintenance costs due to



#### CIVIL AVIATION AUTHORITY OF SRI LANKA

component, structural or integrity issues. This may also lead to catastrophic failures or contribute to accidents & incidents without prior indication.

**Workforce capability** – With companies facing economic difficulties, it is common that companies resort to salary reductions as a method of cost-control. This causes a shortage in the talented, engaged and specialized workforce, as they explore employment options internationally. Because of the highly specialized nature of the aviation industry, it is now vital that companies to have strategies to retain the skilled and qualified personnel necessary to perform the business-critical processes.

**RPAS** - The use of recreational and commercial operations of RPAS has continued to expand in Sri Lanka in recent past years. As RPAS technology improves, the use of new models has been increased in Sri Lanka. Aviation safety, air traffic management and security issues require effective management and monitoring capability to ensure RPAS operations are safely and securely integrated into Sri Lanka airspace alongside traditional flight operations.

Section: Section 8	Page: 8-3	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00



## 9. MONITORING IMPLEMENTATION

CAASL 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, CAASL will review the NASP every three years or earlier, if required, to keep the identified operational safety risks, safety issues and selected SEIs updated and relevant. CAASL 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, CAASL seeks the support of the RASG and industry to ensure the timely implementation of SEIs to address safety deficiencies and mitigate risks. Through close monitoring of the SEIs, CAASL will make adjustments to the NASP and its initiatives, if needed, and update the NASP accordingly.

CAASL will use the indicators listed in Section 6 of this Plan to measure safety performance of the civil aviation system and monitor each national safety target. Annual safety reviews 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 CAASL 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.

Sri Lanka adopted 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:

Director General of Civil Aviation  
Civil Aviation Authority of Sri Lanka  
No 152/1, Minuwangoda Road  
Katunayake  
Sri Lanka

[sldgca@caa.lk](mailto:sldgca@caa.lk) (copy to [mgrasm@caa.lk](mailto:mgrasm@caa.lk))  
+94-112538802/817  
[www.caa.lk](http://www.caa.lk)

Section: Section 9	Page: 9-1	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00









## 10. APPENDIX A - SRI LANKA OPS ROADMAP

### DETAILED SEIS: NATIONAL OPERATIONAL SAFETY RISKS

HRC 1: Controlled Flight Into Terrain (CFIT)							
Goal 1: Achieve a continuous reduction of operational safety risks Target : <ol style="list-style-type: none"> <li>1.1. No fatal accident (CAT)</li> <li>1.2. No ground fatalities as a result of an aviation accident</li> <li>1.3. No accident with aircraft structural damage (CAT)</li> <li>1.4. 50% reduction of serious incidents</li> </ol>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP OPS SEI on CFIT (State) — Mitigate contributing factors to the risk of CFIT	1. Implement the following CFIT safety actions:	Implemented.	FSR Division	Industry Partners  (Air Operator, Aerodrome Operator, ANSP)	TAWS /GPWS warning per 10,000 take offs and landings  MSAWs per 10,000 take offs and landings	High	Occurrence reporting (MOR/VOR)  Surveillance activities  FDA inspections by CAASL  Monitoring of relevant SPTs/SPIs of ANSP and other stake holders.
	a. Ensure aircraft are equipped with terrain awareness and warning system (TAWS) in accordance with Annex 6.	2023	FSR Division				
	b. Issue a Safety Advisory to increase adherence to TAWS warning procedures.	Implemented.	FSR Division				
	c. Promote the use of GPS-derived position data to feed TAWS	Implemented.	FSR Division				
	d. Regulation on Ground Proximity Warning System (GPWS).	Implemented	FSR Division				

**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	e. Advisory Circular/Guidance for Operators to Ensure Effectiveness of GPWS Equipment	2023	FSR Division				ATS reports (on MSAW)
	f. Guidance for Operators on Training Programme on the use of GPWS	2025	FSR Division				
	g. Implement minimum safe altitude warning (MSAW) systems	Implemented	ASR Division				
	h. Issuance of Terrain or Obstacle Alert Warning	2025	ASR Division				
	i. Ensure the timeliness of updates and accuracy of Electronic Terrain and Obstacle Data (eTOD)	2025	ASR Division				
	j. Guidance on the Establishment of a Flight Data Analysis Programme (FDAP)	Implemented	FSR Division				
	k. General Directive on Crew Resource Management Training Programme (CRM)	Implemented	FSR Division				
	l. Advisory Circular - Controlled Flight into Terrain (CFIT) and Approach and Landing Accident	Implemented	FSR Division				

**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	Reduction (ALAR) Training Programme.						
	m. Guidance for Air Operators in Establishing a Flight Safety Documents System.	Implemented	FSR Division				
	2. Validate the effectiveness of this safety enhancement initiatives (SEIs) through the analysis of mandatory occurrence reporting (MORs) and voluntary occurrence reporting systems (VORs) and accident/incident investigations (apply safety management methodologies).	Continuous Process	FSR and ASR Divisions	Industry Partners	TAWS /GPWS warning per 10,000 take offs and landings.  MSAWs per 10,000 take offs and landings.	High	Surveillance activities  Monitoring of relevant SPTs/SPIs of service providers / operators.  Occurrence reporting (MOR/VOR)
	3. Identify additional contributing factors: 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).	2025  Implemented in main International Airport	FSR and ASR Divisions  ASR Division	Industry Partners  ANSP	Altitude changes and diversion due to weather per 10,000 take offs and landings.  Number ground-based Nav. aid malfunctioning or unserviceability events per 10,000 take offs and landings.	High	Safety reporting (MOR/VOR)  Surveillance activities.  ATC Reports  RT/ATC reports  Fatigue Reports  Monitoring the safety data of ANSP/ Surveillance

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	c. Phraseology used (standard vs. non-standard)	Implemented	ASR Division	ANSP	Percentage of non-compliance to standard phraseology		Random checks
	d. Pilot fatigue and disorientation.	Implemented					
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for CFIT.	Continuous process	FSR and ASR Divisions	Industry Partners		High	Surveillance activities  Occurrence reporting (MOR/VOR)
	5. Conduct continuous evaluations of the performance of the SEIs.	Continuous process	FSR and ASR Divisions	Industry Partners		High	Surveillance activities.  Occurrence reporting (MOR/VOR)

HRC 2: Loss of Control – In flight (LOC-I)							
<p>Goal 1: Achieve a continuous reduction of operational safety risks</p> <p>Target:</p> <ol style="list-style-type: none"> <li>1.1. No fatal accident (CAT)</li> <li>1.2. No ground fatalities as a result of an aviation accident</li> <li>1.3. No accident with aircraft structural damage (CAT)</li> <li>1.4. 50% reduction of serious incidents</li> </ol>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
<p>GASP OPS SEI on LOC-I (State) — Mitigate contributing factors to the risk of LOC-I accidents and incidents</p>	1. Implement the following LOC-I safety actions:						
	a. Develop guidance materials on upset prevention and recovery training in all full flight simulator type conversion and recurrent training programmes and ensure implementation.	Implemented	FSR Division	Industry Partners (Air Operator, ANSP)	Low airspeed occurrences per 10,000 take offs and landings.  Icing condition/ Windshear /severe turbulence occurrences per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Flight Data Monitoring via inspection.  Surveillance activities.
	b. Require more time devoted to training for the pilot monitoring role.	2024	FSR Division		Loss of thrust occurrences per 10,000 take offs and landings.		Monitoring of relevant SPTs/SPIs of AN service provider / operators.
	c. Advisory Circular — “Air Operators Standard Operating Procedures for Flight Deck Crewmembers”	Implemented	FSR Division		Abnormal Flight Control inputs per 10,000 take offs and landings.		

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	d. Guidance Material on Flight Crew Proficiency.	Implemented	FSR Division		Pilot/human induced inputs per 10,000 take offs and landings.		
	e. Advisory Circular — Mode Awareness and Energy State Management Aspects of Flight Deck Automation	Implemented	FSR Division				
	2. Validate the effectiveness of the SEIs in the industry through MORs and VORs systems and accident/incident investigations (apply safety management methodologies- PDCA)	Continuous process	FSR Division	Industry Partners		High	Occurrence reporting (MOR/VOR)  Surveillance activities.  Monitoring of relevant SPTs/SPIs of service providers / operators.
	3. Identify additional contributing factors: 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	Implemented	FSR Division	Industry Partners	FDA data on LOC-I	High	Occurrence reporting (MOR/VOR)  Surveillance activities  FDA Reports

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	for recovery from unusual aircraft attitudes g. Inappropriate flight control inputs in response to a sudden awareness of an abnormal bank angle.						
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for LOI-C.	Continuous process	FSR Division	Industry Partners		High	Occurrence reporting (MOR/VOR) Surveillance activities.
	5. Conduct continuous evaluations of the performance of the SEIs.	Continuous process	FSR Division	Industry Partners		High	Surveillance activities.  Occurrence reporting (MOR/VOR)



HRC 3: Mid Air Collision (MAC)							
Goal 1: Achieve a continuous reduction of operational safety risks							
Target 1.1: Maintain a decreasing trend of the national accident rate							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP OPS SEI on MAC (State) — Mitigate contributing factors to risk of MAC accidents and incidents	1. 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 ICAO Annex 6.	Implemented	FSR Divisions	Industry Partners (Air Operator, ANSP)	Number of TCAS/TAWS warnings per 10,000 take offs and landings.  Loss of separation occurrences per 10,000 take offs and landings.  Non adherence to ATC instructions by Pilots for 10,000 take offs and landings.	High	Occurrences reporting (MOR/VOR)  Surveillance activities  Monitoring of relevant SPTs/SPIs of service providers / operators.
	b. Ensure adherence to ACAS warning procedures	Implemented	ASR Division	ANSP	Number of TCAS (RA/TA) alerts received per month		No of TA/RA reports FDA reports
	c. Promote the improvement of air traffic control (ATC) systems, procedures and tools to enhance conflict management	Implemented	ASR Division	ANSP	Number of unserviceability reported ADS – C/ ATM system per month		Safety Data of ANSP  Surveillance activities  Safety Reports
	d. Promote the improvement of communications systems and procedures, such as controller pilot data link.	Implemented	ASR Division	ANSP			



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	2. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations (apply safety management methodologies)	Continuous process	FSR and ASR Divisions	Industry Partners	Number of LHDs per annum  Number of separation minima infringements reported per 10,000 movements	High	Occurrence reporting (MOR/VOR)  Surveillance activities
	3. Identify additional contributing factors:  a. Traffic conditions - traffic density, complexity, mixture of aircraft types and capabilities, etc.  b. ATC performance related to workload, competence, teamwork, procedures, commitment, etc., as well as the influence of air navigation services providers' (ANSP) safety management.  c. Flight crew training and corporate culture with workload, competence, teamwork, procedures, commitment etc., and the influence of aircraft operator's safety management	Implemented  Implemented  Implemented	ASR Divisions  ASR Divisions  FSR Divisions	Industry Partners	Number of occasions that the ATC sector capacity has exceeded per month	High	Surveillance activities  Occurrences reporting (MOR/VOR)

# CIVIL AVIATION AUTHORITY OF SRI LANKA

d. ATC systems - flight data processing, communication, short term conflict alert (STCA), etc., as well as the interaction with the human operators and the aircraft systems, and the procurement policy of the ANSP.	Implemented	ASR Divisions				
e. Aircraft equipment - autopilots, transponders and ACAS, but also aircraft performance (e.g. rate-of-climb) and their physical size.	Implemented	FSR Divisions				
f. Navigation infrastructure - both coverage and quality	Implemented	ASR Divisions				
g. Surveillance - both coverage and quality	Implemented	ASR Divisions				
h. Flight plan processing - efficiency and reliability of flight plan submission, approval and distribution	Implemented	FSR Divisions				
i. Airspace - complexity of airspace design, route layout, extent of controlled or uncontrolled	Implemented	ASR Divisions				
					Number of surveillance systems (Radar/ ADS – B) C/ ATM system failures	Safety data of ANSP

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	airspace, proximity of military operational or training areas, etc.  j. Flight in adverse environmental conditions that may influence conflict management and collision avoidance.	Implemented	FSR Divisions				
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for MAC.	Continuous process	ASR and FSR Divisions	Industry Partners		High	Surveillance activities.  Occurrence reporting (MOR/VOR
	5. Conduct continuous evaluations of the performance of the SEI	Continuous process	ASR and FSR Divisions	Industry Partners		High	Surveillance activities.  Occurrence reporting (MOR/VOR

HRC 4: Runway Excursion (RE)							
Goal 1: Achieve a continuous reduction of operational safety risks Target 1.1. No fatal accident (CAT) 1.2. No ground fatalities as a result of an aviation accident 1.3. No accident with aircraft structural damage (CAT) 1.4. 50% reduction of serious incidents 1.5. No RE occurrences							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP OPS SEI on RE (State) — Mitigate contributing factors to risk of RE accidents and incidents	1. Implement the following RE safety actions:						
	a. Ensure the establishment and implementation of a State Runway Safety Programme (RSP) and Runway Safety Teams (RST) in all certified aerodromes.	Implemented.	ASR Division	Industry Partners  (Air Operator, Aerodrome Operator, ANSP)	Unstabilized approaches occurrences per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance activities.  Monitoring of relevant SPTs/SPIs of service providers / operators. FDA reports
	b. Promote the establishment of policy and training on rejected landings, go-arounds, crosswind and tailwind landings (up to the maximum manufacturer-demonstrated winds).	Implemented	FSR Division		Rejected take off events per 10,000 take offs and landings.		
	c. Promote equipage of runway overrun awareness and alerting systems on aircraft	Implemented	FSR Division		Thrust asymmetry occurrences per 10,000		

# CIVIL AVIATION AUTHORITY OF SRI LANKA

			ASR Division		take offs and landings.		
	d. 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)	Implemented	ASR Division		No of go- arounds per 5,000 landings.		Safety data of ANSP
	e. Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	Implemented	ASR Division		No of overruns/ veer off events per 5,000 landings.		
	f. Ensure that procedures to systematically reduce the rate of unstabilized approaches to runways are developed and used.	Implemented	ASR Division		Number of wind shear reports of Pilots during landing & take - off (per month)		
	g. Guidance material and training program for runway pavement, maintenance and operations from aerodrome operator's perspective.	Implemented	ASR Division		Number of overruns/veer off events during SNOWTAM activation per year.		
					Number of overruns/ veer off -during		

# CIVIL AVIATION AUTHORITY OF SRI LANKA

					maintenance planning level of runway friction per year.		
	2. Validate the effectiveness of the SEI through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies).	Continuous process	FSR and ASR Divisions	Industry Partners	Above metrics	High	Occurrence reporting (MOR/VOR)  Surveillance activities.
	3. Identify additional contributing factors: 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.	2025  2025  Implemented  2025	FSR/ASR Divisions  FSR/ASR Divisions  FSR Division  ASR Division	Industry Partners		High	Occurrence reporting (MOR/VOR)  Surveillance activities.
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for RE.	Continuous process	ASR /FSR Divisions	Industry Partners		High	Occurrence reporting (MOR/VOR)  Surveillance activities.



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	5. Conduct continuous evaluations of the performance of the SEI.	Continuous process	ASR /FSR Divisions	Industry Partners		High	Surveillance activities.  Safety reporting (MOR/VOR)
--	--	--------------------	--------------------	-------------------	--	------	--



HRC 5 : Runway Incursion (RI)							
<p>Goal 1: Achieve a continuous reduction of operational safety risks</p> <p>Target:</p> <ol style="list-style-type: none"> <li>1.1. No fatal accident (CAT)</li> <li>1.2. No ground fatalities as a result of an aviation accident</li> <li>1.3. No accident with aircraft structural damage (CAT)</li> <li>1.4. 50% reduction of serious incidents</li> <li>1.5. No RI occurrences.</li> </ol>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP OPS SEI on RI (State) - Mitigate contributing factors to the risk of RI accidents and incidents.	1. Implement the following RI safety actions:						
	a. Ensure the establishment and implementation of a State runway safety programme (RSP) and runway safety teams (RST)	Implemented	ASR Division	Industry Partners (Air Operator, Aerodrome Operator, ANSP)	Number of RI occurrences per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)
	b. Promote the establishment of policy, procedures and training that supports situational awareness for controllers, pilots and airside vehicle drivers	Implemented	FSR and ASR Divisions				Surveillance activities
	c. Ensure effective use of suitable technologies to assist the improvement of situational awareness, such as improved resolution Airport Moving Maps (AMM), Electronic Flight Bags (EFBs), Enhanced Vision	Implemented stop bars and Wig-Wag lights	FSR and ASR Divisions				Monitoring of relevant SPTs/SPIs of service providers / operators.

**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	Systems (EVS) and Head-Up Displays (HUD), Advanced-Surface Movement Guidance and Control Systems (ASMGCS), stop bars, and runway incursion warning systems (ARIWS).						
d.	Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	Implemented	ASR Division	ANSP			
e.	Ensure the use of standard phraseologies in accordance with applicable State regulations and ICAO provisions (e.g. Doc 9432, Manual of Radiotelephony).	Implemented	FSR & ASR Divisions		Percentage of non-compliance to standard phraseology (in aerodrome control for issuing conditional clearance/ taxi/ crossing runway/ vacating etc.)		Random checks on schedule inspections
f.	Ensure the identification and publication in the aeronautical information publication (AIP) of hot spots at aerodromes	Implemented	ASR Division				
g.	Ensure that suitable strategies to remove hazards or mitigate risks associated with identified hot spots are developed and executed.	Implemented	FSR and ASR Divisions				



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	h. Advisory Circular — Runway Incursion (RI) Prevention and Pilot Training.	2024	FSR Divisions				
	2. Validate the effectiveness of the SEIs through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies)	Continuous process	FSR and ASR Division	Industry Partners	Number of RI occurrences per 10,000 take offs and landings.	High	Safety reporting (MOR/VOR)  Surveillance activities
	3. Identify additional contributing factors:  a. Operations in low visibility conditions  b. Complex or inadequate aerodrome design  c. Conditional clearances  d. Simultaneous use of intersecting runway  e. Phraseology use (e.g. non-standard vs. standard, call-sign confusion)  f. Concurrent use of more than one language for ATC communications  g. English language competence despite the introduction by ICAO	Implemented  Implemented  Implemented  Implemented  Implemented	FSR Division & ASR Division	Industry Partners	Number of RI occurrences per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance activities

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	of a system of validating competence in aviation English.  h. Inadequate manoeuvring area driver training and assessment programme.	Implemented					
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for RI	Continuous process	FSR/AS R Divisions	Industry Partners	Number of RI occurrences per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance activities
	5. Conduct continuous evaluations of the performance of the SEIs	Continuous process	FSR/AS R Divisions	Industry Partners	Number of RI occurrence per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance activities



## Goal 1: Achieve a continuous reduction of operational safety risks

- 1.1. No fatal accident (CAT)
- 1.2. No ground fatalities as a result of an aviation accident
- 1.3. No accident with aircraft structural damage (CAT)
- 1.4. 50% reduction of serious incidents
- 1.5. No RI occurrences.
- 1.6. No RE occurrences
- 1.7. No ARC occurrences

Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
NASP OPS SEI on ARC (State)-Mitigate contributing factors to the risk of ARC accidents and incidents	1. Implement the following ARC safety actions:	Implemented	FSR Division	Industry Partners (Air Operator, Aerodrome Operator, ANSP)	Number of hard landing per 5000 landings.	High	Occurrence reporting (MOR/VOR)
	a. Promote the establishment of policy and training on rejected landings, go-arounds, crosswind and tailwind landings (up to the maximum manufacturer-demonstrated winds).				Number of bounce landing per 5,000 landings.		Surveillance activities.
	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)	Implemented	ASR Division		Number of tail strikes per 10,000 take offs and landings		Monitoring of relevant SPTs/SPIs of service providers / operators.
					Engine pod strikes per 5000 landings		

Section: Appendix A	Page: App A-20	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	<p>c. Tool Guidance material on Unstabilized Approach</p> <p>d. Guidance material and training program for runway pavement, maintenance and operations from aerodrome operator's perspective.</p>	<p>Implemented</p> <p>Implemented</p>	<p>FSR Division</p> <p>ASR Division</p>		<p>Number ARC related incidents during SNOWTAM activation per year</p> <p>Number of ARC related incidents during maintenance planning level of runway friction per year</p>		
	2. Validate the effectiveness of the SEIs through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies)	Continuous process	FSR/ASR Divisions	Industry Partners		High	<p>Occurrence reporting (MOR/VOR)</p> <p>Surveillance activities</p>
	<p>3. Identify additional contributing factors:</p> <p>a. Ineffective SOPs</p> <p>b. Failure to adhere to the appropriate SOPs</p> <p>c. Long/floated/bounced/firm/off-centre/crabbed landing</p> <p>d. Inadequate approach procedures design</p>	<p>2025</p> <p>2025</p> <p>Implemented</p> <p>2025</p>	<p>FSR Division</p> <p>FSR Division</p> <p>FSR Division</p> <p>ASR /FSR Divisions</p>	Industry Partners		High	<p>Occurrence Reporting (MOR/VOR)</p> <p>Surveillance activities</p>

# **CIVIL AVIATION AUTHORITY OF SRI LANKA**

	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any.	Continuous process	ASR/FSR Divisions	Industry Partners		High	Surveillance activities  Occurrence reporting (MOR/VOR)
	5. Conduct continuous evaluations of the performance of the SEIs	Continuous process	ASR/FSR Divisions	Industry Partners		High	Surveillance activities  Occurrences reporting (MOR/VOR)

HRC 7: Wildlife Strike (WS) with damage to aircraft							
<p>Goal 1: Achieve a continuous reduction of operational safety risks</p> <p>Target</p> <ul style="list-style-type: none"> <li>1.1. No fatal accident (CAT)</li> <li>1.2. No ground fatalities as a result of an aviation accident</li> <li>1.3. No accident with aircraft structural damage (CAT)</li> <li>1.4. 50% reduction of serious incidents</li> <li>1.5. No RI occurrences.</li> </ul>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
NASP OPS SEI on WS (State)-Mitigate contributing factors to the risk of WS accidents and incidents	1. Implement the following WS safety actions:						
	a. Observe bird activities and bird strikes at the airports and promote collecting, reporting, recording and analysis of data through various means.	Implemented	ASR Division	Industry Partners (Air operators, Aerodrome Operator)	Number of WS with damage to aircraft parts per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance of Aerodrome Operator
	b. Ensure the better management of vegetation and land use at the airports.	Implemented	ASR Division				Monitoring of relevant SPTs/SPIs of service providers / operators as per SMS by AASL.
	c. Ensure the implementation of effective bird distracting mechanisms at the airports.	Implemented	ASR Division				
	d. Ensure the implementation of Off-airport bird management activities in collaboration with	2025	ASR Division				



**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	<p>local communities and other government agencies through National Airport Bird Control and Reduction Committee.</p> <p>e. Encourage the use of environmentally friendly chemical bird repellent techniques at airports apart from the existing audio and visual repellent techniques.</p>	2025	ASR Division				
	2. Validate the effectiveness of the SEI through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies).	Continuous process	ASR Division	Industry Partners	Number of WS with damage to aircraft parts per 10,000 take offs and landings.	High	<p>Occurrence reporting (MOR/VOR)</p> <p>Surveillance of Aerodrome Operator.</p>
	<p>3. Identify additional contributing factors;</p> <p>a. Birds inhabiting airport and surrounding areas</p> <p>b. Inadequate bird scaring activities</p> <p>c. Insufficient wildlife control programme in Aerodrome.</p> <p>d. Violation of regulations (/butcher/slaughter houses near of airports/within 3 km of airport).</p> <p>e. Lack of study on wildlife habitat management near aerodromes</p>	<p>Continuous process</p> <p>2025</p> <p>2025</p>	ASR Division	Industry Partners	Number of WS with damage to aircraft parts per 10,000 take offs and landings.	High	<p>Occurrence reporting (MOR/VOR)</p> <p>Surveillance of Aerodrome Operator</p>

# **CIVIL AVIATION AUTHORITY OF SRI LANKA**

	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any.	Continuous process	ASR Division	Industry Partners	Number of WS with damage to aircraft parts per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance of Aerodrome Operator.
	5. Conduct continuous evaluations of the performance of the SEIs.	Continuous Process	ASR/FSR Divisions	Industry Partners	Number of WS with damage to aircraft parts per 10,000 take offs and landings.	High	Occurrence reporting (MOR/VOR)  Surveillance of Aerodrome Operator.

HRC 8 : Ground occurrences resulting in damage to aircraft							
Goal 1: Achieve a continuous reduction of operational safety risks Target 1.1. No fatal accident (CAT) 1.2. No ground fatalities as a result of an aviation accident 1.3. No accident with aircraft structural damage (CAT) 1.4. 50% reduction of serious incidents							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
NASP OPS SEI on Ground Occurrences (State)-Mitigate contributing factors to the risk of ground accidents and incidents	1. Implement the following safety actions; a) Ensure timely implementation of Ground safety training programs. b) Ensure implementation of Ground safety awareness programs. c) Promote the Ground Handling personnel training on subject matters. d) Monitor and direct ground handling personnel for recurrent / refresher training. e) Encourage voluntary non punitive reporting. f) Strengthen the enforcement actions for violations.	Continuous Process	FSR Division	Industry Partners  (Ground handling service providers, Self-ground handlers, Air Operators, Aerodrome Operators)	Number of aircraft collisions with GSE per year  Number of GSE collision with GSE per year  Number of GSE collision with facility per year  Number of incident on fire on GSE per year  Number of Jet blast incidents per year	High	Surveillance activities.  Internal quality control programs as per SMS.  Monitoring of relevant SPTs/SPIs of service providers / operators as per SMS.  Occurrence reporting (MOR/VOR)

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	<ul style="list-style-type: none"> <li>g) Ensure proper maintenance of GSE according to the manufacturer's requirement.</li> <li>h) Ensure the implementation of Effective GSE maintenance schedule monitoring program.</li> <li>i) Ensure the establishment of Ground Safety Action Group. (GSAG)</li> <li>j) Monitor the timely dissemination of GSAG recommendations to operational staff.</li> <li>k) Ensure the strengthening the shift briefing in a more effective manner.</li> <li>l) Ensure the implementation of effective monitoring of roster patterns.</li> <li>m) Maintaining of adequate number of personnel.</li> <li>n) Ensure the Minimizing the cross utilization of employees.</li> </ul>						
	2. Validate the effectiveness of the SEI through the analysis of MORs, VORs and accident/incident investigations (apply safety management methodologies).	Continuous process	FSR Division	Industry Partners	Number of Ground occurrences per year.	High	<p>Surveillance activities.</p> <p>Internal quality control programs.</p>

# CIVIL AVIATION AUTHORITY OF SRI LANKA

							Occurrence reporting (MOR/VOR)
	3. Identify additional contributing factors; a) Loss of Situational awareness of ground staff b) Violation of SOP c) Improper communication among ground staff, crew and ATC d) Lack of training e) Aging of Ground equipment	2025	FSR Division	Industry Partners	Number of Ground occurrences per year.	High	Occurrence reporting (MOR/VOR)  Surveillance activities.  Internal quality control programs.
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any.	Continuous process	FSR Division	Industry Partners	Number of Ground occurrences per year.	High	Occurrence reporting (MOR/VOR)  Surveillance activities.
	5. Conduct continuous evaluations of the performance of the SEIs.	Continuous Process	FSR Divisions	Industry Partners	Number of Ground occurrences per year.	High	Occurrence reporting (MOR/VOR)  Surveillance activities.



HRC 9: Significant system failure contributing to safety of the flight							
<p>Goal 1: Achieve a continuous reduction of operational safety risks</p> <p>Target</p> <ul style="list-style-type: none"> <li>1.1. No fatal accident (CAT)</li> <li>1.2. No ground fatalities as a result of an aviation accident</li> <li>1.3. No accident with aircraft structural damage (CAT)</li> <li>1.4. 50% reduction of serious incidents</li> <li>1.5. No RI occurrences.</li> <li>1.6. No RE occurrences</li> <li>1.7. No ARC occurrences</li> </ul>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
NASP OPS SEI on Significant System failure (State)-Mitigate contributing factors to the risk of significant system failures which contribute to accidents and incidents	1. Implement the following safety actions; a) Ensure Implementation of Manufacturer's current Maintenance Program	Continues & ongoing  Revise AMP within 90 days of issue of a revised MPD	FSR Division	CAMO	Frequency of revisions submitted for approval	High	Internal audits / CAASL audits
	b) Ensure Implementation of Airworthiness Directives before the effective date.	Schedule the embodiment of Airworthiness Directives at the earliest opportunity based on Risk Assessment	FSR Division	CAMO Air Operator	Number of applicable AD's issued and the number embodied annually	High	Internal reporting / CAASL Audits



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	c) Ensure Implementation of a proportionate and effective Reliability Monitoring Program	Continuous and ongoing. For operators with a fleet > 10 or more Aircraft, the use of preventative and predictive Maintenance is obligatory	FSR Division	CAMO	Improving reliability trends	Medium	Monthly Reliability reporting shared with the CAASL
	d) Ensure the implementation of a defined policy to manage reoccurring defects based on Risk Assessment	Immediate and ongoing	FSR Division	Air Operator CAMO	Post flight Reports / PIREPS vs rates of defect clearance	Medium	Monthly reporting via the Reliability Report (number of deferred defects)  Monthly reporting of Dispensation reports
	e) Ensure the Implementation of a policy that discourages the use of requests for concession and mandates a Risk Assessment with any request	Immediate and ongoing	FSR Division	Air Operator	Number of internal / external requests are continuously reduced	Medium	Internal Audits/ CAASL Audits
	f) Ensure the implementation of	Immediate and ongoing.	FSR Division	Air Operator CAMO	SRB/C Meeting minutes; SAG	Very High	Hazard Reports; MOC's; RA's,



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	a Safety Management System IAW IS-70	Strong focus on Human Factors and Hazard Reporting		AMO	Meeting Reports; Hazard reports and resolutions; Safety Performance Agreement; SPI's and SPT's. Management of Change; Risk Assessments		SAG meeting minutes
	g) Ensure the available Provision of adequate funds for Aircraft Maintenance regardless of Business income	Continuous and ongoing	FSR Division	Air Operator Aircraft Owner	Budget, funds on hand, annual spend	High	Monthly and Quarterly reports
	h) Ensure Robust Organizational structure with an empowered Accountable Manager	Implemented	FSR Division	CAMO AMO Air Operator	Organization chart	High	Any change to be approved by the CAASL.  through MOC and RA
	i) Ensure implementation of proper Training and qualification in the industry	Implemented	FSR Division	Air Operators CAMO AMO	Training Sources Experience Competence assessment interview	High	Procedures Internal / external audits Hazard reports / incidents





# CIVIL AVIATION AUTHORITY OF SRI LANKA

	j) Ensure availability of adequate facilities to comply with the scope of work to be undertaken	Implemented	FSR Division	Air Operators CAMO AMO	Comparison with similar organizations	High	Initial audit for approval Continuous audit process
	k) Effective audit system with an empowered Quality Assurances Post Holder	At initial approval and for any change via MOC	FSR Division	Air Operators CAMO AMO	Compliance with regulations Comparison with similar organizations	High	Initial approval audit Continuous audit process
	2. Validate the effectiveness of the SEI through the analysis of MORs, VORs, accident/incident investigations and audits (apply safety management methodologies).	Continuous Process	FSR Division	Air Operators CAMO AMO	Number of hazard reports	High	Audit by the CAASL
	3. Identify additional contributing factors; a) Improper maintenance checks and inspections.	Continuous Process	FSR Division	Air Operators CAMO AMO	Number of hazard reports	High	Audit by the CAASL



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	b) Aging of the aircraft c) Inability to oversee operations due to poor training, operational procedures d) Inability to replace components timely						
	4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any previously unknown emerge.	Continuous Process	FSR Division	Air Operators CAMO AMO	Number of hazard reports	High	Audit by the Authority





## 11. APPENDIX - B - SRI LANKA ORG ROADMAP

### DETAILED SEIs: STATE SAFETY OVERSIGHT CAPABILITIES

ORG Issue no.1: Establishment of effective safety oversight framework.							
Goal 2: Strengthen State safety oversight capabilities based on data driven approach							
<p><b>Target 2.1 :</b> Sri Lanka to improve its score for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</p> <ul style="list-style-type: none"> <li>➤ By 2025 – up to 89 percent</li> <li>➤ By 2028 – up to 93 percent</li> <li>➤ By 2030 – up to 95 percent</li> </ul> <p><b>Target 2.2:</b> 100% completion of all Priority PQs self-assessment</p> <p><b>Target 2.3:</b> Sri Lanka to ensure no Significant Safety Concerns (SSCs) raised under the USOAP Continuous Monitoring Approach (CMA).</p> <p><b>Target 2.4:</b> 100% Safety surveillance achieved against schedule</p> <p><b>Target 2.5:</b> Develop and maintain a mechanism for data collection, analysis and sharing among all stake holders by 2025.</p> <p><b>Target 2.6:</b> Sri Lanka to establish an independent Accident and Incident Investigation Authority (AIIA) as required by Annex 13, by 2025.</p>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/ Indicators	Priority	Monitoring Activity
GASP ORG SEI 1 (State) — Consistent implementation of ICAO SARPs at the national level	1. Conduct a structured review of all the Regulations/Implementing Standards, and by following the CAASL rulemaking process, to ensure that all the applicable provisions of the Annexes to the Chicago Convention are properly transposed to national regulations, to ensure that the	Continues process	CAASL	Ministry of Civil Aviation	No of Regulations reviewed  No of IS's reviewed  No Revisions to ISs. No of amendments	High	AWP review Revised of ICAO CAPS.

**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	national regulations provide for clear requirements of the State and are implementable and enforceable;				to Regulations.		
	2. Work at the national level to ensure no significant safety concerns as a priority.	Continuous process	CAASL	Industry partners	No of unsatisfactory PPQs No. of SSCs	High	Continuous Surveillance of operators and service providers.
	3. Address all protocol questions (PQs) of the USOAP CMA	Continuous process			Percentage of priority PQs addressed.	High	Self-assessment of PQs
	4. Establish primary aviation law and regulations, to empower the CAASL to conduct regulatory oversight, this includes separation of oversight functions and service provision functions (CE-1 and CE-2)	Implemented (CAASL 34 of 2002 and CA Act 14 of 2010)			% of CCs completed  No of ICAO State letter received for amendments of SARPS to Annexes.	High	Continuous Surveillance of operators and service providers. Self-assessment of PPQs
	5. Increase the level of compliance with ICAO SARPs and the EI of CEs at the national level (CE-1 to CE-5)	Continuous process			No of compliances to CAASL MC 2018-02.		Adapting the amendments of SARPS to ICAO Annexes. Updating of ICAO CMA web site.
	6. Establish a process for the identification of differences with ICAO SARPs (CE-2).	Implemented			No of differences submitted to ICAO.		Regular review of State letter data base by Documents & Web Management
	7. Ensure the differences identified are notified to ICAO in timely manner.	Continuous process					

# CIVIL AVIATION AUTHORITY OF SRI LANKA

					% of CCs/EFOD		Section of CAASL.  Continuous update of CCs/EFOD - ICAO CMA.
GASP ORG SEI 2 (State) — Development of a comprehensive regulatory oversight framework	<p>1. 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).</p> <p>2. 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).</p> <p>3. Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory oversight (see ORG SEI-5) (CE-3 and CE-4).</p>	<p>Implemented</p> <p>Implemented (SLCAP 0001 and Inspector Hand Books of respective Sections)</p> <p>Implemented (SORs &amp; PCDS developed for all technical posts)</p>	<p>CAASL</p> <p>CAASL</p>	-	-	High	-
					<p>No of technical Guidance issued.</p> <p>No of tools provided</p> <p>No of check lists available</p> <p>No of trained technical No of staff recruited.</p>		<p>Continuous Review of ICAO Annexes, Guidance.</p> <p>Updating of CAASL technical guidance.</p> <p>Review of SORs. Review of Training requirements and Training Plans.</p>



# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP ORG SEI-3 (State) — Establishment of an independent accident and incident investigation authority, consistent with Annex 13	1. Establish an independent accident and incident investigation authority, as per Annex 13 requirements (CE-1 and CE-3).	2025	Ministry in charge of Civil Aviation	CAASL	No of meetings held. No of drafts submitted to LD's Departments.	High	Progress review meetings with the Ministry
	2. 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).	Implemented for the investigations by CAASL. For AAIB – will be amended and implemented by 2025.	Ministry in charge of Civil Aviation	CAASL	No of Guidance Materials and tools issued.		Reviews and amendments according to ICAO SARPS
	3. 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).	2025	Ministry in charge of Civil Aviation		No of trained technical staff recruited as investigators		Preparation of SORs Preparation of Training Plans
GASP ORG SEI-4 (State) — Strategic allocation of resources to enable effective safety oversight	1. Confirm executive or legislative mandate to receive financial resources from government or other external sources and expend them (CE-1).	Implemented (self-financed)	CAASL	-	-		CAASL Annual Budget

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	2. Establish a process for the resource planning and allocation in alignment with a CAASL's organizational structure, which is required to conduct effective safety oversight (CE-2 and CE-3). SEI-1 and SEI-5 could be used to identify resource requirements (CE-1 to CE-5).	Implemented	CAASL	-	-		CAASL Annual Work Programme, Programme - Budget and Surveillance Plan.
	3. A sustainable and stable source of financing through commitments from the national and agency leadership and other stakeholders (CE-1 to CE-3) has been obtained.	Implemented to obtain Technical Assistance from ICAO APAC and other regional organizations	CAASL	-	No of requests made for trainings  No of requests made for required expertise  No of trainings obtained  No of times technical expertise obtained	Medium	Review of Annual Training Plan  Updating of training records  Review of Trainings (planned) schedules  Annual Training Plan
	4. Develop a process for assessing changing resource requirements and sustain	Established and on going	CAASL	ICAO-APRASG COSCAP-SA, EUSA-APP	No of trainings &	Medium	



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	necessary coordination with resource stakeholders for safety oversight improvements, as outlined in Component 1 - State Safety Oversight System (CE-1 to CE-3)				expertise received.  No of inspectors certified.		
GASP ORG SEI-5 (State) — Qualified technical personnel to support effective safety oversight	<ol style="list-style-type: none"> <li>1. Establish an effective system to identify and track qualifications and training of existing technical personnel (CE-4).</li> <li>2. Identify the gaps in qualified technical personnel and training requirements necessary to implement the oversight mandate (CE-4).</li> <li>3. Establish a compensation scheme for the attraction and retention of qualified technical personnel (CE-4).</li> <li>4. Make use of RSOOs, RAIOS, or equivalent means, to secure qualified technical personnel to perform those functions which cannot be</li> </ol>	<p>Implemented (IHB)</p> <p>Implemented (PCDS) Established Carder requirements</p> <p>Implemented (Technical allowance)</p> <p>Implemented</p>	CAASL	-	<p>No of training provided as per Training Plan.</p> <p>Carder requirement</p> <p>No of Technical personnel available</p>	High	<p>Review of Annual Training Plans &amp; Individual Training Plan as per the required trainings.</p> <p>Review of PCDS</p> <p>Review of the carder requirement calculation criteria</p> <p>Review of Technical allowance payment criteria</p>

	performed by the State acting on its own (CE-4).						
	5. Establish human resource plans to support hiring and retention of the appropriate number of qualified technical personnel required (CE-4).	Implemented					
	6. 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).	Implemented					
	7. Develop a process for assessing changing needs for qualified technical personnel requirements and develop procedures to update hiring, retention and training of personnel needs, in coordination with SEI-4, item 2 above (CE-4).	Implemented					

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	8. Ensure that qualified PANS-OPS and CNS inspectors are employed in sufficient number.	The process has been started					
GASP ORG SEI-6 (State) — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	1. Based on the identified hazards and safety deficiencies (Implement), establish a mechanism to identify collaborators and develop an action plan for the resolution of those deficiencies (CE-1 to CE-6).	Implemented and continuous process.	CAASL	Industry Partners	Number of hazards /safety deficiencies identified.	High	Surveillance and Audits
	2. Use a regional safety oversight mechanism, or the services of another competent organization.	2025	CAASL	COSCAP-SA, Industry Partner	No of findings raised No of safety deficiencies resolved. No. of safety oversight activities from regional bodies or/and States.	Medium	Investigation process  Identifying the GAPs in national safety oversight framework  Review of meeting outcomes
	3. Establish a process via RASG 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).	Continuous process	CAASL	RASG ICAO	No of meetings participated	Medium	Reviewing the GAPs in the CAASL Training Plan implementation. Review of ICAO technical guidance.

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	4. Collaborate with RASG and/or RSOO, other States, ICAO, industry joint programmes and/or technical school partnerships to attract, recruit and train qualified and sufficient technical personnel and develop a strategy for their retention (CE-4).	Implemented and Continuous Process	CAASL	APAC - FPP RASG ICAO	No of trainings provided	Medium	Review of Agreements with COSCAP-SA/ APAC-FPP
	5. 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 State's national regulations and operational environments (CE-5).	Continuous Process	CAASL	ICAO EU	No of Guidance materials issued	Medium	Review the requirements of issuing new guidance /tools based on amendments to ICAO SARPS
	6. While working to improve safety oversight, work with RASG and/or RSOO to address high risk categories of occurrences.	Continuous Process	CAASL	RASG RSOO	No of participation to RASP & APANPIRG meetings. Safety Data sharing to ICAO/APAC	High	Response to safety data surveillance.

# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP ORG SEI-7 (State) — Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records	1. Update USOAP corrective action plan items.	Continuous Process	CAASL	Industry partner	No of CAPs submitted.	High	PQ self assessments on each audit area
	2. Complete and submit the self-assessment checklist based on USOAP CMA priority PQs.				No of PQs completed		Continuous updates on ICAO CMA Internal audits
	3. Complete and submit the State aviation activity questionnaire.				SAAQ updated		% of EI Score
	4. Complete and submit the compliance checklists on electronic filing of differences system.				No of CCs completed		
	5. Update documents and records, as required, in a timely manner.				No of revision/editions required for the existing ISs & CAASL documents based on ICAO Annexes and guidance materials		
SEI-8 — Consistent implementation of ICAO SARPs at the national level	1. Work at the national level to address significant safety concerns ( if any) as a priority	As and when required	CAASL	Industry Partners	No of SSCs raised	High	Developing and Reviewing of CAPs to resolve SSCs
	2. 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)	Continuous process	CAASL	Industry Partners	EI score	High	PQ self assessment for CE-6 to CE 8

# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP ORG SEI-9 (State) Continued implementation of and compliance with ICAO SARPs at the national level.	1. Implement licencing, certification, authorization and approval processes (CE-8).	Implemented and in progress for ASPC	CAASL	Industry partners	No of licences/certification/authorizations issued	High	Internal audits surveillance activities Reviewing the existing procedures
	2. Implement regulatory oversight and enforcement processes (CE-7 and CE-8).	Implemented	CAASL	Industry Partners	No of safety concerns raised during surveillance activities and during accident and incident investigations .	High	Findings raised during investigations and inquiries. Follow up actions on safety recommendations issued during Investigations and inquiries.
	3. Establish a system to resolve safety concerns identified via accident and incident investigation, surveillance activities, safety reports and other means (CE-8).	Implemented And continuous reviewed by AAIB when implemented in 2025	CAASL	Industry Partners	No of safety recommendations issues. No of findings issued	High	Findings raised during investigations and inquiries. Follow up actions on safety recommendations



# CIVIL AVIATION AUTHORITY OF SRI LANKA

					No of CAPs – accepted No of CAPs – not accepted.		issued to stake holders during safety audits, Investigations and inquiries.
SEI-10 — Strategic allocation of resources to enable effective safety oversight	<ol style="list-style-type: none"> <li>1. Use SEI-1 and SEI-5 to identify resource requirements (CE-6 to CE-8)</li> <li>2. Leverage regional groups such as the RASG to identify additional resources.</li> </ol>	Continuous process	CAASL	Industry Partners	<p>No of training provided to CAASL inspectors as per Training Plan.</p> <p>No of CAASL inspectors required</p> <p>No of CAASL inspectors available</p> <p>No of Technical personnel available (Operators and Service Providers) in the Industry</p>		<p>Surveillance/ Audits/ Inspections</p> <p>Annual cadre requirement assessment.</p> <p>Updates of PCDS of CAASL Inspectors</p>

# CIVIL AVIATION AUTHORITY OF SRI LANKA

SEI-11 — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	1. Based on the identified hazards and safety deficiencies, establish a mechanism to identify key aviation stakeholders and develop an action plan for the resolution of those safety issues (CE-6 to CE-8)	Implemented and on going process.  Inspection findings and Safety recommendations follow up process  A new process will be implemented with establishment of AAIB.	CAASL AAIB	Industry Partners	No of Findings raised  No of CAPs received  No of CAPS accepted  No of Coordination meetings conducted.	Coordination meetings with the Service Providers and Operators.
	2. 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)	Implemented and Continuous process	CAASL	Industry Partners	No of check lists available  No of Guidance Manuals available for safety oversight functions.  No of Revisions to the check list	Completing the CAASL –MC-2018-02 to address the amendments to ICAO SARPs/PANS



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	3. While working to improve safety oversight, continue to work with RASG and/or RSOO to address national high-risk categories of occurrences	Continuous process	CAASL	Industry Partners	No of Revisions to the guidance Manuals  No. of updates to NASP  No of updates to SMM/SMSM's of service providers/ Operators		Safety Data analysis  SMS Surveillance
GASP ORG SEI-12 (State)  Continued provision of the primary source of safety information to ICAO by updating all relevant documents and records as progress is made.	1. Update USOAP corrective action plan items.  2. Update and submit the self-assessment checklist based on USOAP CMA priority PQs.  3. Update and submit the State Aviation Activity Questionnaire.  4. Update and submit the compliance checklist (CCs) on the electronic filing of differences (EFOD) system.	Continuous process  Continuous process  Continuous process  Continuous process	CAASL	Industry Partners	No of CAPs submitted.  No of PQs completed  SAAQ updated.  No of CCs completed	High	PQ- self assessments.  Updates on CAPs  % of EI score  Internal audits

ORG Issue No. 2: Effective SSP implementation							
<p>Goal 3: Implement effective SMS and SSP</p> <p>Target 3.1: Sri Lanka to implement the foundation of SSP by 2023.</p> <p>Target 3.2: Sri Lanka to attain 100% SSP PQs implementation at “present” level by 2025.</p> <p>Target 3.3: Sri Lanka to implement an effective SSP at maturity level “present &amp; effective” by 2028.</p>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP ORG SEI-13 (State) — Start of SSP implementation at the national level	1. Secure State-level commitment to improve safety.	Implemented	CAASL	Industry Partners	Completion level of SSP implementation	High	ICAO ISTARs
	2. Conduct initial SSP gap analysis (checklist) then the detailed SSP self –assessment.	Implemented			Level of SSP self-Assessment		SSP GAP analysis
	3. Establish an SSP implementation team.	Implemented			No of meetings with SSP implementation team		SSP Implementation Plan
	4. Develop an implementation plan for the SSP.	2023			No of amendments to SSPPPM		Review and updates on SSP Policy and Procedures Manual (SSPPPM)
	5. Issue SMS regulations for service providers and verify SMS implementation.	Implemented			No of amendments to the SMS Regulations and IS 70		Review and update on

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	6. Identify and share safety management best practices.	Continuous process					Implementing Standard (IS) and Regulations on SMS
GASP ORG SEI-14 (State) — Strategic allocation of resources to start SSP implementation	<p>1. Establish a process for planning and allocation of resources to enable SSP implementation and identify areas where resources are needed.</p> <p>2. Obtain resources from national and appropriate authorities' leadership and stakeholders within the State to support SSP implementation.</p> <p>3. Work with the ICAO Regional Office to make use of available means (e.g. Technical Cooperation Bureau) to acquire assistance needed for SSP implementation.</p> <p>4. Work with RSOO, other States and other organizations, as appropriate to train qualified technical</p>	<p>Implemented</p> <p>Implemented CAASL Funded</p> <p>Continuous Process</p> <p>Continuous process with EU-SA-APP, COSCAP-SA</p>	CAASL	Industry partners	Level of SSP Implementation	High	<p>SSP GAP analysis</p> <p>Review and updates to SSP Implementation Plan</p> <p>ICAO ISTARs</p>
					No of SSP trainings received		

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	personnel to fulfil their duties and responsibilities regarding SSP implementation.	and ICAO - APAC			No of expert assistance received on SSP implementation		
GASP ORG SEI-15 (State) — Strategic collaboration with key aviation stakeholders to start SSP implementation.	<ol style="list-style-type: none"> <li>1. Identify areas where collaboration/support is needed as part of the SSP implementation plan (see SEI-14).</li> <li>2. Identify relevant collaborators from key aviation stakeholders, including other States that are implementing or have implemented a SSP.</li> <li>3. Develop an action plan to address the elements identified as missing or deficient during the SSP gap analysis (see SEI-13- item 2).</li> <li>4. Establish a process via RASG for a mentoring system, including providing assistance to States/industry, as well as sharing of best practices to support SSP implementation.</li> </ol>	<p>Continuous process</p> <p>Implemented - Collaborates are within the State.</p> <p>2023</p> <p>Continuous process with RASG</p>	CAASL	<p>Industry Partners</p> <p>Regional Organizations</p>	<p>Number of collaborator identified</p> <p>Number of activities collaborated with identified collaborators</p> <p>No of RASG meetings attended</p> <p>No of trainings received</p>	High	<p>Monitoring and evaluating activities through SSP Coordination Meetings.</p> <p>SSP GAP Analysis</p> <p>ICAO ISTARs</p>

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	<p>5. 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).</p> <p>6. 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.</p>	<p>Implemented and continuous process with ICAO and EU-SA APP.</p> <p>Continuous Process</p>			<p>No of SSP trainings received.</p> <p>No of Occurrence reports shared with relevant States</p> <p>No. of Investigation Reports shared with ICAO and other States per year.</p> <p>No. of Safety Bulletin issued.</p>		<p>Updating of individual SSP training records</p> <p>Review of Annual Training Plan</p> <p>Continuous safety data analysis and safety reports.</p>
--	---	--	--	--	--	--	---



# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP ORG SEI-16 (State) — Strategic collaboration with key aviation stakeholders to complete SSP implementation	<ol style="list-style-type: none"> <li>1. Work with collaborators (identified in SEI-15) to execute the action plan for implementation.</li> <li>2. Work with key aviation stakeholders on establishing and updating SSP elements</li> <li>3. Establish a system for the continuous improvement of the SSP, in collaboration with all relevant stakeholders.</li> </ol>	<p>Continuous process</p> <p>Continuous process</p> <p>Continuous Process</p>	CAASL	<p>Industry Partners</p> <p>Regional Organizations</p>	<p>Number of activities collaborated with identified collaborators</p> <p>Level of SSP implementation</p> <p>Number of best practices shared with other states.</p>	High	<p>Monitoring and evaluating collaborative activities through Meetings.</p> <p>ICAO ISTARs</p>
GASP ORG SEI-17 (State) — Continued availability of safety data and safety information to support safety management activities at the national level( <b>step 1</b> )	<ol style="list-style-type: none"> <li>1. Establish a legal framework related to the protection of safety data, safety information and other related sources in accordance with Appendix 3 of ICAO Annex 19.</li> </ol>	Implemented and will be completed by 2025	CAASL and AAIB after 2025	Industry Partners	<p>Number of mandatory and voluntary reports received</p> <p>Number of Risk Assessment conducted.</p> <p>Regulations on Data Protection</p>	Medium	<p>Effectiveness of reporting systems</p> <p>Data analysis and risk assessments</p>

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	2. Establish a State mandatory occurrence reporting system.	Implemented					
	3. Establish safety data collection and processing systems (SDCPS) to capture, store, aggregate, and enable the analysis of safety data and safety information to support their safety performance management activities.(which includes a system to track, monitor and record the corrective actions taken by the air operators in resolving identified deficiencies; and a surveillance programme for designated examiners, with clear guidance on the frequency and activities to be conducted by CAASL inspectors. ).	Continuously being implemented.					
	4. Establish and implement a system to conduct risk-based	2024					

	inspections of all entities, other than air operators, involved in the transport of dangerous goods by air, including the determination of inspection frequencies as well as random inspections; and						
	5. Implement procedures to take appropriate actions in case of violation in the area of dangerous goods, including a system to track identified deficiencies.	2024					
	6. Establish and maintain a process to identify hazards from collected safety data.	Continuous Process					
	7. Establish and utilize a process to ensure the assessment of safety risks associated with identified hazards.	Continuous Process					
	8. Establish a State confidential voluntary	Implemented					



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	safety reporting system providing data to the safety database (see SEI-17C)						
GASP ORG SEI-18 (State) Continued availability of safety data and safety information to support safety management activities at the national level (step 2)	1. Develop safety performance indicators using the established safety risk management process.	Implemented	CAASL	Industry Partners	Number of mandatory and voluntary reports received.	High	Effectiveness of CAASL reporting systems
	2. Establish the safety objectives to be achieved through the SSP	Implemented			Number of SPIs and SPTs defined on each domain.		Quality of SPIs and SPTs defined
	3. Develop safety performance measurement methodologies, aligned with the regional safety metrics, using the established safety risk management process (see SEI-17.5)	Implemented			Number of risk assessments conducted		Contribution of SPIs to GASP and AP RASP.
	4. Develop safety performance indicators and safety performance targets using the established safety risk management process	Implemented			Number of ALOSP defined		SMS Audits
	5. Ensure the establishment of	Continuous process					

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	mandatory safety reporting systems by service providers.						
	6. Encourage establishment of voluntary safety reporting systems as part of service providers' SMS.	Continuous process					
	7. 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.	Continuous process					
	8. Contribute information on operational safety risks and SSP safety performance indicators and emerging issues to the RASP.	Continuous process					

Issue no. 4: Advance data analysis & risk modelling							
Goal 4: Increase collaboration at the regional level							
Target 4.1: Sri Lanka to achieve Goal 2 and 3, may use a regional safety oversight mechanism or other safety oversight organizations' ICAO recognized functions in seeking assistance to strengthen the safety oversight capabilities.							
Target 4.2: Sri Lanka to share information on operational safety risks, including SSP Safety Performance Indicators (SPIs), and emerging issues to Asia Pacific Regional Aviation Safety Group (AP- RASG) on request.							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP ORG SEI-19 (State) — Acquisition of resources to increase the proactive use of risk modelling capabilities	1. Identify resources needed to support safety intelligence collection and processing, advanced data analysis, risk modelling and information sharing capabilities.	2025	CAASL	Industry Partners  Regional Organizations	Number of qualified technical personnel for data analysis, risk modelling.	High	Review of state risk modelling capabilities
	2. Attract, recruit, train, and retain qualified technical personnel to specialize in risk modelling.	2025			No of advance data analysis and risk modelling conducted		
	3. Ensure that the Civil Aviation Safety Inspector workforce is trained to perform safety oversight	Continuous Process			No of technical staff recruited /trained on risk modelling  No of training on data analysis, risk modelling received by CAASL Inspectors		



# CIVIL AVIATION AUTHORITY OF SRI LANKA

<p>GASP ORG SEI-20 (State) — Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities.</p>	<p>1. 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.</p>	2025	CAASL	Industry Partners	<p>Number of areas identified for collaboration.</p> <p>No of Mandatory and Voluntary Reports received</p>		<p>SMS Audits</p> <p>Review of safety Data /analysis</p>
	<p>2. Establish a process via RASG and/or RSOO (or other regional bodies) for a mentoring system, including providing assistance to States/industry, as well as the sharing of best practices, to support safety culture development and the proactive use of risk modelling.</p>	2025			<p>Number of assistance received and best practices shared</p>		
	<p>3. Foster and participate in public-private partnerships similar to the commercial/general aviation safety teams' concept to identify and implement system safety enhancements.</p>	Continuous process			<p>No of annual safety meetings held</p>		
	<p>4. 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</p>	Implemented and Continuous process			<p>No of Stakeholder meetings per year</p>		



**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	confidential and non-punitive environment.						
GASP ORG SEI-21 (State) — Advancement of safety risk management at the national level Statistics	<ol style="list-style-type: none"> <li>1. 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.).</li> <li>2. Develop risk modelling capabilities to support monitoring system safety issues and accident/incident prevention.</li> <li>3. Encourage information-sharing with industry.</li> </ol>	<p>2025</p> <p>2025</p> <p>Continuous process</p>	CAASL	Industry Partners	Number occurrence information shared	High	Surveillance activities including SMS Audits

Section: Appendix B	Page: App B-26	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

Issue No. 5: Effective SMS implementation							
Goal 5: Expand the use of industry programmes and safety information sharing networks by service providers							
Target 5.1: Establish a national safety information sharing networks by 2025.							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
GASP SMS SEI-5 : Improvement of industry compliance with applicable SMS requirements	1. Ensure implementation of a safety management system (SMS) commensurate to the size and complexity of the service provider, as required by national regulations and Annex 19.	Continuous Process	CAASL	Industry Partners	Level of SMS Implementation.	High	SMS Audit  SMSM review  SSPIA (when available )
	2. Ensure utilization of available guidance material to assist with SMS implementation	Continuous Process			No of guidance materials available		

# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP SMS SEI-6 : Resources for service providers to effectively implement SMS	1. Ensure working in collaboration with the State and industry associations to advance SMS implementation and identify expectations that cannot be efficiently resourced.	Continuous Process	CAASL	Industry Partners	No of areas identified for support	High	SMS Audit
	2. Ensure identification of areas where resources are needed as part of the SMS implementation plan developed following the SMS gap analysis.	Continuous Process			No of areas identified having lack of resources		SMSM approval process
	3. Ensure establishing a process for resource planning and allocation to enable SMS implementation, including resources which may be obtained from industry organizations	Continuous Process			Plan for resource allocation		SMSM approval process
	4. Ensure obtaining commitment from the accountable executive within the service provider for the necessary resources to enable SMS implementation.	Continuous Process			Safety policy  Level of Commitment from accountable manager		SMSM approval process

# CIVIL AVIATION AUTHORITY OF SRI LANKA

GASP SMS SEI-7 — Strategic collaboration with key aviation stakeholders to complete SSP implementation.	<ol style="list-style-type: none"> <li>1. Ensure working with the action plan of SSP implementation through sharing and supporting harmonization of SMS within industry.</li> <li>2. Ensure support for continuous improvement of SSP.</li> </ol>	Continuous process	CAASL	Industry Partners	<p>Level of information shared with the State</p> <p>Level of SMS implementation</p>	High	<p>Review of SMS implementation plans</p> <p>SMS Audits</p>
GASP SMS SEI-8 — Establishment of safety risk management at the service provider level	<ol style="list-style-type: none"> <li>1. Ensure establishment of mandatory safety reporting systems.</li> <li>2. Ensure providing information from the service provider to the State mandatory safety reporting system, as required.</li> <li>3. Ensure establishment of internal mechanisms related to the protection of safety data, safety information and related sources for the purpose of safety improvement</li> <li>4. Ensure establishment of voluntary and confidential hazard/occurrence reporting systems as part of the SMS.</li> </ol>	Continuous Process	CAASL	Industry Partners	<p>Level of establishment of internal occurrence reporting system</p> <p>No of MOR received.</p> <p>No of SPIs and SPTs defined</p> <p>No of VORs received.</p>	High	<p>Review of SMS implementation plans</p> <p>SMS Audits</p> <p>Monitoring of SPTs and SPIs</p>



# CIVIL AVIATION AUTHORITY OF SRI LANKA

	<p>5. Ensure establishment and maintenance of a safety database for technical personnel to monitor system safety issues within the service provider.</p> <p>6. Ensure establishment and utilization of a safety risk management process.</p> <p>7. Ensure development of safety performance measurement methodologies, aligned with harmonized safety metrics within industry, via the established safety risk management process.</p> <p>8. Ensure development of safety performance indicators and associated targets/alert settings, via the established safety risk management process.</p> <p>9. Encourage the use of globally harmonized metrics for the development and monitoring of safety performance indicators, as part of the service providers' SMS.</p>				<p>No Techniques used for safety performance measurement.</p> <p>No of risk assessments conducted</p>		
--	--	--	--	--	---	--	--



**CIVIL AVIATION AUTHORITY OF SRI LANKA**

	10. Encourage sharing and use of information from within industry to identify hazards and mitigate safety risks.						
GASP SMS SEI-10 — Allocation of industry resources to support continuous improvement of SSP and SMS	<p>1. Ensure competent technical personnel are allocated, at the service provider level, to support the requirements of the SSP infrastructure.</p> <p>2. Ensure providing safety analysis results from service providers to support the SSP.</p> <p>3. Ensure that;</p> <p>a) the service provider for air traffic service (ATS) develop and implement a training programme for its ATS staff, which includes refresher training;</p> <p>b) contingency plans have been developed and published for implementation in the event of disruption of ATS or related supporting services;</p> <p>c) An effective surveillance over the PANS-OPS, CNS,</p>	<p>Continuous Process</p> <p>On going</p>	CAASL	Industry Partners	<p>Level of competence of Safety Manager</p> <p>Competency level of staff allocated for SMS implementation.</p> <p>ATS trainings/refresher trainings provided.</p> <p>No. of updates to the ATS Training Plan.</p> <p>No. of meetings/reviews on Contingency Plan.</p>	High	<p>SMS Audits</p> <p>Post holder interviews</p>

Section: Appendix B	Page: App B-31	Date: 31-Dec-22
National Aviation Safety Plan of Sri Lanka	1 <sup>st</sup> Edition	Rev. No : 00

# CIVIL AVIATION AUTHORITY OF SRI LANKA

	MET and SAR service providers is conducted.						
GASP SMS SEI-11 — Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities	<ol style="list-style-type: none"> <li>1. Ensure working with industry stakeholders to leverage best practices with safety information analysis.</li> <li>2. Ensure sharing of safety risk identification with stakeholders for mitigation and monitoring strategies.</li> <li>3. Ensure active participation with State and organizations engaged in risk modelling.</li> </ol>	<p>Continuous Process</p> <p>Continuous Process</p> <p>2025</p>	CAASL	Industry Partners	<p>No of stakeholders identified</p> <p>No of safety analysis conducted</p>	High	SMS Audits
GASP SMS SEI-12 — Advancement of safety risk management at the service provider level	<ol style="list-style-type: none"> <li>1. Ensure that a legal framework related to the protection of safety data, safety information and other related sources is implemented and effective.</li> <li>2. Ensure developing risk modelling capabilities to support the monitoring of system safety issues and accident/incident prevention.</li> <li>3. Ensure monitoring safety information exchange networks for continuous improvements.</li> </ol>	<p>2025 after the establishment of AAIB</p> <p>2025</p> <p>2025</p>	CAASL	Industry Partners	<p>No of IS issued on protection of safety data.</p>	High	<p>SMS Audits</p> <p>SMSM review and acceptance process</p>

## CIVIL AVIATION AUTHORITY OF SRI LANKA

Issue no. 6: Appropriate development and utilization of air navigation and airport core infrastructure to support safe operations							
Goal 6: Ensure Sri Lanka has the appropriate infrastructure (physical and institutional) to support safe operations							
Target 6.1: Sri Lanka to implement the Air Navigation Plan and airport infrastructure development by 2025.							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
SEI - Implement the air navigation and airport core infrastructure and improve the EI percentage	1. Implement safety-related initiatives from the APAC Seamless ANS Plan in a timely manner, as applicable.	Continuous process	CAASL	Industry Partners	Level of Implementation of Safety related initiatives from the latest APAC Seamless ANS Plan.	High	Implementation of elements of the APAC Seamless ANS Plan