



National Aviation Safety Plan

(NASP)

2024- 2026

**Civil Aviation Authority of Islamic
Republic of Iran (CAA.IRI)**

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AMENDMENTS

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FOREWORD

The purpose of the National Aviation Safety Plan (NASP) of Iran is to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a national aviation safety strategy. A safe aviation system contributes to the economic development of Iran and the industries.



The NASP has been developed combining international safety goals and targets and High-Risk Categories of Occurrences (HRCs) from both the GASP and the MID-RASP. The SEIs listed in the NASP support the improvement of safety at the wider regional and international. IRAN has adopted these SEIs and has included them in this plan. The NASP promotes the effective implementation of Iran's safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between Iran and other States, regions and aviation industry. 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 Iran Aviation authorities to ensure the continued confidence in our aviation industry. The National Aviation Safety Plan (NASP) 2024–2026 complements the State Safety Programme (SSP) of Iran. It identifies initiatives that are being undertaken to reduce the risks associated with air operations in Iran and details the strategic direction for the management of aviation safety in the short, medium and long term.

The first issue of the NASP National Strategy and Roadmap for Promotion through Safety Initiatives to promote aviation safety in alignment with the ICAO Global Aviation Safety Program (GASP) 2023-2025 and the Regional Aviation Safety Program 2023-2025 (MID-RASP) is offered for 3 years from 2024 to 2026.

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

I appreciate the sincere and tireless efforts of the Safety Team in managing the State Safety Programme and achieving this goal.



MOHAMMAD MOHAMMADIBAKHSH
Vice Minister of Roads and Urban
Development and President of
Civil Aviation Authority

Table of Contents

FOREWORD.....	IV
DEFINITIONS	6
ABBREVIATIONS AND ACRONYMS	9
SECTION 1. INTRODUCTION.....	12
1.1. General overview of the NASP	12
1.2. Relationship between the NASP and Global and Regional Aviation Safety Plans ..	12
1.3. Structure of the National Aviation Safety Plan (NASP)	14
1.4. Relation between the NASP and the State safety program (SSP)	15
1.5. Responsibility for the NASP development, implementation and monitoring	15
1.6. National safety issues, goals and targets	15
1.6.1 Organizational Challenges.....	15
1.6.2 Operational Safety Risks	16
1.6.3 Emerging Issues	18
1.6.4 An Overview of Identified national safety issues	19
1.6.5 Goals, Targets.....	20
1.7. Operational Context	21
SECTION 2. Purpose Of IRAN's National Aviation Safety Plan.....	21
SECTION 3. IRAN'S STRATEGIC APPROACH TO MANAGING AVIATION SAFETY	22
3.1. IRAN's safety goals and their alignment with global and regional goals	24
SECTION 4. NATIONAL OPERATIONAL SAFETY RISKS.....	24
SECTION 5. ORGANIZATIONAL CHALLENGES.....	27
SECTION 6. EMERGING ISSUES.....	31
SECTION 7. MONITORING IMPLEMENTATION.....	31
SECTION 8. DETAILS OF THE SAFETY ENHANCEMENT ISSUES(SEIS)	33

DEFINITIONS

Accident investigation authority. The authority designated by a State as responsible for aircraft accident and incident investigations within the context of Annex 13.

Audit. A systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements and audit criteria are fulfilled.

Audit area. One of eight audit areas pertaining to the Universal Safety Oversight Audit Program (USOAP), i.e. primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG); personnel licensing and training (PEL); aircraft operations (OPS); airworthiness of aircraft (AIR); aircraft accident and incident investigation (AIG); air navigation services (ANS); and aerodromes and ground aids (AGA).

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.

Gap analysis. An evaluation that compares an existing situation to the desired one, it identifies specific steps that can be taken to reach a desired goal.

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.

Note. — The types of incidents which are of main interest to the International Civil Aviation

Organization for accident prevention studies are listed in Annex 13, Attachment C.

Maximum mass. Maximum certificated take-off mass.

Operator. The person, organization or enterprise engaged in or offering to engage in an aircraft operation.

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 audit. A USOAP CMA audit that a State requests and pays for (on a cost-recovery basis). The State determines the scope and date of a safety audit. Also see definition of audit.

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;
- f) safety studies and reviews.

Safety enhancement initiative (SEI). One or more actions to eliminate or mitigate risks associated with contributing factors to a safety occurrence or to address an identified safety deficiency.

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

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.

Surveillance. The State activities through which the State proactively verifies through inspections and audits that aviation license, 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.

Safety performance. A State or a 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.

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.

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 program (SSP). An integrated set of regulations and activities aimed at improving safety.

ABBREVIATIONS AND ACRONYMS

ADREP	Accident/incident data reporting
ADRM	Aerodrome
AGA	Aerodrome and Ground Aids
AIG	Aircraft Accident and Incident Investigation
AIID	Accident and Incident Investigation Department
ALAR	Approach and Landing Reduction
ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
ARC	Abnormal Runway Contact
ASBU	Aviation System Block Upgrade
ASR	Annual Safety Report
ATM	Air Traffic Management
ATO	Approved training organization
ATS	Air Traffic Services
BIRD	Bird Strike
CAA	Civil aviation authority
CAA.IRI	Civil aviation authority of Islamic Republic of Iran
CAST	Commercial Aviation Safety Team
CE	Critical Element
CFIT	Controlled Flight into Terrain
CICTT	CAST/ICAO Common Taxonomy Team
CMA	Continuous Monitoring Approach
EI	Effective Implementation
FDAP	Flight Data Analysis Programme
FIR	Flight Information Region
F-NI	Fire/ Smoke (Non-Impact)
GADSS	Global Aeronautical Distress and Safety System
GANP	Global Air Navigation Plan



GASP	Global Aviation Safety Plan
GPWS	Ground Proximity Warning System
HRC	High Risk Categories of Occurrences
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IOSA	IATA Operational Safety Audit
ISAGO	IATA Safety Audit for Ground Operations
ISTARS	Integrated Safety Trend Analysis and Reporting System
LOC-I	Loss of Control In-flight
MAC	AIRPROX/ TCAS alert/ loss of separation/ near miss collisions/ mid-air collisions
MRUD	Ministry of Roads & Urban Development
MTOW	Maximum Take-Off Weight
NASP	National Aviation Safety Plan
OPS	Flight Operations (USOAP Audit Area)
ORG	Civil Aviation Organization (USOAP Audit Area)
PEL	Personnel licensing and training
RAMP	Ground Handling
RASG	Regional Aviation Safety Group
RASP	Regional Aviation Safety Plan
RE	Runway Excursion (departure or landing)
RI	Runway Incursion
RS	Runway Safety
RSOO	Regional Safety Oversight Organization
RST	Runway Safety Team
SARPs	Standards and Recommended Practices
SCF-NP	System/Component Failure or Malfunction Non-power plant
SCF-PP	System/Component Failure or Malfunction - Power plant
SDCPS	Safety Data Collection and Processing System
SEI	Safety Enhancement Initiatives
SMS	Safety Management Systems
SPI	Safety Performance Indicator

SSC	Significant Safety Concern
SSO	State Safety Oversight
SSP	State Safety Programme
TCAS	Traffic Collision and Avoidance System
UAS	Unmanned Aircraft Systems
UPRT	Upset Prevention and Recovery Training
USOAP	Universal Safety Oversight Audit Programme
USOS	Undershoot/ Overshoot

SECTION 1. INTRODUCTION

1.1. General overview of the NASP

The primary purpose of the NASP is to identify the key aviation safety issues in I.R. of Iran and provide an indication of the state level actions being taken to improve safety performance related to those issues. The CAA IRI is responsible in Iran for the development, implementation and monitoring of the NASP. The 3-year plan 2024 - 2026 is influenced from both GASP and MID-RASP key safety regulatory requirements and key safety issues.

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

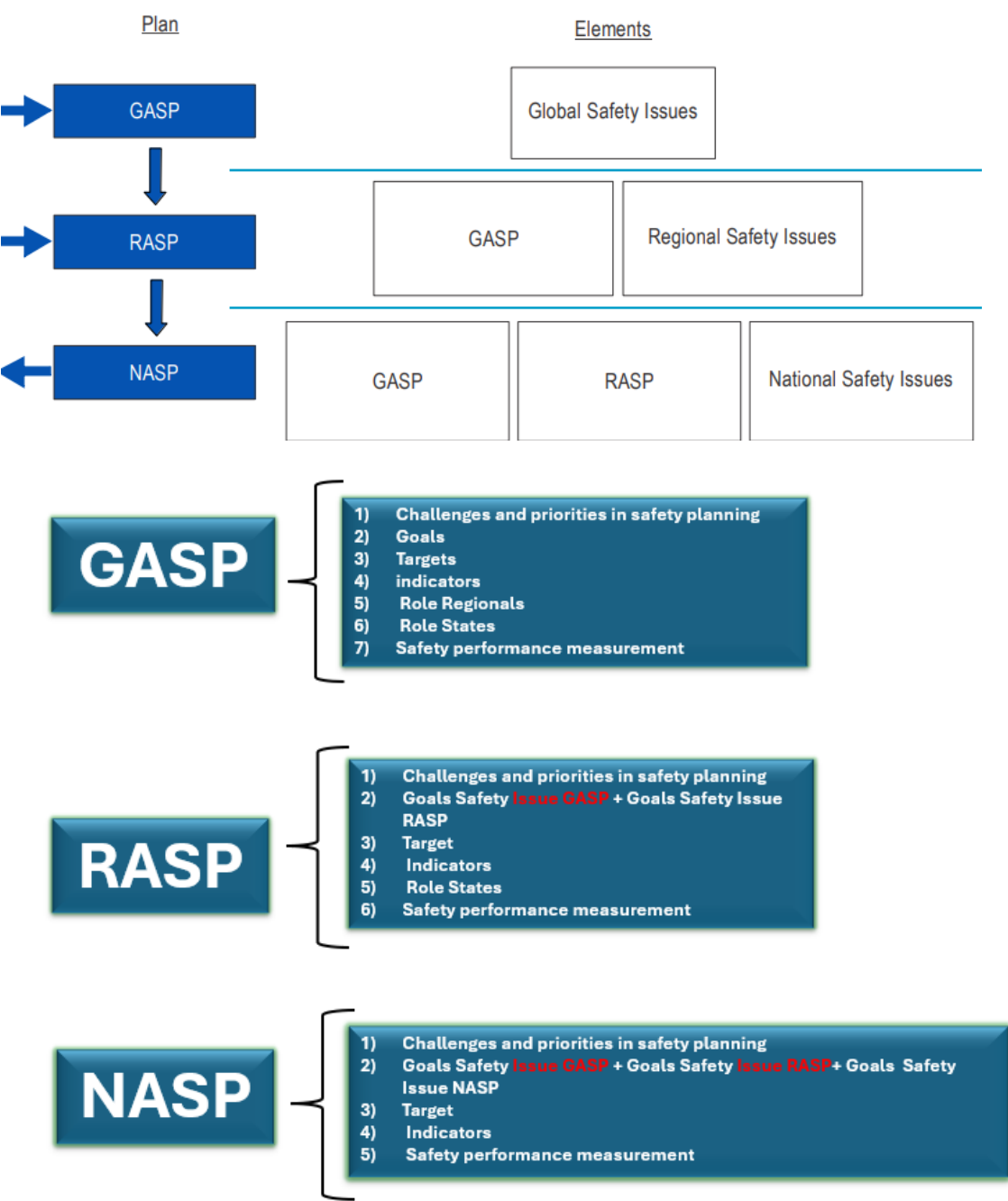
The NASP of Iran is in alignment with the ICAO Global Aviation Safety Plan (GASP, Doc 10004) and the ICAO MID-RASP

1.2. Relationship between the NASP and Global and Regional Aviation Safety Plans

ICAO created the GASP to continually reduce fatalities, and the risk of fatalities, by guiding the development of a harmonized aviation safety strategy, regional aviation safety plans and national aviation safety plans. It presents global goals and G-HRCs. As the GASP presents a global perspective, its content needs to be adapted to meet regional needs. In order to do so, each region should produce a RASP. The RASP presents the strategic direction for the management of aviation safety at the regional level (or "for a region") for a set period. The RASP should be developed in line with the

GASP goals, targets and G-HRCs. However, it should be based on the region’s own risk assessment and address the region’s specific operational safety risks and organizational challenges.

A NASP presents the strategic direction for the management of aviation safety at the national level, for a set period. It presents the national safety goals and targets, the operational safety risks and organizational challenges, as well as SEIs with specific actions to address them (that is, an action plan). The State should use both the GASP and the RASP to develop its NASP.



1.3. Structure of the National Aviation Safety Plan (NASP)

This NASP presents the strategy for enhancing aviation safety for a period of 3 years. It comprises eight sections. In addition to the introduction, sections include: the purpose of the NASP, Iran's strategic approach to managing aviation safety, the Iran operational safety risks identified for the 2024 to 2026, other safety issues addressed in the NASP, and a description of how the implementation of the safety enhancement initiatives (SEIs) listed in the NASP is going to be monitored.

Iran's National Aviation Safety Plan (NASP) collects the actions deemed necessary to achieve the safety objectives set in the Iran's State Safety Program. In particular, both the safety actions required by ICAO through the global and regional aviation safety plans (i.e., GASP and MID-RASP) and the actions identified by CAA.IRI based upon the collected national safety data are part of the NASP.

With the NASP, Iran Civil Aviation Authority (CAA.IRI) aims the following objectives:

- Implement the strategic decisions adopted in the Iran State Safety Programme (SSP);
- Meet the ICAO safety management requirements;
- Put in place the safety actions identified in the GASP and MID-RASP by ICAO that are relevant for the State of Iran;
- Put in place the safety actions identified at National level based on the collected safety data;
- Fulfil the safety risks mitigation actions identified at both national, regional, and global level.

The Iran NASP presents the strategy for enhancing aviation safety in the State of Iran for a period of three years (2024-2026). Specifically, to identify the national actions, CAA.IRI conducts periodic analysis of the Safety Recommendations issued by the Iran Accident and Incident Investigation Department (AIID.IRI), the data collected in the Safety Web (CAA.IRI online mandatory and voluntary occurrence reporting system), and the evidence collected during certification and surveillance activities. Therefore, the Iran NASP is not a static document. It evolves along with the information received in the GASP and MID-RASP periodic updates by ICAO and the national safety data analysis. This document comprises eight (8) sections as follows:

1. Introduction;

2. Purpose of the Iran NASP, including links to both the ICAO MID-RASP and the ICAO GASP;
3. safety goals, targets and indicators;
4. Organizational/systemic safety issues, such as challenges related to SSP and SMS implementation, and initiatives to address them;
5. Operational safety issues and initiatives to address them;
6. Emerging and other safety issues, and initiatives to address them; and
7. Monitoring and oversight of the effective implementation of the NASP.
8. Details of the Safety Enhancement Issues (SEIs)

1.4. Relation between the NASP and the State safety program (SSP)

This NASP mentions operational safety risks identified in the ICAO GASP and the MID-RASP in the absence of an SSP of I.R. of IRAN. Iran is committed to fully implement an SSP by 2026 as a state's responsibilities for the management of safety comprise both safety oversight and safety management, collectively implemented through an SSP. Initiatives listed in this NASP address organizational challenges and aim to enhance organizational capabilities related to effective safety oversight.

1.5. Responsibility for the NASP development, implementation and monitoring

The Civil Aviation Authority of Islamic Republic of Iran (CAA.IRI) is responsible for the development, implementation and monitoring of the NASP, in collaboration with Ministry of Roads & Urban Development (MRUD) with the Iran aviation industry. The NASP was developed in consultation with national operators and other stakeholders, and in alignment with the ICAO GASP (2023– 2025) and the MID-RASP (2023– 2025).

1.6. National safety issues, goals and targets

The NASP addresses the following safety issues:

1.6.1 Organizational Challenges

According to the ICAO audit report in 2022, the shortage of Critical Elements (CEs) and the Areas is as follows:

1.6.1.1 Deficiency of Critical Elements (CEs) and Areas:

Critical Elements (CEs):

- CE-4 (Qualified technical personnel)
- CE-6 (Licensing, certification, authorization and approval obligations)
- CE-7 (Surveillance obligations)
- CE-8 (Resolution of safety Issues)

Areas:

- PEL (Personnel licensing and training)
- OPS (Air Operation)
- AGA (Aerodromes and ground aids)
- ANS (Air navigation services)
- AIR (Airworthiness of aircraft)

1.6.1.2 2) Difficulties in establishment of an independent accident investigation authority (AIIA).

1.6.1.3 Lack of qualified human resources (CE-4) to Implementation licensing, certification, authorization and approval processes, supporting accident and incident investigations, Implementation of surveillance programs (CE-7) and follow up CAP for the resolution of those safety issues (CE-6 to CE-8).

1.6.1.4 Lack of effective safety monitoring in the implementation of SSP.

1.6.1.5 The lack of development and implementation of safety management system regulations for some aviation service providers (Part 145 and Part 21).

1.6.1.6 The lack of implementation of 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.

1.6.2 Operational Safety Risks

States should review and analysis available safety data to determine their operational safety risks, which include global HRCs and additional national or regional operational safety risks. In addition, States should take into account the HRCs listed in the GASP and the regional operational safety risks (established by the RASG) when determining their national operational safety risks. This assessment should be data-driven.

Globally and regionally, there are five high risk categories that have been identified as key safety priorities. Based on the number of accidents and the number of fatal accidents

related to the mentioned risks that occurred in the Iran civil aviation industry from 2016 to 2023, these risks have been prioritized in the NASP.

Commercial air transport occurrences in IRAN				
Year	Fatal accidents	Non-fatal accidents	Accidents	Fatalities
2016-2023	1 -> CFIT 1-> SEC	8	10	242

Occurrences involving commercial air transport aircraft registered in States other than IRAN		
Year	Fatal accidents	Non-fatal accidents
2016-2023		1

In addition, there are one safety risks of relevance to the IRAN aviation industry. These safety risks were identified based on data and information from the IRAN Safety Data Collection, which include information from mandatory and voluntary reports, accident and investigation reports, IRAN's safety performances and trends, and industry engagements. These risks are:

- SECURITY related (SEC)

No.	Occurrence Category	Priority
1	Controlled flight into terrain (CFIT)	High
2	Loss of control in-flight (LOC-I)	High
3	SECURITY RELATED(SEC)	High
4	Mid-air collision (MAC)	High
5	Runway excursion (RE)	High
6	Runway incursion (RI)	High

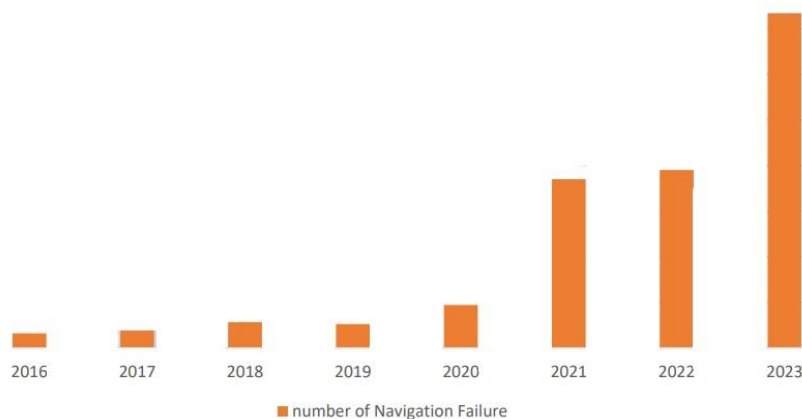
Note: It is prioritized based on severity and probability

1.6.3 Emerging Issues

Anticipates issues that are emerging or where potential hazards exist for the immediate or near future. Gives consideration to safety issues derived from operations or regulations that have not been fully deployed and where data is not always available.

1.6.3.1 Navigation error / GPS Failure / False EGPWS / GNSS (NAV)

Based on the reports received through the ECCAIRS system, we had a lot of events. (2016-2023) related to navigation error.



1.6.3.2 RPAS

- Frequency Interference: In cases where more than one drone operates in a single area, frequency interference may occur, leading to a reduction in the efficiency and safety of flights.
- Congestion Issues: In densely populated areas with heavy air traffic, the use of drones may encounter issues related to airspace congestion, requiring precise flight management. It is worth mentioning that the Remotely Piloted Aircraft Systems (RPAS) operations are strictly limited to domestic operations and are not envisaged to conduct international operations.

1.6.3.3 Laser Attack (Interferences)

Laser attacks on the cockpit are a serious issue and can cause significant disruption to the operational activities of aircraft. these types of attacks can potentially harm the pilot's eyes, as well as lead to loss of focus and vision problems during flight.

We have received four reports (2020-2023) regarding laser attacks that have disrupted the operational activities in the cockpit.

1.6.4 An Overview of Identified national safety issues

Category Name	Relevant Challenges
ORG- Challenges	1. Difficulties in establishment of an independent accident investigation authority (AIIA)
	2. Lack of qualified human resources (CE-4) to Implementation licensing, certification, authorization and approval processes, supporting accident and incident investigations, Implementation of surveillance programs (CE-7) and follow up CAP for the resolution of those safety issues (CE-6 to CE-8).
	3. The European Co-ordination Center for Accident and Incident Reporting Systems (ECCAIRS 2).
	4. The lack of development and implementation SMS regulations for some aviation service providers (Part 145 and Part 21).
	5. The lack of effective implementation and execution of 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.

Category Name	Relevant Challenges
OPS- safety risk	1. Controlled flight into terrain (CFIT)
	2. SECURITY related (SEC)
	3. Loss of control in-flight (LOC-I)
	4. Mid-air collision (MAC)
	5. Runway excursion (RE)
	6. Runway incursion (RI)
Emerging risks	1. Navigation error / GPS Failure / False EGPWS / GNSS 2. (NAV)
	2. RPAS

3. Leaser Attack

1.6.5 Goals, Targets

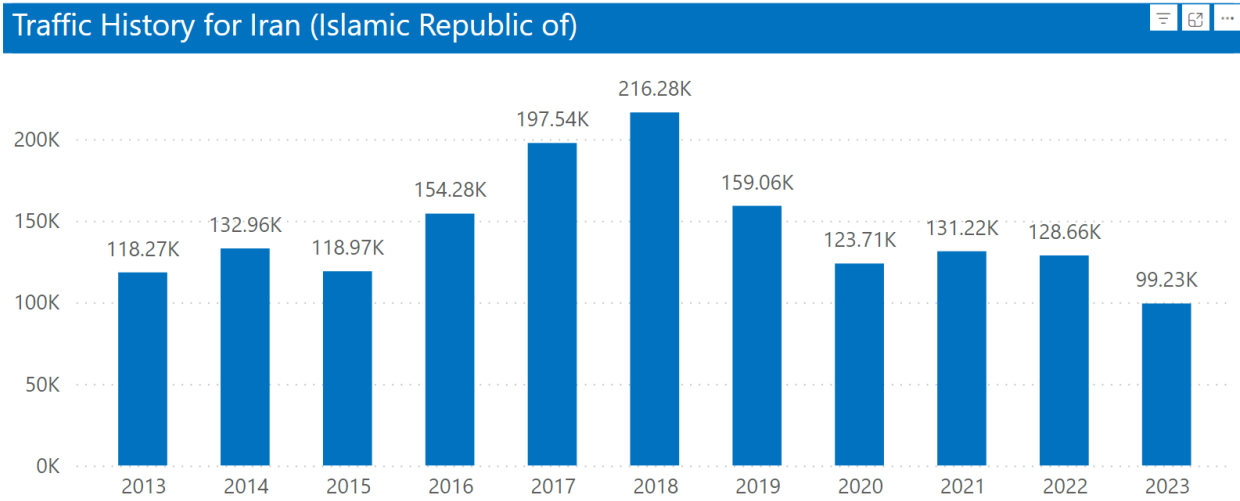
In order to address the issues listed above and enhance safety at the national level, the NASP (2024-2026) contains the following goals and targets:

Goal	Target	
Goal 1: Achieve a continuous reduction of operational safety risks	1.1	Maintain a decreasing trend of the national accident rate. (High-Risk Categories)
Goal 2: Strengthen safety oversight capabilities of I.R. of Iran	2.1	Improve its score for the effective implementation (EI) of the critical elements (CE4-CE6-CE7-CE8) of the State's safety oversight system (with focus on priority PQs) as follows: by 2025 – 85 percent by 2030 – 95 percent
	2.2	Encourage to increase the number of IOSA registered Iranian airlines and ISAGO registrations.
	2.3	To achieve the Safety Oversight Index greater than 1 for area of Operations by 2025.
Goal 3: Fully implement effective State safety program (SSP)	3.1	By 2025, fully implementing the SSP foundation
	3.2	To fully implement an effective SSP: a) by 2026 -present b) by 2029- present and effective
	3.3	Establish and implementation SMS regulations for aviation service providers Part 145 and Part 21 by the end of 2024.
	3.4	By 2026, 70 % of the service providers/operators will implement SMS
Goal 5: Expand the use of Industry Programmes and safety information sharing networks	5.1	Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of NASPs and RASPs.
Goal 6: Ensure the appropriate infrastructure is available to support safe operations	6.1	Maintain a decreasing trend of the national accident rate. (High-Risk Categories)
	6.2	Improve its score for the effective implementation (EI) of the critical elements (CE4-CE6-CE7-CE8) of the State's safety oversight system (with focus on priority PQs) as follows: by 2025 – 85 percent

		by 2030 – 95 percent
	6.3	Encourage to increase the number of IOSA registered Iranian airlines and ISAGO registrations.

1.7. Operational Context

There are 4 certified aerodromes in Iran, including 4 international aerodromes. The airspace of Iran is classified into Class B, C and G. There were 2,291,508 movements in Iran over the period of 2016 to 2023. There are currently 27 air operator certificates



(AOCs) issued by Iran, and of those there are 12 issued to operators conducting international commercial air transport operations. Iran also has 6 operators, which operate domestic air taxi services, primarily on turboprop aircraft, as well as 9 helicopter operators. There are 252 heliports in Iran. Common challenges in Iran include among others are meteorology, topography, technology and environment.

SECTION 2. Purpose Of IRAN’s National Aviation Safety Plan

The NASP is the master planning document containing the strategic direction of Iran for the management of aviation safety for a period of three years (2024 to 2026). 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 NASP has been developed using international safety goals and targets and HRCs from both the GASP (www.icao.int/gasp) and the ICAO MID-RASP. These are highlighted in the text, where applicable. 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 [ICAO MID-RASP](#) Iran has adopted these SEIs and has included them in this plan.

The NASP also address identified deficiencies in state safety oversight capabilities and hence propose mitigating action through various SEIs to remedy, and improve Effective Implementation (EI) of audit areas and Critical Elements (CE) associated with it to achieve at the minimum the set target.

SECTION 3. IRAN'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 (Doc 10161), as well as State-specific issues identified by NASP technical sub-group (NASP committee decision). This plan is developed and maintained by Civil Aviation Authority of Iran (CAAI), in coordination with all stakeholders, and is updated at least every 3 years.

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

Goal	Target	Indicators	Link to GASP and RASP
Goal 1: Achieve a continuous reduction of operational safety risks	1.1: Maintain a decreasing trend of the national accident rate. (High-Risk Categories)	<ul style="list-style-type: none"> Number of accidents Number of accidents per 1000,000 departures. Number of fatal accidents Number of fatal accidents per 1000,000 departures. Number of fatalities per passengers carried (fatality rate) Percentage of occurrences related to high-risk categories (HRCs) 	linked to Goal 1, and Target 1.1 of the GASP, linked to Goal 1 of the RASP
Goal 2: Strengthen safety oversight capabilities of I.R. of Iran	2.1: Improve its score for the effective implementation (EI) of the critical elements (CE4-CE6-CE7-CE8) of the State's safety oversight system (with focus on priority PQs) as follows: by 2025 – 85 per cent	<ul style="list-style-type: none"> percentage of effective implementation (EI) of the critical elements Percentage of fully implementation the priority PQs Percentage of required corrective action plans (CAPs) 	This goal is directly linked to Goal 2 and Target 2.1 of the GASP and linked to Goal 2 of the RASP.

Goal	Target	Indicators	Link to GASP and RASP
	by 2030 – 95 per cent	submitted (OLF) • Percentage of completed CAPs (using OLF)	
	2.2: Encourage to increase the number of IOSA registered Iranian airlines and ISAGO registrations.	•The number of Iranian airlines registered in IOSA and ISAGO registration.	
	2.3: To achieve the Safety Oversight Index greater than 1 for area of Operations by 2025.	•safety oversight index for area of Operations	
Goal 3: Fully implement effective State safety program (SSP)	3.1: By 2025, fully implementing the SSP foundation	<ul style="list-style-type: none"> •Percentage of satisfactory implementation of SSP foundational PQs •Percentage of required CAPs related to the SSP foundational PQs submitted (using OLF) •Percentage of required CAPs related to the SSP foundational PQs completed (using OLF) • Number of applicable service providers implement an SMS 	linked to Goal 3 and Target 3.1 of the GASP and linked to Goal 5 of the RASP Goal 3 of the RASP.
	3.2: To fully implement an effective SSP: a) by 2026 -present b) by 2029- present and effective	<ul style="list-style-type: none"> • Level of implementation achieved through SSP Gap Analysis (ISTARS) •Implementation of an effective SSP 	linked to Goal 3 and Target 3.3 of the GASP and linked to Goal 3 of the RASP.
	3.3: Establish and implementation SMS regulations for aviation service providers Part 145 and Part 21 by the end of 2024.	• Progress percentage of Regulation development and Implementation	linked to Goal 3 and Target 3.3 of the GASP and linked to Goal 3 of the RASP.
	3.4: By 2026, 70 % of the service providers/operators will implement SMS	• Percentage of service providers/operators have implemented SMS	linked to Goal 3 and Target 3.3 of the GASP and linked to Goal 3 of the RASP.
Goal 5: Expand the use of Industry Programmes and safety information sharing networks	5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of NASPs and RASPs.	<ul style="list-style-type: none"> • The number of Iranian airlines to be certified IATA- IOSA • The number of Iranian Ground Handling service providers to be certified IATA-ISAGO 	
Goal 6: Ensure the appropriate infrastructure is available to support safe operations	6.1: By to achieve 100% PBN implementation	• Percentage of PBN implementation.	linked to Goal 6 and Target 6.1 of the GASP and linked to Goal 6 of the RASP.
	6.2: By 2024, That all international aerodromes be certified.	• Number/percentage of certified aerodrome that are used for international operations.	linked to Goal 6 and Target 6.1 of the GASP and linked to Goal 6 of the RASP.
	6.3: 100% of the International Aerodromes having established an RST	• Number of established Runway Safety Teams (RST) at the International Aerodromes.	linked to Goal 6 and Target 6.1 of the GASP and linked to Goal 6 of

Goal	Target	Indicators	Link to GASP and RASP
			the RASP.

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

3.1. IRAN's safety goals and their alignment with global and regional goals

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
GASP	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
RASP	Achieve a continuous reduction in Operational Risks	strengthen States safety oversight capabilities	: Implementation of effective State safety Programmes	Increase collaboration at the regional level	Expand the use of industry Programmes and safety information sharing networks	Ensure the appropriate infrastructure is available to support safe operations
NASP-IRAN	Achieve a continuous reduction of operational safety risks	Achieve a continuous reduction of operational safety risks	Fully implement effective State safety program (SSP)	-	Expand the use of Industry Programmes and safety information sharing networks	Ensure the appropriate infrastructure is available to support safe operations

SECTION 4. 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 SEIs (details in Appendix A) may include actions such as: rule-making; policy development; targeted safety oversight activities; safety data analysis; and safety promotion. Separate sections are provided to address commercial air transport and general aviation to make the information more accessible to stakeholders.

Iran publishes an Annual Safety Report, available on the Civil aviation Authority website (<https://caa.gov.ir/statistics-and-reports>). The summary of accidents and serious incidents that occurred in Iran, and those for aircraft registered in Iran involved in commercial air transport and aircraft involved in general aviation, is shown in the tables below.

Commercial air transport occurrences in I.R. of Iran			
Year	Fatal accidents No.	Non-fatal accidents No.	Serious incidents No.
2016 to 2023	3	13	111
General aviation aircraft occurrences in I.R. of Iran			
Year	Fatal accidents No.	Non-fatal accidents No.	Serious incidents No.
2016 to 2023	12	27	31

Table 1. Number of Occurrences in 2016 to 2023

Occurrences involving commercial air transport aircraft registered in IRAN			
Year	Fatal accidents No.	Non-fatal accidents No.	Serious incidents No.
2016 to 2023	2	12	78
Occurrences involving general aviation aircraft registered in IRAN			
Year	Fatal accidents No.	Non-fatal accidents No.	Serious incidents No.
2016 to 2023	7	30	18

Table 2. Number of Occurrences in 2016 to 2023

The following Five national High-Risk Categories (HRCs) of occurrences in the Iran context were considered of the utmost priority because of the number of fatalities and risk of fatalities associated with such events. They were identified based on analyses from mandatory and voluntary reporting systems, accident and incident investigation reports, safety oversight activities over the past eight years, These HRCs are in line with those listed in the 2023 – 2025 of the GASP, as well as the ICAO MID-RASP:

- 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)

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

Security related (SEC)

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>.

contributing factors leading to HRCs:

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

HRC 1: Controlled flight into terrain (CFIT)

- a) Procedure design and documentation
- b) Flight in adverse environmental conditions.
- c) Equipment requirements for aircraft with ground proximity warning system
 - Terrain avoidance warning systems (TAWS)
- d) Insufficient operational oversight from the organization.
- e) 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)

- a) Operating in low visibility conditions.
- b) Require upset prevention and recovery training
- c) Inadequate standard operating procedure (SOP) for effective flight management.
- d) Violation of SOP by pilots

HRC 3: Mid-air collision (MAC)

- a) Training and coordination between pilots and ATCOs
- b) Air Traffic Controller (ATC) workload
- c) communication errors between pilot and ATC
- d) ATC clearance and navigation error by pilot
- e) pilot deviation from air traffic management (ATM) procedures

HRC 4: Runway excursion (RE)

- a) The experience, training and competence of individuals
- b) Heavy rain and/or strong winds
- c) Pilot error and decision making
- d) Aircraft system malfunction - Thrust reversers, speed-brakes & brakes
- e) lack of training (before landing in contaminated runway, and CRM)
- f) lack of procedure (to operate in contaminated runway and experience of pilot for night flying)

HRC 5: Runway incursion (RI)

- a) Inadequate maneuvering area driver training and assessment programmed
- b) Loss of situational awareness
- c) Non-adherence to ATC clearances
- d) In adherence or incompliance to ATC clearance or instruction
- e) Communication by flight crew with air navigation services.

HRC 6: Security related (SEC)

- a) Lack of Training and Awareness
- b) Human error
- c) Regulatory Compliance Issues
- d) Emerging Threats: Evolving threats such as cyber threats targeting aviation networks, drones posing security risks, or new methods of concealing explosives or weapons.

The full list of the SEIs is presented in the appendix to the NASP.

SECTION 5. ORGANIZATIONAL CHALLENGES

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

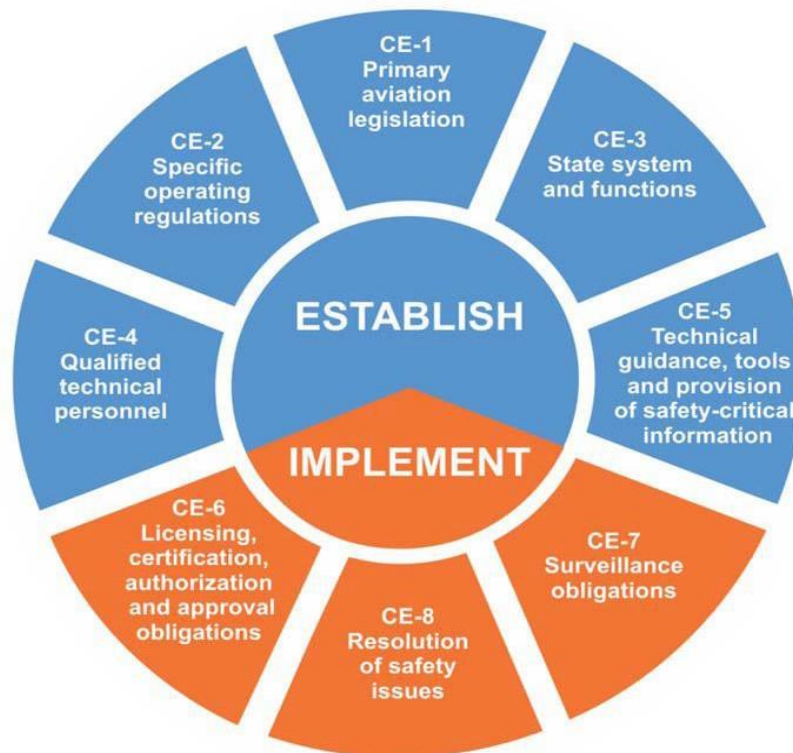


Figure 3. Critical elements of a state's safety oversight system

The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Iran's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Program (USOAP), have resulted in the following scores (Figure 4):

Overall EI score							
73.4%							
EI score by CE							
CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
89.66%	90.11%	83.33%	60.87%	89.83%	66.33%	58.82%	48.84%
EI score by audit area ²							
LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA

95.24%	90%	78.31%	59.32%	77.5%	86.75%	71.9%	67.42%
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Figure 4. USOAP Scores

The safety oversight index (SOI) of a State is an ICAO indicator of its safety oversight capabilities. Every State audited by ICAO has an SOI. It is a number greater than zero where “1” represents a level at which the safety oversight capabilities of a State would indicate the minimum expected capabilities considering the number of departures as an indication of the size of that State’s aviation system. The calculations conducted by ICAO of Iran’s SOI have resulted in the following scores (Figure 5):

Overall, SOI score	Score in the area of Operations	Score in the area of Air Navigation	Score in the area of Support Functions
1.2	1.00	1.17	1.50

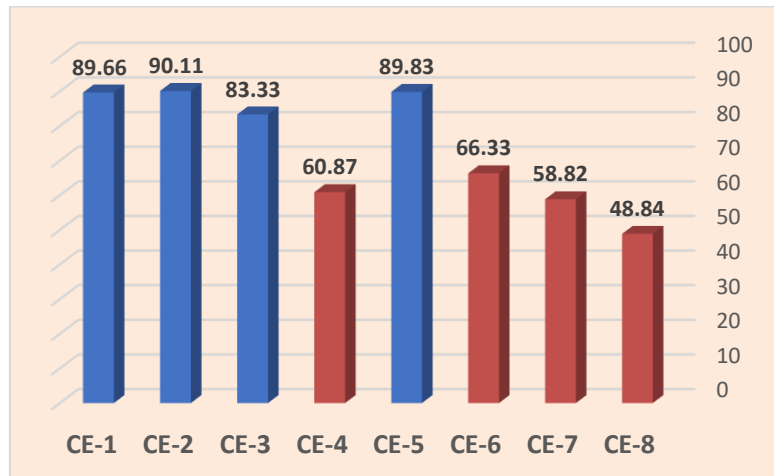
Figure 5. Safety Index Scores

The following six safety issues in the Iran context were considered of the utmost priority because they are systemic issues, which impact the effectiveness of safety risk controls. They were identified based on analysis from USOAP data, accident and incident investigation reports, and safety oversight activities over the past three years. These issues are typically organizational in nature and relate to challenges associated with the conduct of States’ safety oversight functions, implementation of SSP at the national level and the level of SMS implementation by national service providers. These safety issues are in line with those listed in the 2023-2025 of the GASP, as well as the ICAO MID-RASP:

1) Deficiency of Critical Elements (CEs) and Areas:

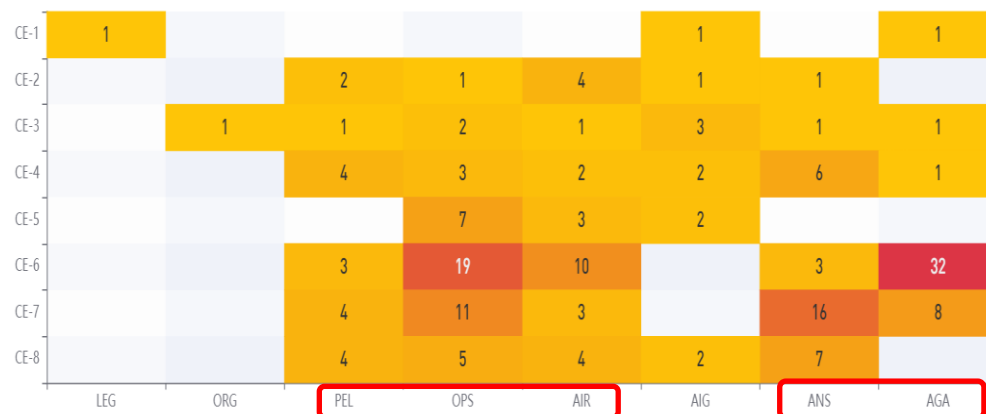
Critical Elements (CEs):

- CE-4 (Qualified technical personnel)
- CE-6 (Licensing, certification, authorization and approval obligations)
- CE-7 (Surveillance obligations)
- CE-8 (Resolution of safety Issues)



In the Areas:

- PEL (Personnel licensing and training)
- OPS (Air Operation)
- AGA (Aerodromes and ground aids)
- ANS (Air navigation services)
- AIR (Airworthiness of aircraft)



- 2) Difficulties in establishment of an independent accident investigation authority (AIIA)
- 3) Lack of qualified human resources (CE-4) to Implementation licensing, certification, authorization and approval processes, supporting accident and incident investigations, Implementation of surveillance programs (CE-7) and follow up CAP for the resolution of those safety issues (CE-6 to CE-8).
- 4) Lack of effective safety oversight, difficulties in implementing SSP.
- 5) The lack of development and implementation of safety management system regulations for some aviation service providers (Part 145 and Part 21).
- 6) The lack of implementation of 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.

In order to address the issues listed above, Iran 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 B & C to the NASP.

SECTION 6. EMERGING ISSUES

The NASP 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 Iran remain vigilant on emerging issues to identify potential safety risks, collect relevant data and proactively develop mitigations to address them. The NASP addresses the following emerging issues, which were identified by the ICAO MID-RASP and the evaluation of the NASP technical sub-group for further analysis:

- 1) Navigation error / GPS Failure / False EGPWS / GNSS (NAV)
- 2) Drones operating in the vicinity of aerodromes
- 3) Laser attacks on aircraft approaching for landing

In order to address the safety risks raised from emerging safety issues, the State of IRAN will implement a series of safety enhancement initiatives (SEIs) to mitigate contributing factors leading to these issues. The full list of the SEIs is presented in the appendix D to the NASP.

SECTION 7. MONITORING IMPLEMENTATION

Iran 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, Iran will review the NASP every 3 years or earlier, if required, to keep the identified operational safety risks, safety issues and selected SEIs updated and relevant. The Civil Aviation Authority of Islamic Republic of Iran (CAA IRI) 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, state of Iran will seek the support of the ICAO RASG-MID *and industry* to ensure the timely implementation of SEIs to address safety deficiencies and mitigate risks. Through close monitoring of the SEIs, Iran will make adjustments to the NASP and its initiatives, if needed, and

update the NASP accordingly.

The Iran Civil Aviation Authority (CAA IRI) will use the indicators listed in this document (NASP) to measure safety performance of the civil aviation system and monitor each national safety target. An annual safety report will be published to provide stakeholders with relevant up-to-date information on the progress made in achieving the national safety goals and targets, as well as the implementation status of the SEIs.

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

Islamic Republic of Iran adopted a standardized approach to provide information at the regional level, for reporting to the RASG-MID via appointed focal point. This allows the region to receive information and assess safety risks using common methodologies. Any questions regarding the NASP and its initiatives, and further requests for information may be addressed to the following:

Civil Aviation Authority of Islamic Republic of Iran (CAAIRI)/Safety and Quality assurance department	
Address:	Parvaz St., Mehrabad Airport, Tehran, Iran
Telephone:	: +98-021-66078700-9
Fax:	+98-021-66025405
E-mail:	safety@caa.gov.ir
Website:	http://www.caa.gov.ir

SECTION 8. DETAILS OF THE SAFETY ENHANCEMENT ISSUES(SEIS)

In this Appendix to the IRAN's NASP, the Safety Enhancement Initiatives (SEIs) are being provided under three categories as already indicated. These are:

Appendix A:

Operational Safety Risks (OPS) Roadmap

Appendix B:

Organizational Challenges (ORG) Roadmap -Safety Oversight System and Safety Management (SSP&SMS)

Appendix C:

Emerging Safety Issues

The first category includes actions related to solving operational problems, the second category typically originated from operational problems, while the third category includes those relating to new or innovative issues that may pose a risk.



Appendix A:

Operational Safety Risks (OPS) Roadmap





NASP of I.R, of IRAN



Issue 1: Operational Safety Issues – Significant number of accident/serious incident → **HRC 1: Controlled Flight into Terrain (CFIT)**

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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.1: Mitigate contributing factors to Controlled Flight into Terrain. GASP HRC-1 Mid-RASP HRC-4	1. Ensure Training program on the use of TAWS	CAAIRI (OPS)	2024-2026	a. Airport Operators b. ANSP c. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	2. Ensure aircraft are equipped with terrain awareness and warning system (TAWS) in accordance with Annex 6.	CAAIRI (OPS)	2024-2026	a. Airport Operators b. ANSP c. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	3. Issue a Safety Advisory to increase adherence to TAWS warning procedures	CAAIRI (OPS)	2024-2026	a. Airport Operators b. ANSP c. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	4. Improved Flight Data Analysis Program (FDAP) guidance to encourage operators to consider CFIT precursors as part of FDAP	CAAIRI (OPS)	2024-2026	a. Airport Operators b. Operators c. ANSP d. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	5. Ensure the timeliness of updates and accuracy of Electronic Terrain and Obstacle Data (eTOD)	CAAIRI (OPS)	2024-2026	a. Airport Operators b. Operators c. ANSP d. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	6. Consider the implementation of continuous descent final approaches (CDFA))	CAAIRI (OPS)	2024-2026	a. Airport Operators b. Operators c. ANSP d. Airlines	Number of CFIT Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance



NASP of I.R, of IRAN



Issue 1: Operational Safety Issues – Significant number of accident/serious incident  HRC 2: loss of control in-flight (LOC-I)

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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.2: Mitigate contributing factors to loss of control in-flight. GASP HRC-2 Mid-RASP HRC-1	1. Require upset prevention and recovery training in all full flight simulator type conversion and recurrent training programmes	CAAIRI (OPS)	2024-2026	a. CAAIRI b. Airlines c. ATOs	Number of LOC-I Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	2. Ensure that the pilot trainings extensively incorporate human factors such as distraction, complacency, situational awareness etc.	CAAIRI (OPS)	2024-2026	a. CAAIRI b. Airlines c. ATOs	Number of LOC-I Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	3. Ensure that ATC surveillance system is improved for the provision of Minimum Safety Altitude Warning (MSAW) system.	CAAIRI (OPS)	2024-2026	a. CAAIRI b. Airlines c. ATOs	Number of LOC-I Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	4. Improved FDAP guidance to encourage operators to consider LOC-I precursors as part of FDAP	CAAIRI (OPS)	2024-2026	a. CAAIRI b. Airlines c. ATOs	Number of LOC-I Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	5. Guidance Material on Flight Crew Proficiency	CAAIRI (OPS)	2024-2026	a. CAAIRI b. Airlines c. ATOs	Number of LOC-I Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance



Issue 1: Operational Safety Issues – Significant number of accident/serious incident HRC 3: Security related (SEC)

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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.3: Mitigate contributing factors Security related (SEC) National HRC	1. Arrangement regarding the use of airspace between civil and military	CAAIRI (ANS/AGA)	2024-2026	a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	2. Implement robust cybersecurity protocols to protect airport and airline IT systems from cyberattacks, including firewalls, intrusion detection systems, and regular security audits.	CAAIRI (ANS/AGA)	2024-2026	a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	3. Develop a procedure to coordinate Civil and the military sector in critical war situations and assigning relevant duties	CAAIRI (ANS/AGA)	2024-2026	a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	4. Comply with international aviation security standards set by organizations such as the International Civil Aviation Organization (ICAO) and the Transportation Security Administration (TSA).	CAAIRI (ANS/AGA)	2024-2026	a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	5. Develop and regularly update comprehensive crisis management and emergency response plans to handle security incidents effectively.	CAAIRI (ANS/AGA)	2024-2026	a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	6. Establish robust communication systems to ensure timely and coordinated responses during security incidents.	CAAIRI (ANS/AGA)		a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	7. Provide continuous security training for all airport and airline personnel to ensure they are aware of the latest threats and security procedures.	CAAIRI (ANS/AGA)		a. CAAIRI b. Airlines c. Airports d. Military	Number of SEC Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance



Issue 1: Operational Safety Issues – Significant number of accident/serious incident					HRC 4: 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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.4: Mitigate contributing factors to Mid-air collision (MAC). GASP HRC-3 Mid-RASP HRC-5	1. Establish guidance and regulations to ensure aircraft required to be equipped are equipped with airborne collision avoidance system (ACAS), in accordance with Annex 6.	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders
	2. Ensure ANSP and Air Operator (AOC)adherence to ACAS warning procedures	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders
	3. Promote improvement of communications systems and procedures, such as controller-pilot data link.	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders
	4. Improved FDAP guidance to encourage operators to consider MAC precursors as part of FDAP.	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders
	5. Ensure ANSP and Air Operator (AOC)provide sufficient training related to TCAS and how to avoid them	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders
	6. Ensure ANSP and Air Operator (AOC)to distribute safety issue Information related to MAC/TCAS RA/AIRPROX	CAAIRI (OPS/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of MAC Accident/incident per 10,000 flight movements.	High	Oversight of airline and ATO training activities, Continuous engagement with stakeholders



Issue 1: Operational Safety Issues – Significant number of accident/serious incident					HRC 5: Runway excursion (RE)		
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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.5: Mitigate contributing factors to Runway excursion (RE). GASP HRC-4 Mid-RASP HRC-2	1. Ensure the establishment and implementation of a state runway safety programme and runway safety teams	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	2. Promote the establishment of policy and training on rejected landings, go arounds, crosswind and tailwind landings (up to the maximum manufacturer demonstrated winds)	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	3. Establish requirements for a reporting format to assess and report runway surface conditions in accordance with the ICAO Global Reporting Format in Annex 14 Vol I	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	4. Improved FDAP guidance to encourage operators to consider Runway Safety precursors as part of FDAP.	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	5. Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	6. Guidance material and training program for runway pavement, maintenance and operations from aerodrome operator's perspective. [Guidance material for training on runway maintenance and operations based on Annex 14 SARPs	CAAIRI (AGA/ANS)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance



Issue 1: Operational Safety Issues – Significant number of accident/serious incident HRC 6: Runway incursion (RI)

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	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 1.6: Mitigate contributing factors to Runway incursion (RI). GASP HRC-5 Mid-RASP HRC-3	1. Ensure establishment and implementation of National Runway Safety Programme (NRSP) and Runway Safety Teams (RST)	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATO d. ANSP	Number of RI Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	2. Develop policy, procedures and trainings that support situational awareness for controllers, pilots, airside-vehicle drivers and other airport users	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	3. Improved FDAP guidance to encourage operators to consider Runway Safety precursors as part of FDAP.	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	4. Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	5. Conduct the risk assessment of identified hot spots of aerodrome and develop and execute suitable strategies to remove hazards or mitigate risks associated with those hot spots.	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance
	6. Ensure the identification and publication in the aeronautical information publication (AIP) of hot spots at aerodromes	CAAIRI (AGA)	2024-2026	a. CAAIRI b. Airlines c. ATOs d. ANSP	Number of RE Accident/incident per 10,000 flight movements.	High	Oversight activity – inspection / surveillance

Appendix B:

Organizational Challenges (ORG)

Roadmap





Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System

Critical Element: CE-1 TO CE-5

Goal 2: Strengthen States' safety oversight capabilities



Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.1: Consistent implementation of and compliance with ICAO SARPs at the national level. GASP SEI- 1	1. Increase level of compliance with ICAO SARPs and the EI (CE-1 to CE-5)	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	<ul style="list-style-type: none"> Percentage of required corrective action plans (CAPs) submitted (OLF) Percentage of completed CAPs for PEL, OPS, AIR, ANS and AGA (Using OLF) 	High	ICAO OLF Self-Assessment
	2. Address all priority protocol questions (PQs) of the USOAP CMA (CE-1 to CE-5)	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	<ul style="list-style-type: none"> Number / percentage of responded PQs Number / percentage of unsatisfied PQs 	High	ICAO OLF Self-Assessment
	3. Establish primary aviation law and regulations, to empower the competent authority to conduct regulatory oversight (CE-1, CE-2)	CAAIRI	2018	CAAIRI – all regulatory divisions	Number of published documents	High	Published on the website of rules and regulations regulation.caa.gov.ir/en
	4. Establish process for identification of differences with ICAO SARPs (CE-2)	CAAIRI	2018	CAAIRI – all regulatory divisions	Executive evidence of the process	High	Published on the website of rules and regulations regulation.caa.gov.ir/en



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Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.2: Development of comprehensive regulatory oversight framework GASP SEI- 2	1. 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)	CAAIRI	2024-2026	<ul style="list-style-type: none"> • CAAIRI – all regulatory divisions • Service Providers 	Availability of technical guidance, tools & safety-critical information needed for technical personnel	High	Publication on the website of rules and regulations regulation.caa.gov.ir/en
	2. 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)	CAAIRI		Service Providers	Separate service provision functions from CAAIRI	High	Published on the website of rules and regulations regulation.caa.gov.ir/en
	3. Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory functions (CE3, CE4)	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	Availability qualified and sufficient technical personnel	High	Publication on the website of rules and regulations regulation.caa.gov.ir/en



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Goal 2: Strengthen States' safety oversight capabilities



Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.3: Establishment of an independent accident and incident investigation authority, consistent with Annex 13 — Aircraft Accident and Incident Investigation GASP SEI-3	1. Establish an independent accident and incident investigation authority in accordance with Annex 13 requirements (CE-1 and CE-3).	CAAIRI (AAII-LEG)	2024-2026	<ul style="list-style-type: none"> CAAIRI Aircraft operators Iran Ministry of Roads & Urban Development 	Percentage of completed CAPs for AIG (using OLF)	High	ICAO OLF Self-Assessment
	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)	CAAIRI (AAII-LEG)	2024-2026	<ul style="list-style-type: none"> CAAIRI Aircraft operators Iran Ministry of Roads & Urban Development 	Percentage of completed CAPs for AIG (using OLF)	High	ICAO OLF Self-Assessment
	3. Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory oversight (CE-3 and CE-4)	CAAIRI (AAII-LEG)	2024-2026	<ul style="list-style-type: none"> CAAIRI Aircraft operators Iran Ministry of Roads & Urban Development 	Percentage of completed CAPs for AIG (using OLF)	High	ICAO OLF Self-Assessment



Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System						Critical Element: CE-1 TO CE-5	
Goal 2: Strengthen States' safety oversight capabilities			 Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%				
Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.4: Strategic allocation of resources to enable effective safety oversight GASP SEI-4	1. Confirm executive or legislative mandate to receive financial resources from government or other external sources and expend them. (CE-1)	CAAIRI (Finance Dep)	Continuous Process	<ul style="list-style-type: none"> all regulatory divisions 	The amount of allocated budget	Medium	Funding Mechanism
	2. Establish a process for the resource planning and allocation in alignment with a competent authority's organizational structure, which is required to conduct effective safety oversight (CE-2 and CE-3).	CAAIRI (Finance Dep)	Continuous Process	<ul style="list-style-type: none"> all regulatory divisions 	Percentage of completed CAPs for AIG (using OLF)	Medium	Funding Mechanism



Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System

Critical Element: CE-1 TO CE-5


Goal 2: Strengthen States' safety oversight capabilities




Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.5: Qualified technical personnel to support effective safety oversight GASP SEI-5	1. Establish human resource plans to support hiring and retention of the appropriate number of qualified technical personnel required (CE-4).	CAAIRI	Continues Process	<ul style="list-style-type: none"> all regulatory divisions human resource department 	The number of qualified and sufficient technical personnel available	High	Review of sufficient number of technical personnel every year.
	2. 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).	CAAIRI	Continues Process	<ul style="list-style-type: none"> all regulatory divisions human resource department 	Number of trainings conducted Number of inspectors being trained	High	Annual Review of Training Program
	3. Establish an effective system to identify and track qualifications and training of existing technical personnel (CE-4)	CAAIRI	Continues Process	<ul style="list-style-type: none"> all regulatory divisions human resource department 	The number of qualified and sufficient technical personnel available	High	Annual Review of sufficient number of technical personnel
	4. Develop a process for assessing changing needs for qualified technical personnel requirements and develop procedures to update hiring, retention and training of personnel needs. (CE-4)	CAAIRI	Continues Process	<ul style="list-style-type: none"> all regulatory divisions human resource department 	The percentage of policy implementation for training	High	Annual Review of Training Program



Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System						Critical Element: CE-1 TO CE-5	
Goal 2: Strengthen States' safety oversight capabilities			 Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%				
Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.6: Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records GASP SEI-7	1. Update USOAP corrective action plan items	CAAIRI	2024-2026	<ul style="list-style-type: none"> all regulatory divisions 	EI percentage Safety Oversight index	High	Updated CAPs
	2. Complete and submit the self-assessment checklist based on USOAP CMA priority PQs	CAAIRI	2024-2026	<ul style="list-style-type: none"> all regulatory divisions 	Percentage of priority PQs addressed.	High	Updated Self-assessment
	3. Complete and submit the State aviation activity questionnaire	CAAIRI	2024-2026	<ul style="list-style-type: none"> all regulatory divisions 	Update data of SAAQ	High	Updated SAAQ
	4. Complete and submit the compliance checklists on electronic filing of differences system	CAAIRI	2024-2026	<ul style="list-style-type: none"> all regulatory divisions 	Rate of improvement in compliance	High	Updated EFOD
	5. Update documents and records as required in a timely manner	CAAIRI	2024-2026	<ul style="list-style-type: none"> all regulatory divisions 	Timely updating documents and records	High	Annual Review of updating documents and records



Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System						Critical Element: CE-6 TO CE-8	
Goal 2: Strengthen States' safety oversight capabilities			 Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%				
Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.7: Consistent implementation of and compliance with ICAO SARPs at the national level. GASP SEI-8	1. Increasing the level of compliance with ICAO SARPs and EI CE at the national level (6,7,8) especially in the fields of PEL, OPS, AIR, ANS and AGA	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	<ul style="list-style-type: none"> Percentage of required corrective action plans (CAPs) submitted (OLF) Percentage of completed CAPs for PEL, OPS, AIR, ANS and AGA (Using OLF) 	High	ICAO OLF Self-Assessment
	2. Address all priority protocol questions (PQs) of the USOAP CMA	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	<ul style="list-style-type: none"> Number / percentage of responded PQs Number / percentage of unsatisfied PQs 	High	ICAO OLF Self-Assessment



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Issue 2: Organizational Safety Issues – Deficiency in Safety Oversight System

Critical Element: CE-6 TO CE-8

Goal 2: Strengthen States' safety oversight capabilities



Target 2.1 To improve score for the Effective Implementation (EI) of Critical Elements (CE) of the Safety Oversight System as follows: By 2026 – 85%, by 2030 – 95%

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 2.8: Continued implementation of and compliance with ICAO SARPs at the national level GASP SEI-9	1. Implement licensing, certification, authorization and approval processes (CE-6) (Especially international airport certification)	CAAIRI – all regulatory divisions	2024-2026	Aviation Industry	EI percentage for CE-6	High	EI Score
	2. Implement regulatory oversight and enforcement processes (CE-7 and CE-8)	CAAIRI – all regulatory divisions	2024-2026	Aviation Industry	EI percentage for CE-7 & CE-8 Safety Oversight Index	High	Annual Review of oversight & enforcement functions
	3. Implement a risk-based surveillance program across all service providers (CE-7)	CAAIRI – all regulatory divisions	2024-2026	Aviation Industry	Number of risk-based surveillance programs	High	Completed Surveillance programs
	4. Establish a system to resolve safety concerns identified via accident and incident investigations, surveillance activities, safety reports and other means (CE-8)	CAAIRI – all regulatory divisions	2024-2026	Aviation Industry	EI percentage Safety Oversight index	High	Annual Review of oversight functions



Issue 3: Organizational Safety Issues - Ineffective State Safety Programme Implementation

State Safety Programme (SSP)

Goal 3: Fully implement effective State safety program



Target 3.1 To effectively implement the foundation of an SSP by 2023

Target 3.2 Implement an effective SSP by 2025

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 3.1: Start of SSP implementation at the national level GASP SEI-13	1. Establish an SSP implementation team	CAAIRI	implemented	Aviation Industry	No specific Merric is defined for this SEI	High	SSP Implementation Plan
	2. Conduct initial SSP gap analysis (checklist) then the detailed SSP self - assessment	CAAIRI	implemented	Aviation Industry	Level of SSP implementation (ISATAR4- OLF)	High	SSP GAP analysis
	3. Issue SMS regulations for service providers and verify SMS implementation through SMS audit	CAAIRI	2024-2026	Aviation Industry	Updating SMS Regulation Level of SMS assessment in service providers	High	Surveillance Activity
	4. Develop an implementation plan for the SSP	CAAIRI	2024-2026	Aviation Industry	No specific Merric is defined for this SEI	High	SSP Implementation Plan



Issue 3: Organizational Safety Issues - Ineffective State Safety Programme Implementation

State Safety Programme (SSP)

Goal 3: Fully implement effective State safety program (SSP) capabilities

Target 3.1 To effectively implement the foundation of an SSP by 2023

Target 3.2 Implement an effective SSP by 2025

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 3.2: Strategic allocation of resources to start SSP implementation GASP SEI-14	1. Establish a process for planning and allocation of resources to enable SSP implementation and identify areas where resources are needed.	CAAIRI	2024-2026	Aviation Industry	Percentage of satisfactory implementation of SSP foundation PQs	High	Review and updates to SSP Implementation Plan
	2. Providing and allocating the necessary financial resources based on the budgeting process of the CAAIRI	CAAIRI	2024-2026	Aviation Industry	Percentage of satisfactory implementation of SSP foundation PQs	High	Review and updates to SSP Implementation Plan
	3. Ensure that the Civil Aviation Safety Inspector workforce is trained to perform safety oversight of service providers that have implemented SMS	CAAIRI	2024-2026	CAAIRI – all regulatory divisions	Level of SSP Implementation	High	Level of SSP Implementation
	4. Develop a process to provide training on SSP to relevant staff, in collaboration with Regional Office and/or other States (e.g. initial, recurrent and advanced)	CAAIRI	2024-2026	Aviation Industry Global & Regional bodies Other States	The number of collaborations made	High	Review and updates to SSP Implementation Plan



Issue 3: Organizational Safety Issues - Ineffective State Safety Programme Implementation

State Safety Programme (SSP)

Goal 3: Fully implement effective State safety program (SSP) capabilities

Target 3.1 To effectively implement the foundation of an SSP by 2023

Target 3.2: Implement an effective SSP by 2025

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 3.3: Strategic collaboration with key aviation stakeholders to start SSP implementation GASP SEI-15	1. Collaborate with Regional Office, other States and other organizations, as appropriate to train qualified technical personnel to fulfil their duties and responsibilities regarding SSP implementation	CAAIRI	2024-2026	Aviation Industry Global & Regional bodies Other States	The number of collaborations made	High	Review and updates to SSP Implementation Plan
	2. Develop an action plan to address the elements identified as missing or deficient during the SSP Gap analysis	CAAIRI	implemented	Aviation Industry Global & Regional bodies Other States	Number of Unsatisfactory Area from SSP Gap Analysis	High	SSP Implementation Plan



Issue 3: Organizational Safety Issues - Ineffective State Safety Programme Implementation

State Safety Programme (SSP)

Goal 3: Fully implement effective State safety program




Target 3.1 To effectively implement the foundation of an SSP by 2023

Target 3.2: Implement an effective SSP by 2025

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 3.4: Availability of safety data and safety information to support safety management activities at the national level (step 1) GASP SEI-17	1. Establish a State mandatory occurrence reporting system	CAAIR (Safety&Quality Assurance)	implemented	Aviation Industry	Number of mandatory reports	High	Publication on the website of rules and regulations regulation.caa.gov.ir/en
	2. Establish a State confidential voluntary safety reporting system providing data to the safety database	CAAIR (Safety&Quality Assurance)	implemented	Aviation Industry	Number of voluntary reports	High	Publication on the website of rules and regulations egulation.caa.gov.ir/en
	3. Develop a safety database for monitoring system safety issues and hazards, in line with the principles of Doc 9859 — Safety Management Manual	CAAIR (Safety Quality Assurance)	2024-2026	Aviation Industry	Number of mandatory and voluntary reports	High	Periodic review by Safety Implementation Group
	4. . Establish and maintain a process to identify hazards from collected safety data	CAAIR (Safety&Quality Assurance)	implemented	Aviation Industry	Number of Unsatisfactory Area from SSP Gap Analysis	High	Publication on the website of rules and regulations regulation.caa.gov.ir/en
	5. Establish a mechanism to collect and analyses SSP SPIs data from service providers (SDCPS)	CAAIR (Safety&Quality Assurance)		<ul style="list-style-type: none"> All Regulatory Divisions All Service Providers 	Progress percentage of SDPS system creation	High	Progress report to SSP



Issue 3: Organizational Safety Issues - Ineffective State Safety Programme Implementation					State Safety Programme (SSP)		
Goal 3: Fully implement effective State safety program (SSP)capabilities				Target 3.1 To effectively implement the foundation of an SSP by 2023 Target 3.2. Implement an effective SSP by 2025			
Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 3.5: Availability of safety data and safety information to support safety management activities at the national level (step 2) GASP SEI-18	1. Develop safety performance indicators using the established safety risk management process	CAAIRI	2024-2026	Aviation Industry	Percentage of satisfactory implementation of SSP foundation PQs	High	Annual Review of SRMs conducted Effectiveness of reporting system
	2. Establish the acceptable level of safety performance to be achieved through the SSP	CAAIR (Safety&Quality Assurance)	2024-2026	Aviation Industry	Percentage of satisfactory implementation of SSP foundation PQs	High	<ul style="list-style-type: none">Annual Review of SRMs conductedEffectiveness of reporting system
	3. Promote safety awareness and two way communication, sharing and exchange of information within the State’s aviation organizations and encourage sharing of safety information with industry within the State	CAAIR (Safety&Quality Assurance)	2024-2026	Aviation Industry	Establishment of communication channel between CAAIR and industry	High	Periodic review by Safety Implementation Group



Issue 4: Lack of active participation of aviation service providers in aviation industry assessment programs

Goal 5: Expand the use of Industry Programmes and safety information sharing networks



Target 4.1 At least 60% of eligible airlines to be certified IATA-IOSA by 2026

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 5.1: Encourage to increase the number of IOSA registered Iranian airlines and ISAGO registrations. RASP-MID G5-SEI-01	1. Use of the IATA Operational Safety Audit (IOSA), to improve safety oversight activities	CAAIRI	2024-2026	Aviation Industry	The number of Iranian airlines to be certified IATA- IOSA	High	Annual Review of SRMs conducted Effectiveness of reporting system
	2. Use of the IATA Safety MID-RASP. Audit for Ground Operations (ISAGO), to improve safety oversight activities	CAAIRI	2024-2026	Aviation Industry	The number of Iranian Ground Handling service providers to be certified IATA-ISAGO	High	<ul style="list-style-type: none"> Annual Review of SRMs conducted Effectiveness of reporting system



Issue 5: Organizational Safety Issues – Deficiencies in air navigation infrastructure and international airports.

Goal 6: Ensure the appropriate infrastructure is available to support safe operations



Target 6.1: Iran to implement the Air Navigation Plan and airport infrastructure development by 2026

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI 6.1: Ensuring the implementation of appropriate infrastructure for air navigation and national airports to support safe operations and improve the EI percentage. RASP-Mid G6-SEI-01,02	1. Implementation of Performance Based Navigation (PBN) at all international airports	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	The number of international airports where PBN has been implemented	High	Oversight activity – inspection / surveillance
	2. Ensure implementation of the air navigation and airport core infrastructure	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	Percentage of implementation of the air navigation and airport core infrastructure	High	Oversight activity – inspection / surveillance
	3. Certify International Aerodromes in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	The number of international airports where the certificate has been issued	High	Oversight activity – inspection / surveillance
	4. Develop and implement a National Air Navigation Plan to supplement the NASP and meet the requirements of the GANP	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	The percentage of implementation of the national air navigation plan	High	Oversight activity – inspection / surveillance
	5. Establishing Runway Safety Teams (RST) at the International Aerodromes to manage the runway safety related risks	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	<ul style="list-style-type: none"> RSTs established at all international aerodromes Number of the RST missions conducted 	High	Monitor the metrics via the outcomes of the periodic surveillance of the aerodromes
	6. Support to implement the Global Reporting Format Methodology through capacity building activities	CAAIRI (ANS&AGA)	2024-2026	Air Operators ANSP Aerodrome Operators Military	The percentage of implementing the Global Reporting Format	High	Oversight activity – inspection / surveillance





Appendix C:

Emerging Safety Issues





Issue 01: Emerging And Other Safety Issues - **Navigation error / GPS Failure**

Goal: Achieve a continuous reduction of the risks associated with navigation and GPS errors



Target 1.1: Maintain a decreasing trend of the risks associated with navigation and GPS errors by 2026

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI EME 01: Reducing the risks associated with navigation and GPS errors	1. Ensuring regular updates of GPS software to reduce errors and mistakes	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users	The number of events related to navigation and GPS errors	high	Oversight activity – inspection / surveillance
	2 Using back-up GPS or using alternative navigation systems to reduce the risk of errors	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	2. Training employees and users on the correct use of GPS and introducing alternative navigation methods in case GPS fails.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military		high	Oversight activity – inspection / surveillance
	3. Make sure to create and update emergency plans and take necessary actions in case of navigation errors to lower the associated risks.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	4. Ensuring regular inspection and maintenance of equipment to ensure the accuracy of navigation systems	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	5. Using anti-jamming technologies and signal amplifiers to improve communication stability.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance



Issue 02: Emerging And Other Safety Issues – RPAS(Drones)

Goal: Reducing the risks and problems associated with RPAS (Drones)



Target 2.1: Maintain a decreasing trend of the risks associated with RPAS(Drones)

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI EME 02: Reducing the risks associated with RPAS(Drones) including: • Frequency Interference • Congestion Issues	1. Allocation of separate and dedicated frequency bands for RPAS communications in order to prevent interference with other devices and systems.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users	The number of events related to RPAS (Drones)	high	Oversight activity – inspection / surveillance
	2. Formulating and implementing national and international regulations and standards to utilize frequencies and prevent interference.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	3. Cooperation with international organizations and other countries to develop and implement integrated and coordinated regulations in the field of drone air traffic management.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	4. Training drone users and operators on how to use drones correctly and safely and prevent congestion.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	5. Definition of permitted and prohibited flight areas for drones in order to prevent the gathering of drones in certain areas.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	6. Establishing and implementing systems to manage drone air traffic (known as UAS Traffic Management or UTM) for coordinating and monitoring drone flights.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance



Issue 03: Emerging And Other Safety Issues - Laser Attacks

Goal: Reducing the risks and problems associated with Laser Attacks



Target 3.1: Maintain a decreasing trend of the risks associated with Laser Attacks

Safety enhancement initiative	Action	Responsible entity	Timeline	Stakeholders	Metrics	Priority	Monitoring Activity
SEI EME 03: Decreased Laser Attacks	1. Conducting a training course on laser attack situations for pilots and integrating it into the training program.	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users	The number of events related to Laser Attacks	high	Oversight activity – inspection / surveillance
	2. Utilizing technologies such as special lenses to shield against laser impacts or laser awareness systems that notify pilots about laser threats	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance
	3. Public notification About the dangers of laser attacks and the reporting mechanisms of these illegal measures to prevent the dangers of laser attacks	CAAIRI	2024-2026	Air Operators ANSP Aerodrome Operators Military Legal and real users		high	Oversight activity – inspection / surveillance