

# NATIONAL AVIATION SAFETY PLAN

## SECTION 1. INTRODUCTION

### 1.1 Overview of the NASP

The Republic of North Macedonia 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 The Republic of North Macedonia and its industries. The NASP promotes the effective implementation of The Republic of North Macedonia's safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between The Republic of North Macedonia 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 The Republic of North Macedonia is in alignment with the International Civil Aviation Organization (ICAO) *Global Aviation Safety Plan* (GASP, Doc 10004), and the EUR Regional Aviation Safety Plan 2023-2025 (EUR RASP).

Tomislav Tuntev, CAA Director

### 1.2 Structure of the NASP

This NASP presents the strategic direction for the management of aviation safety at the national level, for a period of three years. It comprises six sections. In addition to the introduction, sections include: the purpose of the NASP, The Republic of North Macedonia's strategic direction for the management of aviation safety, the national operational safety risks identified for the 2023-2025 NASP, organizational challenges addressed in the NASP, and a description of how the implementation of the safety enhancement initiatives (SEIs) listed in the NASP is going to be monitored.

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

Through the safety data analysis (SDA) aspects of the State safety programme (SSP), as described in the ICAO SSP Implementation Assessment (SSPIA), The Republic of North Macedonia has the ability to use its hazard identification and safety risk management process as a source of safety intelligence to identify hazards and safety deficiencies, and determine national operational safety risks and organizational challenges for inclusion in the NASP. The SSP provides safety information to the NASP. The SSP allows The Republic of North Macedonia to manage its aviation activities in a coherent and proactive manner, measure the safety performance of its civil aviation system, monitor the implementation of the NASP's SEIs and address national safety issues. The NASP is one of the key documents produced as part of The Republic of North Macedonia's SSP documentation. It is the means by which The Republic of North Macedonia defines and drives the implementation of SEIs determined through SSP processes and drawn from the ICAO *Global Aviation Safety Roadmap* (Doc 10161) and the EUR RASP. It also allows The Republic of North Macedonia to determine initiatives to strengthen the SSP or otherwise needed to achieve its safety objectives. Safety intelligence gathered through the SSP also contributes to other national plans. Further information on The Republic of North Macedonia's SSP can be found at <https://www.caa.gov.mk/>.

#### **1.4 Responsibility for the NASP development, implementation and monitoring**

The Republic of North Macedonia Civil Aviation Agency (CAA) is responsible for the development, implementation and monitoring of the NASP. The NASP was developed in alignment with the 2023-2025 edition of the GASP and the EUR RASP.

#### **1.5 National safety issues, goals and targets**

The NASP addresses the following national safety issues:

##### **A. National Operational Safety Risks**

- 1) Mid Air Collision (MAC);
- 2) Runway Incursion (RI);
- 3) Runway Excursions (RE);
- 4) Loss of Control in Flight (LOC-I)
- 5) Controlled Flight into Terrain (CFIT)

##### **B. Organizational Challenges**

- 1) Continuous improvement in overall EI of the State safety oversight system;
- 2) Strengthen Macedonian's safety oversight capabilities;
- 3) Strengthen aircraft accident and incident investigation capabilities;
- 4) Qualified technical personnel to support effective safety oversight)
- 5) Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records
- 6) Strategic allocation of resources to enable effective safety oversight
- 7) Strategic collaboration with key aviation stakeholders to improve safety
- 8) Continuous SSP implementation at the national level

To address the issues listed above and enhance aviation safety at the national level, the 2023-2025 NASP contains the following goals and targets:

- 1) Goal: Achieve a continuous reduction of operational safety risks  
Target: 1.1 Maintain a decreasing trend of the national accident rate
- 2) Goal: Strengthen the State's safety oversight capabilities  
Target: 2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:  
-by 2026-85%  
-by 2030-95%
- 3) Goal: Implementation of effective SSPs by the State  
Target: 3.1 Implement the foundation of an SSP by 2023.  
3.2 Publish a NASP by 2024.  
3.3 Work towards an effective SSP as follows:  
a) by 2025-Present  
b) by 2028 -Present and effective
- 4) Goal: Increase collaboration at the regional level to enhance safety.  
Target: 4.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met  
4.3 Contribute information on operational safety risks, including SSP SPIs and emerging issues, to the respective RASGs by 2025.
- 5) Goal: Expand the use of industry programmes and safety information sharing networks by service providers.  
Target: 5.1 Maintain an increasing trend in the State's industry's contribution in safety information sharing networks to EUR States and within EUR region to assist in the development of national and regional aviation safety plans
- 6) Goal: Ensure the appropriate infrastructure is available to support safe operations  
Target: 6.1 By 2025, maintain an increasing trend of States with air navigation and aerodrome infrastructure that meets relevant ICAO Standards

## **1.6 Operational Context**

North Macedonia has a relatively small aviation industry and an established Safety Regulator, assessed in 2016 to have an ICAO Effective Implementation of 78.25%. The Regulator is legally and financially independent from Government and industry, and employs approximately 75 people at present, with plans to recruit some additional qualified staff. There are approximately 100 safety occurrence reports per year. There is no AOC holder and a small number of aircraft registered including a Government corporate operation, four PPL training organisations plus some ultralight and paraglider training, one Aeromedical Centre and one Aircraft Maintenance Engineer Training Organisation. There is a single ANSP and two international airports, Skopje and Ohrid, with seven (ICAO published) smaller aerodromes for GA and sport aviation.

Skopje airport handles approximately 22,000 movements annually, the majority being international scheduled flights, with 2.9 million passengers and 3,500 metric tons of freight. The ground handling company is privatized and is under contract to the airport. Ohrid airport is smaller with approximately 2000 movements annually, most of them international scheduled traffic, 270,000 passengers and 0.5 metric tons of freight. Both airports are close to mountainous terrain, both have ILS on one runway only and no GNSS type approaches. Weather is described as generally good with possibilities of storms in spring and Skopje experiences some fog in December.

The ANSP (MNAV) is company to which the State of North Macedonia delegates the management and control of civilian and military air traffic in North Macedonia with 267 000 flights annually. Both airports and the ANSP have implemented their own SMS. The Government corporate jet operation is developing an SMS.

Search and Rescue co-ordination is co-located with ATC and in case of emergency operations, Military and Police helicopters are engaged. In the future, the SAR structure may be reviewed and restructured. Dedicated Police and Military Helicopter operations also exist but are not considered to be within the oversight responsibilities of CAA.

### **1.7. Common hazards and safety deficiencies in The Republic of North Macedonia**

The regulatory body for aerodromes and its infrastructure in Republic of North Macedonia is Civil Aviation Authority of North Macedonia (CAA). CAA is responsible for the certifying and oversight of the aerodromes in the country. In North Macedonia, we have 2 (two) international aerodromes, 5 sport airfields and 6 airfields for agricultural aviation. The international airport Skopje, located in vicinity of the capital Skopje and the international airport St. Apostle Paul in Ohrid.

TAV Macedonia Ltd. operates both of the airports since 1<sup>st</sup> March 2010 and its passenger turnover and capacities increased drastically in the last 5 years. Taking into account their current infrastructure, possibilities for renovation and future increase of their capacity we can say that International airport Skopje is near its maximum capabilities in both terms of infrastructure capacity and possible upgrade to a higher level of classification for instrument approach and runway extension or strengthening to accommodate larger aircrafts. Additionally, both airports in Skopje and Ohrid suffer from specific meteorological condition during the winter months with foggy days mainly due to their geographic location in valley surrounded by high terrain. Resulting from the foggy days, many flights are delayed or cancelled, with foggy days accounting 7- 9 days per month during January and February in Skopje.

As a comparison, some of the airports in the region have better infrastructure, longer runways with higher PCN characteristics able to accommodate heavier fleet of aircraft and higher level of classification for instrument approach – CAT IIIB or CAT IIIC, allowing them to continue operations even during heavy fog or no visibility at all. The international airport in Skopje has a classification of CAT I for instrument approaches and due to high terrain in the final approach and the resulting steep glide path of 3.3° is not able to upgrade to CAT II instrument approaches or higher. In order to keep up with the airports in our region and be able to offer more on the market and be competitive, some of the solutions are to clear location that will not be affected by obstacles, in order to attract more airlines to open new routes to our country.

Regarding the classes of airspace A, B, and F are not used in the Republic of North Macedonia. Within some agricultural districts, especially during the period between May and October, in thunderstorms, or weather conditions in which the formation of thunderstorms is likely, anti-hail rockets might be fired up to 20000ft (6000m) AMSL, constituting a hazard to air navigation. There are two restricted area - LW R01 and LW R03, one Temporary Segregated Area (TSA) - LW TSA01. There are no published flexible use airspaces (FUA). Nevertheless, there is a continuous and fluent civil-military coordination with CIMC committee established. The implementation of Performance-based Navigation (PBN) is presently the global aviation community's highest air navigation priority but is still not implemented.

## **SECTION 2. PURPOSE OF THE REPUBLIC OF NORTH MACEDONIA'S NATIONAL AVIATION SAFETY PLAN**

The NASP is the master planning document containing the strategic direction of The Republic of North Macedonia for the management of aviation safety for a period of three years (2024 to 2026). This plan lists national safety issues, sets national safety goals and targets, and presents a series of safety enhancement initiatives (SEIs) to achieve those goals.

Other national plans were considered in the development of the NASP, including the following: State Safety Programme 2020 and State Safety Plan 2020-2024. The NASP has been developed using the safety goals and targets and high-risk categories of occurrences (HRCs) from both the GASP ([www.icao.int/gasp](http://www.icao.int/gasp)) and the EUR 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. The NASP includes several actions to address specific safety issues and recommended SEIs for individual States set out in the EUR RASP (<https://www.icao.int/EURNAT/Pages/EUR-and-NAT-Documents.aspx>). The Republic of North Macedonia has adopted these SEIs and has included them in this plan. Cross-references are provided to the EUR RASP for individual SEIs where relevant.

### SECTION 3. THE REPUBLIC OF NORTH MACEDONIA'S STRATEGIC DIRECTION FOR THE MANAGEMENT OF AVIATION SAFETY

The NASP presents the SEIs mainly determined through SSP processes, including The Republic of North Macedonia's hazard identification and safety risk management process and its SDCPS, as well as the work undertaken by service providers in the development and implementation of their safety management systems (SMS). This plan is developed and maintained by the CAA, in coordination with key aviation stakeholders and is updated at least every three 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 EUR RASP and include additional national safety goals, targets and indicators.

<i>Goal</i>	<i>Target</i>	<i>Indicators</i>	<i>Link to GASP and RASP</i>
1. Achieve a continuous reduction of operational safety risks	1.1 Maintain a decreasing trend of the national accident rate.	<p>1.1.1 Number of accidents occurring in the State per 10 000 departures.</p> <p>1.1.2 Number of accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg and occurring in the State</p> <p>1.1.3 Number of accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg and occurring in the State per million departures (accident rate)</p> <p>1.1.4 Number of fatal accidents to aircraft of 5700 kg or more occurring in the EUR Region</p> <p>1.1.5 Number of fatal accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg and occurring in the State per million departures (fatal accident rate)</p> <p>1.1.6 Number of fatalities</p>	This goal is directly linked to Goal 1 and Target 1.1 of the GASP and linked to Goal 1 and Target 1.1 of the RASP.

		<p>in accidents to aircraft of 5700 kg or more occurring in the State</p> <p>1.1.7 Number of fatalities in accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg and occurring in the State per passengers carried (fatality rate) EUR.SPI.1.1.07 Percentage of accidents to aircraft of 2250 kg or more occurring in the EUR Region related to high-risk categories (HRCs)</p> <p>1.1.8 Number of accidents to aircraft of 2250 kg or more occurring in the State</p>	
2. Strengthen the State's safety oversight capabilities	<p>2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95%</p>	<p>2.1.1 Overall EI score for the State.</p> <p>2.1.2 Number of priority PQs implemented.</p> <p>2.1.3 Percentage of required corrective action plans (CAPs) submitted.</p> <p>2.1.4 Percentage of completed corrective action plans (CAPs) completed.</p>	<p>This goal is directly linked to Goal 2 and Target 2.1 of the GASP and linked to Goal 2 and Target 2.1 of the RASP.</p>
3. Implementation of effective SSPs by the State	<p>3.1 Implement the foundation of an SSP by 2023.</p> <p>3.2 Publish a NASP by 2024.</p> <p>3.3 Work towards an effective SSP as follows: a) by 2025-Present</p>	<p>3.1.1 Percentage of required CAPs related to the SSP foundation PQs submitted by States using the OLF</p> <p>3.1.2 Percentage of required CAPs related to the SSP foundational PQs submitted by the State</p>	<p>This goal is directly linked to Goal 3 and Targets 3.1, 3.2 and 3.3 of the GASP and linked to Goal 3 and Targets 3.1, 3.2 and 3.3 of the RASP</p>

	<p>b) by 2028 -Present and effective</p> <p>The terms “present” and “present and effective” are based on the maturity levels established in the ICAO SSP Implementation Assessment (SSPIA).</p>	<p>3.2.1 Published NASP.</p> <p>3.3.1 Having SSP that is present</p> <p>3.3.2 Having SSP that is present and effective</p> <p>3.3.3 Number of applicable service providers under the State’s authority required to implement an SMS</p>	
<p>4. Increase collaboration at the regional level to enhance safety.</p>	<p>4.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met</p> <p>4.3 Contribute information on operational safety risks, including SSP SPIs and emerging issues, to the respective RASGs by 2025.</p>	<p>4.1.1. Number of assistance activities sought, by using a regional safety oversight mechanism, another State or other safety oversight organization’s ICAO-recognized functions</p> <p>4.1.2 Submitted draft NASP to an ICAO EUR/NAT Office</p> <p>4.1.3 Registration of State in the NASP Online Community</p> <p>4.3.1. Registration of the State to the Secure Portal on Emerging Issues and Additional Categories of Operational Safety Risks</p> <p>4.3.2 Number of SSP SPIs shared with EASPG</p> <p>4.2.2. Number of reports by the State received via the Secure Portal on Emerging issues and Additional Categories of Operational Safety Risks and validated from EUR entities</p>	<p>This goal is directly linked to Goal 4 and Targets 4.1, 4.3 of the GASP and linked to Goal 4 and Targets 4.1, 4.3 of the RASP.</p>
<p>5. Expand the use of industry programmes and safety</p>	<p>5.1 Maintain an increasing trend in the State’s industry’s contribution in</p>	<p>5.1.1 Number of service providers using globally harmonized metrics for their SPIs;</p>	<p>This goal is directly linked to Goal 5 and Target 5.1, of the GASP and linked to</p>

information sharing networks by service providers.	safety information sharing networks to EUR States and within EUR region to assist in the development of national and regional aviation safety plans	<p>5.1.2 Percentage of service providers participating in the corresponding ICAO-recognized industry assessment programmes</p> <p>5.1.3 Having an established safety data collection and processing system (SDCP) to facilitate participation in a safety information-sharing network</p>	Goal 5 and Target 5.1, of the RASP
6. Ensure the appropriate infrastructure is available to support safe operations.	6.1 By 2025, maintain an increasing trend of States with air navigation and aerodrome infrastructure that meets relevant ICAO Standards	<p>6.1.1 Number of infrastructure-related air navigation deficiencies by State against the EUR regional air navigation plan</p> <p>6.1.2. Number of implemented infrastructure-related PQs linked to the basic building blocks</p>	This goal is directly linked to Goal 6 and Target 6.1, of the GASP and linked to Goal 6 and Target 6.1, of the RASP.

The SEIs in this plan are implemented through The Republic of North Macedonia's existing safety oversight capabilities and the service providers' SMS. SEIs derived from the ICAO *Global Aviation Safety Roadmap* (Doc 10161) were identified to achieve the national safety goals presented in the NASP. Some of the national SEIs are linked to overarching SEIs at the regional and international levels and help to enhance aviation safety globally. The full list of the SEIs is presented in the appendix to the NASP.

The NASP also addresses emerging issues. 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. Due to the lack of data, emerging issues cannot automatically be considered as operational safety risks. It is important that The Republic of North Macedonia remain vigilant on emerging issues to identify hazards and safety deficiencies, collect relevant data and proactively develop mitigations to address any associated risks. The NASP addresses the following emerging issues, which were identified by National aviation safety committee for further analysis:

- 1) Small drones operating in the vicinity of aerodromes
- 2) Safe integration of unmanned aircraft systems in the airspace
- 3) Bird strikes



#### SECTION 4. NATIONAL OPERATIONAL SAFETY RISKS

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

The Republic of North Macedonia publishes an Annual Safety Report, available on the Republic of North Macedonia website <https://kinsiv.mk/>. The summary of accidents and serious incidents that occurred in The Republic of North Macedonia, and those for aircraft registered in The Republic of North Macedonia involved in commercial air transport and aircraft involved in general aviation, is shown in the tables below.

<i>Year</i>	<i>Fatal accidents</i>	<i>Non-fatal accidents</i>	<i>Serious incidents</i>
<b>Commercial air transport occurrences in The Republic of North Macedonia</b>			
2016 - 2020	0	1	1
2020 - present	0	0	1
<b>General aviation aircraft occurrences in The Republic of North Macedonia</b>			
2016 - 2020	2	0	0
2020 - present	0	0	1

<i>Year</i>	<i>Fatal accidents</i>	<i>Non-fatal accidents</i>	<i>Serious incidents</i>
<b>Occurrences involving commercial air transport aircraft registered in The Republic of North Macedonia</b>			
2016 - 2020	0	0	0
2020 - present	0	0	0
<b>Occurrences involving general aviation aircraft registered in The Republic of North Macedonia</b>			
2016 - 2020	0	0	0
2020 - present	0	1	0

The following 6 national high-risk categories of occurrences (N-HRCs) in the Republic of North Macedonia context were considered of the utmost priority because of the number of fatalities and risk of fatalities associated with such occurrences. They were identified based on analyses from mandatory and voluntary reporting systems, accident and incident investigation reports, and safety oversight activities over the past 4 years, the SSP, as well as on the basis of regional analysis conducted by RESG/06 and RESG RASP WG/05 and on the operational safety risks described in the GASP.

These N-HRCs are in line with those listed in the 2023-2025 edition of the GASP, as well as the EUR RASP:

- 1) Mid Air Collision (MAC);
- 2) Runway Incursion (RI);
- 3) Runway Excursions (RE);
- 4) Loss of Control in Flight (LOC-I)
- 5) Controlled Flight into Terrain (CFIT)

In addition to the N-HRCs listed above, the following national operational safety risks have been identified:

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

To address the national operational safety risks listed above, The Republic of North Macedonia identified the following contributing factors leading to N-HRCs and Macedonian aviation industry will implement a series of SEIs, some of which are derived from the ICAO OPS roadmap, contained in the ICAO *Global Aviation Safety Roadmap* (Doc 10161):

**N-HRC 1: Mid Air Collision (MAC);**

- 1) Traffic conditions
- 2) Air traffic controller workload
- 3) Aircraft equipment;
- 4) Flight crew training

**N-HRC 2: Runway Incursion (RI);**

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

**N-HRC 3: Runway Excursions (RE);**

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

**N-HRC 4: Loss of Control in Flight (LOC-I);**

- 1) Aeroplane systems-induced
- 2) Environmentally induced
- 3) Pilot/human-induced or any combination of these three

**N-HRC 5: Controlled Flight into Terrain (CFIT);**

- 1) Procedure design and documentation
- 2) Pilot disorientation
- 3) Adverse weather

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, The Republic of North Macedonia has identified organizational challenges and a series of SEIs, selected for the NASP, to address them. These are given priority in the NASP since they are aimed at enhancing and strengthening The Republic of North Macedonia'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. The Republic of North Macedonia is committed to the effective implementation of these eight CEs, as part of its overall safety oversight responsibilities, which emphasize The Republic of North Macedonia's commitment to safety in respect of its aviation activities. The eight CEs are presented in Figure 1 below.

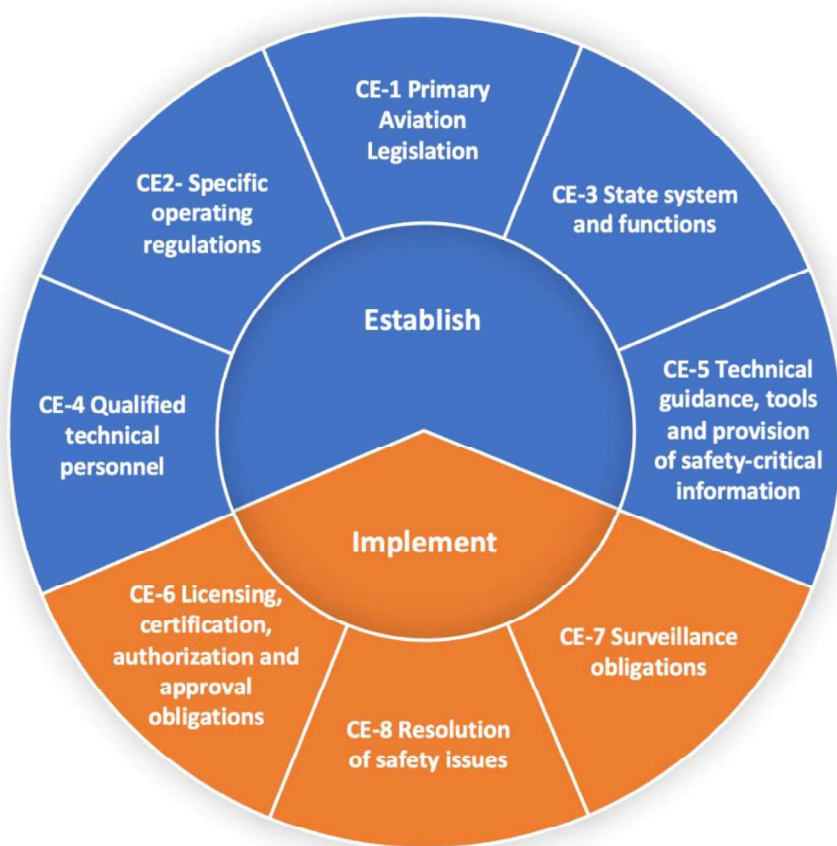


Figure 1. Critical elements of a State's safety oversight system

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

<i>Overall EI score</i>							
78.25%							
<b>EI score by CE</b>							
<b>CE-1</b>	<b>CE-2</b>	<b>CE-3</b>	<b>CE-4</b>	<b>CE-5</b>	<b>CE-6</b>	<b>CE-7</b>	<b>CE-8</b>
86.21%	85.00%	84.21%	75.00%	71.00%	81.25%	81.32%	50.00%
<b>EI score by audit area<sup>1</sup></b>							
<b>LEG</b>	<b>ORG</b>	<b>PEL</b>	<b>OPS</b>	<b>AIR</b>	<b>AIG</b>	<b>ANS</b>	<b>AGA</b>
82.61%	57.14%	95.59%	65.66%	89.52%	61.43%	76.42%	80.87%

The following 8 organizational challenges in the Republic of North Macedonia context were considered of the utmost priority because they 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 4 years, the SSP, as well as on the basis of regional analysis conducted by RESG/06 and RESG RASP WG/05. These issues are typically systemic in nature and relate to challenges associated with the conduct of States' safety oversight functions, implementation of SSP at the national level and the level of SMS implementation by national service providers. They take into consideration organizational culture, policies and procedures within the CAA and those of service providers. These organizational challenges are in line with those listed in the 2023-2025 edition of the GASP, as well as the EUR RASP:

- 1) Continuous improvement in overall EI of the State safety oversight system;
- 2) Strengthen Macedonian's safety oversight capabilities;
- 3) Strengthen aircraft accident and incident investigation capabilities;
- 4) Qualified technical personnel to support effective safety oversight)
- 5) Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records
- 6) Strategic allocation of resources to enable effective safety oversight
- 7) Strategic collaboration with key aviation stakeholders to improve safety
- 8) Continuous SSP implementation at the national level

To address the organizational challenges listed above, the CAA will implement a series of SEIs, some of which are derived from the ICAO ORG roadmap, contained in the ICAO *Global Aviation Safety Roadmap* (Doc 10161). The full list of the SEIs is presented in the appendix to the NASP.

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

## **SECTION 6. MONITORING IMPLEMENTATION**

The Republic of North Macedonia 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, The Republic of North Macedonia will review the NASP every three years or earlier, if required, to keep the identified operational safety risks, organizational challenges and selected SEIs updated and relevant. The CAA will periodically review the safety performance of the initiatives listed in the NASP to ensure the achievement of national safety goals. If required, The Republic of North Macedonia will seek the support of RESG/RASP groups ECAC, EASA, ICAO and industry, to ensure the timely implementation of SEIs to address national safety issues. Through close monitoring of the SEIs, The Republic of North Macedonia will make adjustments to the NASP and its initiatives, if needed, and update the NASP accordingly.

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

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

The Republic of North Macedonia adopted a standardized approach to provide information at the regional level, for reporting to the regional aviation safety group (RASG) through regular meetings. This allows the region to receive information and assess operational safety risks using common methodologies.

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

### **Civil Aviation Agency**

Dame Gruev 1  
1000 Skopje  
Republic of North Macedonia

Tel. +389 (02) 3 18 16 01  
Fax. +389 (02) 3 11 57 08

e-mail: [info@caa.gov.mk](mailto:info@caa.gov.mk)

# 1. APPENDIX TO THE NASP

## Appendix A Detailed SEIS: National Operational Safety Risks

HRC 1: Mid Air Collision (MAC)								
Goal 1: Improve the safety of aviation operations across all sectors Target 1.1: Maintain a decreasing trend of the national incident rate								
Safety Enhancement Initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity	
Mitigate contributing factors to MAC accidents and incidents	(a) Actualize the use of ADS-B for surveillance and enhancement of CN systems in the entire airspace	2024-2026	CAA	M-NAV TAV	Actualization of the use of ADS-B surveillance system	High	Safety oversight of ANSP, Aerodromes and Air Operators	
	(b) Ensure adequate training of ATC	2024-2026	CAA	M-NAV	Number of ATC personnel trained	High	Safety oversight of ANSP	
	(c) Ensure adequate training of Pilots	2024-2026	CAA	DGCAG	Number of Pilots trained	High	Safety oversight of Air Operators	
	(d) Adherence to procedures	2024-2026	CAA	M-NAV DGCAG	Reduced number of incidences reported related to non-adherence to procedures	High	Safety oversight of ANSP and Air Operators	

	(e) Continue to implement programs that raise awareness of drone safety rules in the community	2024-2026	CAA	M-NAV TAV DGCAG	Number of awareness programs conducted	Medium	Safety oversight of ANSP, Aerodromes and Air Operators
	(f) Implement RPAS passive detection at selected aerodromes	2024-2026	CAA	TAV MO	Detection systems implemented	Medium	Safety oversight of aerodromes
<b>HRC 2: Runway Incursion (RI)</b>							
<b>Goal 1: Improve the safety of North Macedonian aviation operations across all sectors</b>							
<b>Target 1.1: Maintain a decreasing trend of the national incident rate</b>							
<b>Safety Enhancement Initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics/Indicators</b>	<b>Priority</b>	<b>Monitoring Activity</b>
Mitigate contributing factors to RI accidents and incidents	(a) Establish runway safety teams	2024-2026	CAA	TAV M-NAV DGCAG	Number of runway safety meetings held	High	Safety oversight of aerodromes, ANSP and air operators
	(b) Ensure proper signages and markings of Runways and taxiways	2024-2026	CAA	TAV M-NAV	Signages and markings implemented	High	Safety oversight of aerodromes
	(c) Ensure proper ATC communication procedures	2024-2026	CAA	M-NAV DGCAG	Documented communication procedures	High	Safety oversight of ANSP and air operators



<b>HRC 3: Loss of Control in Flight (LOC-I)</b>							
<b>Goal 1: Improve the safety of North Macedonian aviation operations across all sectors</b>							
<b>Target 1.1: Maintain a decreasing trend of the national accident rate</b>							
<b>Safety Enhancement Initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics/Indicators</b>	<b>Priority</b>	<b>Monitoring Activity</b>
Mitigate contributing factors to LOC-I accidents and incidents	(a) Ensure adequate Pilot training	2024-2026	CAA	GA DGCAG	Number of pilots trained	High	Safety oversight of air operators
	(b) Ensure airworthiness of aircraft	2024-2026	CAA	GA DGCAG	Number of AOCs issued	High	Safety oversight of MROs
	(c) Ensure accurate weather information update	2024-2026	CAA	M-NAV	Accurate weather updates	High	Safety oversight of ANSP
	(d) Set standards for upset prevention and recovery training (URPT).	2024-2026	CAA	GA DGCAG CAA	Number of pilots and inspectors trained	High	Monitor the training plan of DGCAG and GA as well as CAA inspectors
<b>HRC 4: Runway Excursions (RE)</b>							
<b>Goal 1: Improve the safety of North Macedonian aviation operations across all sectors</b>							
<b>Target 1.1: Maintain a decreasing trend of the national accident rate</b>							
<b>Safety Enhancement Initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics/Indicators</b>	<b>Priority</b>	<b>Monitoring Activity</b>
Mitigate contributing factors to RE accidents and incidents	Establishment and implementation of runway safety teams	2024-2026	CAA	TAV M-NAV DGCAG	Number of runway safety meetings held	High	Safety oversight of aerodromes, ANSP and air operators
	Timely reporting of runway surface conditions	2024-2026	CAA	TAV AAIIC	Number of incidents/accidents reported related to surface conditions	High	Safety oversight of aerodromes, Annual Safety Report

	Certification of Aerodromes in accordance with ICAO Annex 14	2024-2026	CAA	M-NAV	Number of certified Aerodromes	High	Safety oversight of aerodromes
<b>HRC 5: Controlled Flight into Terrain (CFIT)</b>							
<b>Goal 1: Improve the safety of North Macedonian aviation operations across all sectors</b> <b>Target 1.1: Maintain a decreasing trend of the national accident rate</b>							
<b>Safety Enhancement Initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics/Indicators</b>	<b>Priority</b>	<b>Monitoring Activity</b>
Mitigate contributing factors to CFIT accidents and incidents	Implementation of continuous descent final approaches	2024-2026	CAA	GA DGCAG	Number of CFIT accidents Number of safety reports related to CFIT precursors	High	Continuous engagement with stakeholders Oversight activity—inspection/ surveillance
	Implementation of Minimum Safe Altitude Warning (MSAW) Systems	2024-2026	CAA	GA DGCAG	Number of CFIT accidents Number of safety reports related to CFIT precursors	High	Monitor Air Operators Training Activities.
	Timeliness of update and accuracy of Electronic Terrain and Obstacle Data (EToD)	2024-2026	CAA	GA DGCAG	Number of CFIT accidents Number of safety reports related to CFIT precursors	High	Monitor Air Operators Training Activities.
	Pilot training and Fatigue management	2024-2026	CAA	GA DGCAG	Number of CFIT accidents Number of safety reports related to CFIT precursors	High	Monitor Air Operators Training Activities.

Appendix B Detailed SEIS: Organizational Challenges

Organizational challenge: Continuous improvement in overall EI of the State safety oversight system							
Goal: 1. Strengthen the State’s safety oversight capabilities							
Target: 1.1 The State to improve the EU score for critical elements (CEs) of the State’s safety oversight system (with focus on priority PQs) as follows: -by 2026-85%-by 2030-95%							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-1 — Consistent implementation of ICAO SARP’s at the national level	1A — Increase the level of compliance with ICAO SARP’s and the EI of CEs at the national level (CE-1 to CE-5)	2024-2026	CAA	CAA	EI Percentage	High	USOAP CMA OLF
	1B. Address all priority protocol questions (PPQs) of the USOAP CMA	2024-2026	CAA	CAA	EI Percentage	High	USOAP CMA platform on the Self-assessment
	1C. Complete CC/EFOD in all areas	Actual	CAA	CAA	Completion status	Medium	CC/EFOD Report on USOAP OLF

Organizational challenge: Strengthen Macedonian's safety oversight capabilities							
<b>Goal: 1. Strengthen the State's safety oversight capabilities</b> <b>Target: 1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</b> <b>-by 2026-85%</b> <b>-by 2030-95%</b>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-2 Development of a comprehensive regulatory oversight framework	2A — Establish and maintain an independent regulatory oversight authority, which includes separation of oversight functions from service provision functions where these exist within the authority (CE-3)	2024-2026	CAA	CAA	Approved Structure organization	High	Follow up meeting
	2B — Develop an effective system to promulgate technical guidance and tools, and provide safety-critical information needed for technical personnel to effectively perform their safety oversight functions (CE-5)	2024-2026	CAA	CAA	Technical guidance material (TGM), distribution lists and acknowledgement of receipt of the TGMs	High	Follow up meeting
	2C — Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory oversight (see SEI-4) (CE-3 and CE-4)	2024-2026	CAA	CAA	Conduct an Annual Job Evaluation Review the Training Needs analysis Review the Training Programme and Training Plan Allocate Budget for training in line with the plan	High	Follow up meeting

Organizational challenge: Strengthen aircraft accident and incident investigation capabilities							
<p><b>Goal:</b></p> <p>1. Achieve a continuous reduction of operational safety risks;</p> <p>2. Strengthen the State's safety oversight capabilities</p> <p><b>Target:</b></p> <p>1.1 Maintain a decreasing trend of the national accident rate.</p> <p>2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</p> <p>-by 2026-85%</p> <p>-by 2030-95%</p>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-3 — Establish and maintain of an independent accident and incident investigation authority, consistent with Annex 13 — Aircraft Accident and Incident Investigation	3A Maintain an independent accident and incident investigation authority, as per Annex 13 requirements (CE-1 and CE-3)	2024-2026	CAA, AAIC Government	AAIC	Regulatory framework Organisation structure Resources		Follow up meeting
	3B — Develop an effective system to promulgate technical guidance and tools, and provide safety-critical information needed for technical personnel to effectively conduct accident and incident investigations (CE-5)	2024-2026	CAA, AAIC	AAIC	TGM distribution lists and acknowledgement of receipt of the TGMs	High	USOAP CMA platform on the Self-assessment
	3C — Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support accident and incident investigations (see SEI-5) (CE-3 and CE-4)	2024-2026	AAIC	AAIC	Technical personnel recruitments and turnover rates Training policy	High	USOAP CMA platform on the Self-assessment

Organizational challenge: Strategic allocation of resources to enable effective safety oversight							
<p><b>Goal:</b></p> <p>1. Strengthen the State's safety oversight capabilities</p> <p>2. Increase collaboration at the regional level to enhance safety.</p> <p><b>Target:</b></p> <p>1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95%</p> <p>2.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met</p>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-4 — Strategic allocation of resources to enable effective safety oversight	4A — Confirm executive or legislative mandate to receive financial resources from government or other external sources and expend them (CE-1)	2024-2026	CAA	CAA , MTC	Aviation Act, Approved Budget	High	Provisions and implementation of acts and regulations
	4B — 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).	2024-2026	CAA	CAA, MTC	Aviation Act, Approved Budget	High	Provisions and implementation of acts and regulations
	4C — Obtain a sustainable and stable source of financing through the commitments from the national and agency leadership and other stakeholders (CE-1 to CE-3). For small scope short-term	2024-2026	CAA	CAA, MTC	Aviation Act, Approved Budget	High	Provisions and implementation of acts and regulations

	improvements: –Utilize the ICAO Safety Fund (SAFE), Technical Cooperation Bureau, or other means to acquire technical and financial assistance in coordination with RASG/RSOO/ICAO Regional Office  –Seek assistance from more experienced States and other stakeholders in coordination with RASG/RSOO/ICAO Regional Office –Seek assistance from sources of financing (World Bank, Regional Development Banks, etc.) in coordination with RASG/RSOO/ICAO Regional Office							
	4D — Develop a process for assessing changing resource requirements and sustain necessary coordination with resource stakeholders for safety oversight improvements, as outlined in Component 1 of this roadmap (CE-1 to CE-3)	2024-2026 After self-financing	CAA	CAA, MTC	Aviation Act, Approved Budget	High	Provisions and implementation of acts and regulations	

Organizational challenge: Qualified technical personnel to support effective safety oversight							
<p><b>Goal:</b></p> <ol style="list-style-type: none"> <li>1. Achieve a continuous reduction of operational safety risks</li> <li>2. Strengthen the State's safety oversight capabilities</li> <li>3. Implementation of effective SSPs by the State</li> <li>4. Increase collaboration at the regional level to enhance safety.</li> </ol> <p><b>Target:</b></p> <ol style="list-style-type: none"> <li>1.1 Maintain a decreasing trend of the national accident rate.</li> <li>2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95%</li> <li>3.2 publish a NASP by 2024.</li> <li>4.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met</li> </ol>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-5 — Qualified technical personnel to support effective safety oversight	5A — Establish an effective system to identify and track qualifications and training of existing technical personnel (CE-4)	2024-2026	CAA	CAA	Number of training conducted	High	Human Resources Planning Activities and meeting
	5B — Identify the gaps in qualified technical personnel and training requirements necessary to implement the oversight mandate (CE-4)	2024-2026	CAA	CAA	Effective training	High	Human Resources Planning Activities and meeting
	5C — Establish a compensation scheme for the attraction and retention of qualified technical personnel (CE-4)	2024-2026	CAA	CAA	Adequate and qualified	High	Human Resources Planning Activities and meeting
	5D — Make use of RSOOs, RAIOS, or equivalent means, to secure qualified	2024-2026	CAA	CAA	Effective HR policy and training programmes	High	Human Resources Planning



	technical personnel to perform those functions which cannot be performed by the State acting on its own (CE-4)							Activities and meeting
	5E — Establish human resource plans to support hiring and retention of the appropriate number of qualified technical personnel required (CE-4)	2024-2026	CAA	CAA	CAA	Effective HR policy and training programmes	High	Human Resources Planning Activities and meeting
	5F — Implement training policies and programmes for technical personnel and verify that the type and frequency of training successfully completed (i.e. initial, recurrent, specialized and on-the-job training) are sufficient to acquire/maintain the required qualifications and level of competence corresponding to the assigned duties and responsibilities of technical personnel (CE-4)	2024-2026	CAA	CAA	CAA	Effective HR policy and training programmes	High	Human Resources Planning Activities and meeting
	5G — Develop a process for assessing changing needs for qualified technical personnel requirements and develop procedures to update hiring, retention and training of personnel needs, in coordination with SEI-4B (CE-4)	2024-2026	CAA	CAA	CAA	Effective HR policy and training programmes	High	Human Resources Planning Activities and meeting

Organizational challenge: Strategic collaboration with key aviation stakeholders to improve safety						
<b>Goal:</b> 1. Achieve a continuous reduction of operational safety risks 2. Strengthen the State's safety oversight capabilities 3. Implementation of effective SSPs by the State 4. Increase collaboration at the regional level to enhance safety.						
<b>Target:</b> 1.1 Maintain a decreasing trend of the national accident rate. 2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95% 3.2 publish a NASP by 2024. 4.1Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met						
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority  Monitoring Activity
SEI-6 — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	6A — Based on the identified hazards and safety deficiencies, establish a mechanism to identify key aviation stakeholders and develop an action plan for the resolution of those safety issues (CE-1 to CE-5)	2024-2026	CAA	CAA	Number of identified Hazards Number of safety deficiencies recorded Develop a mechanism for resolving the safety issues Number of Stakeholder engagement	Quarterly Management Meetings. Quarterly Unit reports
	6B — Use a regional safety oversight mechanism, or the services of another competent State or organization to support a State that does not expect to meet GASP Goals 2 and 3	2024-2026	CAA	CAA	Number of Participation in Regional Activities	High  Quarterly Meetings

	6C — Provide assistance via States, regions and industry to other States for primary aviation legislation development (in coordination with SEI-1B) (CE-1)	2024-2026	CAA	CAA	CAA	Number of Participation in Regional Assistance Missions	High	Quarterly Meetings
	6D — Provide assistance via States, regions and industry to other States for the development of national regulations (CE-2)	2024-2026	CAA	CAA	CAA	Number of Participation in Regional Assistance Missions	High	Quarterly Meetings
	6E — Establish a process via RASG and/or RSOO for a mentoring/collaboration system, including providing State/industry assistance as well as sharing of best practices and internal follow-up actions (CE-1 to CE-5, emphasis on CE-3)	2024-2026	CAA	CAA	CAA	Number of Participation at Regional RASG and/or RSOO Collaborative and Mentorship Programmes	High	Quarterly Meetings
	6F — Collaborate with RASG and/or RSOO, other States, ICAO, industry joint programmes and/or technical school partnerships to attract, recruit and train qualified and sufficient technical personnel and develop a strategy for their retention (CE-4)	2024-2026	CAA	CAA	CAA	Number of Participation at Regional RASG and/or RSOO Collaborative and Mentorship Programmes	High	Quarterly Meetings
	6G — Establish and implement a process for the development and promulgation of technical guidance, tools and the	2024-2026	CAA	CAA	CAA	Review process for the Development and Promulgation of TGMs	High	Quarterly Meetings

	provision of safety-critical information, in collaboration with other States, RSOO, ICAO and/or other stakeholders, with the understanding that these materials need to be tailored to each State's national regulations and operational environments (CE-5)							
	6H — While working to improve safety oversight, work with RASG and/or RSOO to address national high-risk categories of occurrences	2024-2026	CAA	CAA		Number of HRC Occurrences reviewed	High	Quarterly Meetings

<b>Organizational challenge: Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records</b>							
<b>Goal:</b> <b>1. Strengthen the State's safety oversight capabilities</b> <b>Target:</b> <b>1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</b> <b>-by 2026-85%</b> <b>-by 2030-95%</b>							
<b>Safety enhancement initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics</b>	<b>Priority</b>	<b>Monitoring Activity</b>
SEI-7 — Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records	7A — Update USOAP corrective action plan items	2024-2026	CAA	CAA	Number of corrective Action Plans updated	High	USOAP CMA platform on the CAP and PQs
	7B — Complete and submit the self-assessment checklist based on USOAP CMA PQs	2024-2026	CAA	CAA	Status of the Updated Self-Assessment	High	USOAP CMA platform on the SA
	7C — Complete and submit the State aviation activity questionnaire	2024-2026	CAA	CAA	Status of the Updated SAAQ	High	USOAP CMA platform on the SAAQ
	7D — Complete and submit the compliance checklists on electronic filing of differences system	2024-2026	CAA	CAA	Status of the Updated CC/EFOD	High	USOAP CMA platform on the CC/EFOD
	7E — Update documents and records, as required, in a timely manner	2024-2026	CAA	CAA	Status of the Updated Self-Assessment	High	USOAP CMA platform on the CAP and PQs

<b>Organizational challenge: Continuous improvement in overall EI of the State safety oversight system</b>						
<b>Goal:</b> <b>1. Strengthen the State's safety oversight capabilities</b>						
<b>Target:</b> <b>1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</b> <b>-by 2026-85%</b> <b>-by 2030-95%</b>						
<b>Safety enhancement initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics</b>	<b>Priority</b>
SEI-8 — Consistent implementation of ICAO SARPs at the national level	8A — Increase the level of compliance with ICAO SARPs and the EI of CEs at the national level (all CEs, emphasis on CE-6 to CE-8)	2024-2026	CAA	CAA	1. number of surveillance activities 2. review of the operating Regulation 3. stakeholder sensitisation 4. number of surveillance activities undertaken	High
						USOAP CMA platform

<b>Organizational challenge: Strategic allocation of resources to enable effective safety oversight</b>							
<b>Goal:</b> 1. Strengthen the State's safety oversight capabilities 2. Increase collaboration at the regional level to enhance safety.							
<b>Target:</b> 1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95% 2.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-10 — Strategic allocation of resources to enable effective safety oversight	10A — Use SEI-1 and SEI-5 to identify resource requirements (CE-6 to CE-8)	2024-2026	CAA	CAA	Number of management meetings Budget review meetings	High	Annual work plan
	10B — Leverage regional groups such as the RASG to identify additional resources	2024-2026	CAA	CAA	Number of regional meeting participated	High	Annual work plan

Organizational challenge: Strategic collaboration with key aviation stakeholders							
<p><b>Goal:</b></p> <ol style="list-style-type: none"> <li>1. Achieve a continuous reduction of operational safety risks</li> <li>2. Strengthen the State's safety oversight capabilities</li> <li>3. Implementation of effective SSPs by the State</li> <li>4. Increase collaboration at the regional level to enhance safety.</li> </ol> <p><b>Target:</b></p> <ol style="list-style-type: none"> <li>1.1 Maintain a decreasing trend of the national accident rate.</li> <li>2.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: -by 2026-85% -by 2030-95%</li> <li>3.2 publish a NASP by 2024.</li> <li>4.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met</li> </ol>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-11 Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner	11A — Based on the identified hazards and safety deficiencies, establish a mechanism to identify key aviation stakeholders and develop an action plan for the resolution of those safety issues (CE-6 to CE-8)	2024-2026	CAA	CAA	Number of Safety issues resolved	High	Review of ICAO USOAP OLF dashboard Safety Board meetings
	11B — Use an RSOO or other competent State or organization to support a State that does not expect to meet GASP Goals 2 and 3	2024-2026	CAA	CAA	Correspondences CAP		Review of ICAO USOAP OLF dashboard Safety Board meetings
	11C — Provide assistance via RASG and/or RSOO to other States for the conduct of surveillance activities	2024-2026	CAA	CAA	EI by Critical Element High	High	Review of ICAO USOAP OLF dashboard Safety Board meetings



	(CE-7)							
	11D — Use technical guidance, tools and safety-critical information, developed in collaboration with other States, RSOO, ICAO and/or other stakeholders, to enable technical personnel to perform their safety oversight functions effectively (CE-6 to CE-8)	2024-2026	CAA	CAA	CAA	El by Critical Element High	High	Review of ICAO USOAP OLF dashboard Safety Board meetings
	11E — While working to improve safety oversight, continue to work with RASG and/or RSOO to address national high-risk categories of occurrences	2024-2026	CAA	CAA	CAA	Number of Safety issues resolved	High	Review of ICAO USOAP OLF dashboard Safety Board meetings

<b>Organizational challenge: Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records</b>							
<b>Goal:</b>							
<b>1. Strengthen the State's safety oversight capabilities</b>							
<b>Target:</b>							
<b>1.1 The State to improve the EU score for critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows:</b>							
<b>-by 2026-85%</b>							
<b>-by 2030-95%</b>							
<b>Safety enhancement initiative</b>	<b>Action</b>	<b>Timeline</b>	<b>Responsible entity</b>	<b>Stakeholders</b>	<b>Metrics</b>	<b>Priority</b>	<b>Monitoring Activity</b>
SEI-12 — Continued provision of the primary source of safety information to ICAO by updating all relevant documents and records as progress is made	12A — Update USOAP corrective action plan items	2024-2026	CAA	CAA	Number of corrective Action Plans updated	High	USOAP CMA platform on the CAP and PQs
	12B — Update and submit the self-assessment checklist based on USOAP CMA PQs	2024-2026	CAA	CAA	Status of the Updated Self-Assessment	Medium	USOAP CMA platform
	12C — Update and submit the State aviation activity questionnaire (SAAQ)	2024-2026	CAA	CAA	Status of the Updated SAAQ	Medium	USOAP CMA platform
	12D — Update and submit the compliance checklists (CCs) on the electronic filing of differences (EFOD) system	2024-2026	CAA	CAA	Status of the Updated CC/EFOD	Medium	USOAP CMA platform

<b>Organizational challenge: Continuous SSP implementation at the national level</b>							
<b>Goal:</b> 1. Implementation of effective SSPs by the State 2. Increase collaboration at the regional level to enhance safety.							
<b>Target:</b> 1.1 Implement the foundation of an SSP 1.2 Work towards an effective SSP as follows: a) by 2025-Present b) by 2028 -Present and effective							
<b>2.1 Seek assistance to strengthen the safety oversight capabilities if GASP Goals 2 and 3 are not met</b>							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
SEI-14 — Strategic allocation of resources to start SSP implementation	14A — Work with the ICAO Regional Office to make use of available means (e.g. Technical Cooperation Bureau) to acquire assistance needed for SSP implementation	2024-2026	CAA	CAA /NASC	Number of ICAO assistance and Validation missions offered	High	SSP Implementation Plan
	14B — Work with RSOO, other States and other organizations, as appropriate to train qualified technical personnel to fulfil their duties and responsibilities regarding SSP implementation	2024-2026	CAA	CAA /NASC	Number of ICAO assistance missions offered Number of Inspector nominated to participate at RSOO Number of SSP trainings Offered by RSOO to Safety inspectors	High	SSP Implementation Plan



Organizational challenge: Strategic allocation of resources to enable effective safety oversight						
<p><b>Goal:</b></p> <ol style="list-style-type: none"> <li>1. Achieve a continuous reduction of operational safety risks</li> <li>3. Implementation of effective SSPs by the State</li> <li>4. Increase collaboration at the regional level to enhance safety.</li> <li>5. Expand the use of industry programmes and safety information sharing networks by service providers.</li> </ol> <p><b>Target:</b></p> <ol style="list-style-type: none"> <li>1.1 Maintain a decreasing trend of the national accident rate.</li> <li>3.2 Publish a NASP by 2024.</li> <li>4.3 Contribute information on operational safety risks, including SSP SPIs and emerging issues, to therespective RASGs by 2025.</li> <li>5.1 Maintain an increasing trend in the State's industry's contribution in safety information sharing networks to EUR States and within EUR region to assist in the development of national and regional aviation safety plans</li> </ol>						
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority
SEI-19 — Acquisition of resources to increase the proactive use of risk modelling capabilities	19A — Identify resources needed to support safety intelligence collection and processing, advanced data analysis, risk modelling and information-sharing capabilities	2024-2026	CAA	CAA /NASC	Budget Allocation	High
	19B — Attract, recruit, train, and retain qualified technical personnel to specialize in risk modelling	2026 and beyond	CAA	CAA /NASC	Budget Allocation	High
	19C — Ensure that the Civil Aviation Safety Inspector workforce is trained to perform safety oversight of service providers that have implemented SMS	2026 and beyond	CAA	CAA /NASC	Budget Allocation Number of training conducted as per the training programmes	High
						Approved Budget
						Approved Budget

Organizational challenge: Strategic collaboration with key aviation stakeholders to improve safety						
<b>Goal:</b> 1. Achieve a continuous reduction of operational safety risks 2. Implementation of effective SSPs by the State 3. Increase collaboration at the regional level to enhance safety.						
<b>Target:</b> 1.1 Maintain a decreasing trend of the national accident rate. 2.1 Publish a NASP by 2024. 2.2 Work towards an effective SSP as follows: a) by 2025-Present b) by 2028 -Present and effective 2.3 Contribute information on operational safety risks, including SSP SPLs and emerging issues, to the respective RASGs by 2025. 3.1 Maintain an increasing trend in the State's industry's contribution in safety information sharing networks to EUR States and within EUR region to assist in the development of national and regional aviation safety plans						
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority
SEI-20 — Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities	20A — Identify areas where collaboration / support is needed to ensure that stakeholders understand and foster a positive safety culture that creates high degree of trust and respect between personnel and management and promotes safety reporting	2026 and beyond	CAA	CAA /NASC	Number of stakeholder engagements undertaken with the Service providers	High
	20B — Establish a process via RASG and/or RSOO (or other regional bodies) for a mentoring system, including providing assistance to States/industry, as well as the sharing of best practices, to support positive safety culture	2026 and beyond	CAA	CAA /NASC	Number of Participation in the RASG meetings and Workgroup	High
						ICAO RASG Calendar of Activities

	development and the proactive use of risk modelling								
	20C — Foster and participate in public-private partnerships similar to the commercial/general aviation safety teams' concept to identify and implement system safety enhancements	2026 and beyond	CAA	CAA /NASC	Number of Participation in the public-private partnerships engagements	High	Stakeholder engagement Plan		
	20D — Collaborate with key aviation stakeholders to establish a mechanism for the regular sharing and exchange of safety information, analyses, risk safety discoveries/lessons learned and best practices within a confidential and non-punitive environment	2026 and beyond	CAA	CAA /NASC	Number of Collaboration engagements with Aviation Stakeholders	High	Stakeholder engagement Plan		





	prevention						
	21C — Encourage information-sharing with industry	2026 and beyond	CAA	CAA /NASC	Number of stakeholder engagements undertaken with the Service providers	Medium	Stakeholder engagement Plan

Appendix C Detailed SEIS: Emerging Safety Risks

Emerging Safety Risks challenge: Mitigate safety risks related to operation of UAS							
Goal: 1. Achieve a continuous reduction of operational safety risks Target: 1.1 Maintain a decreasing trend of the national accident rate.							
Safety enhancement initiative	Action	Timeline	Responsible entity	Stakeholders	Metrics	Priority	Monitoring Activity
Safe integration of unmanned aircraft systems in the airspace	Review unmanned aircraft regulations and collaborate with all stakeholders to ensure safe integration of unmanned aircraft into the airspace	2024-2026	CAA	CAA,M-NAV,TAV	Civil aviation (UAS) regulations	High	Follow up meeting
	Develop technical guidance material to enable compliance with the unmanned aircraft systems regulations	2024-2026	CAA	CAA,M-NAV,TAV	Correspondences and CAA website	High	Follow up meeting
	Increase frequency of stakeholder engagements to ensure the compliance with unmanned aircraft systems regulations and to facilitate exchange and sharing of information	2024-2026	CAA	CAA,M-NAV,TAV	Correspondences	Medium	Follow up meeting

PRIORITY MATRIX

- 1. High
- 2. Medium
- 3. Low