VIETNAM NATIONAL AVIATION SAFETY PLAN 2025 to 2028

FIRST EDITION

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Hanoi July, 2025.

Contents

Foreword

Safety and passenger confidence in the air transport system are key objectives in **Vietnamese Aviation Safety Policy**. Commercial air transport is an important mode of transport in terms of global accessibility and the movement of people and goods. Furthermore, commercial air transport is experiencing rapid growth in Vietnam. The Vietnamese aviation industry provides direct and indirect employment to thousands of professionals, many of whom carry out tasks that impact the safety of air transport.

The **National Aviation Safety Plan (NASP)** is the master planning document containing the strategic direction of Vietnam for the management of aviation safety for a period of 4 years from 2025 to 2028. This plan lists national safety risks, stemming from operational and organisational issues which 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 combining international **safety goals and targets** and High-Risk Categories of Occurrences (HRCs) from both the GASP (www.icao.int/gasp) and the AP-RASP (www.icao.int/apac). 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 goals and targets. Vietnam has adopted these SEIs and has included them in this plan. Cross-references are provided to the GASP and AP-RASP for individual SEIs where relevant.

For Director General
Deputy Director General

BỘ XÂY DỰNG
CỤC HÀNG KHÔNG VIỆT NAM

Ho Minh Tan

Acronyms

ACV	Airport Corporation of Vietnam
ADR	Aerodromes
AIG	Aircraft Accident and Incident Investigation
AIR	Airworthiness of Aircraft
AGA	Aerodrome and Ground Aids
AMO	Approved Maintenance Organisation
ANS	Air Navigation Services
AOC	Air Operator Certificate
AP-RASP	Asia Pacific – Regional Aviation Safety Plan
ASRMC	Aviation Safety Risk Manangement Committee
ATO	Approved Training Organisation
CAAV	Civil Aviation Authority of Vietnam
CE	Critical Element
EI	Effective Implementation
FDM	Flight Data Monitoring
FSSD	Flight Safety Standard Department
FRMS	Fatigue Risk Management System
GASP	Global Aviation Safety Plan
HRC	High-Risk Categories of Occurrences
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Air Line Pilots' Associations
LEG	Primary Aviation Legislation & Specific Operating Regulations
MoC	Ministry of Construction
MOR	Mandatory Occurrence Report
NASP	National Aviation Safety Plan
ORG	Civil Aivation Organization
OPS	Aircraft Operations
PEL	Personnel Licensing and Training
RASG	Regional Aviation Safety Group
RASP	Regional Aviation Safety Plan
RPAS	Remotely Piloted Aircraft Systems
SEI	Safety Enhancement Initiative
SMS	Safety Management System
SPI	Safety Performance Indicator
SPT	Safety Performance Target
SSP	State Safety Programme
UAS	Unmanned Aircraft System
USOAP	ICAO Universal Safety Oversight Audit Programme
VAR	Vietnam Aviation Regulations
VATM	Vietnam Air Traffic Management Corporation
VOR	Voluntary Occurrence Report

SECTION 1. INTRODUCTION

1.1 Overview of the NASP

Vietnam 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 Vietnam and its industries. The NASP promotes the effective implementation of Vietnam safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between Vietnam 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 Vietnam is in alignment with the ICAO Global Aviation Safety Plan (GASP, Doc 10004) and the AP-RASP.

VIETNAM's NATIONAL AVIATION SAFETY PLAN

Figure 1 Vietnam's NASP

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 4 years. It comprises six sections. In addition to the introduction, sections include: the purpose of the NASP, Vietnam strategic direction for the management of aviation safety, the national operational safety risks identified for the Vietnam's 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 SSP and the NASP

This NASP addresses operational safety risks identified in the ICAO GASP and the AP-RASP in the absence of mature safety data analysis (SDA) aspects, as described in the ICAO State Safety Program Implementation Assessment (SSPIA) in Vietnam.

Vietnam 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 organisational challenges and aim to enhance organisational capabilities related to effective safety oversight.

1.4 Responsibility for the NASP development, implementation and monitoring

The Civil Aviation Authority of Vietnam (CAAV) is responsible for the development, implementation and monitoring of the NASP, in collaboration with entities below and with the national aviation industry. The NASP was developed in consultation with national operators and other key aviation stakeholders, and in alignment with the of the GASP and the AP-RASP.

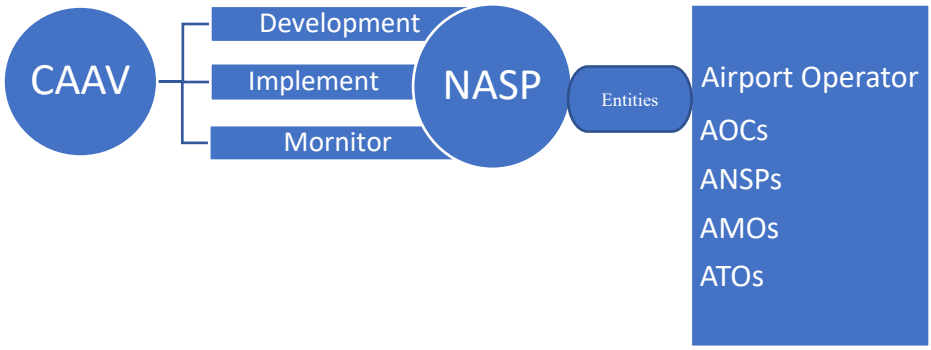


Figure 2 Responsible of CAAV and Related Entities

1.5 National safety issues, goals and targets

The NASP addresses the following national safety issues:

Operational safety issue

1. *Number of Accident/ Serious Incident is still significant relative to the size of aviation sector*

Organizational safety issue

1. *Low EI score (below 75%) in 2 area (LEG, AIG) and 4 CEs (CE-1, CE-2, CE-5, CE-8).*
2. *Ineffective implementation of State Safety Program (SSP)*

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

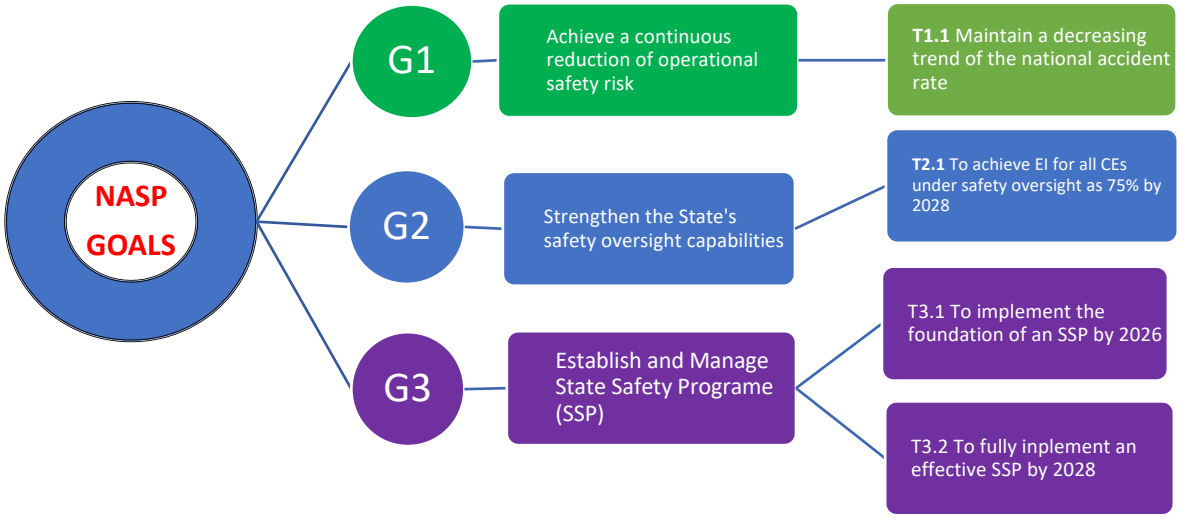
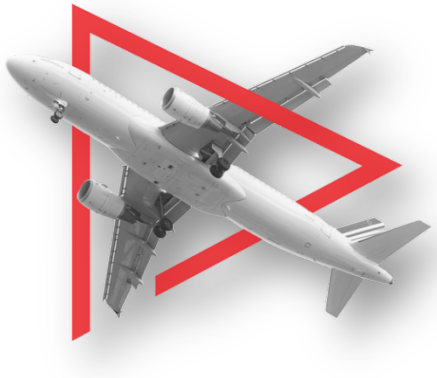


Figure 3 NASP Goals and Targets

The following 6 national high-risk categories of occurrences (HRCs) in the Vietnam context were considered of the utmost priority because of the number of fatalities and risk of fatalities associated with such events. They were identified based on analyses from mandatory and voluntary reporting systems, accident and incident investigation reports, safety oversight activities over the past 10 years, the SSP and on the operational safety risks described in the GASP and AP-RASP. These HRCs are in line with those listed in the 2023-2025 edition of the GASP, as well as the AP-RASP:

a. **Controlled Flight into Terrain (CFIT).**
b. **Loss of Control in Flight (LOC-I).**
c. **Mid Air Collision (MAC).**
d. **Runway Excursion (RE).**
e. **Runway Incursion (RI).**
f. **Birds and Wildlife Strikes (BIRD).**



In addition to the national operational safety risks listed above, the following additional category of operational safety risks have been identified based on analyses from mandatory and voluntary reporting systems, accident and incident investigation reports, and safety oversight activities: *Bird and wildlife strikes (BWI)*
and RPAS activities has been identified as additional category of operational safety risks.

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

To address the national operational safety risks listed above, Vietnam identified the following contributing factors leading to N-HRCs and 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):

HRC 1: Mitigate contributing factors to the risk of Controlled Flight into Terrain (CFIT).

Controlled Flight Into Terrain (CFIT) is an in-fight collision with terrain, water or obstacle without indication of loss of control. CFIT events are included in the VNASP due to the high risk of fatality.

Examples of contributing factors	Examples of precusor events
• ATS procedure design and documentation • Pilot fatigue and disorientation • ILS malfunction or calibration • PAPI alignment with glideslope • Crew resource management • Adverse weather • Obstacles not appropriately documented (charts) or marked (lighting) • Loss of situational awareness • Mountainous terrain • Aircraft not equipped with TAWS/EGPWS • Aircraft system malfunction (Navigation equipment and EGPWS)	• Altitude below minimum safe altitude • Flight path below glideslope during ILS approach • Excessive rate of descent • TAWS (EGPWS) warning • Go-around at low altitude • Inappropriate low altitude manoeuvring • Low fuel • Low energy during approach • ILS failures and malfunctions

HRC 2: Mitigate contributing factors to LOC-I accidents and incidents.

Loss of Control In-fight is an extreme deviation from intended flight path. Occurrences categorised as LOC-I are events that lead or could lead to a non-recoverable loss of control. LOC-I accidents often have catastrophic results with very high risk of fatality; for this reason, it is included in this VNASP.

Examples of contributing factors	Examples of precusor events
• Pilot performance as a result of Human Factors • Inadequate flight crew training • Operating procedure design • ATS procedure design - SIDs & STARs • Air trafc related such as wake turbulence	• System malfunction causing automation to disengage • Aircraft not behaving as expected • Wind shear event • Stall warning and stick shaker events • Excessive Bank angle

• Malfunctioning and/or misunderstanding of automation • Aircraft system malfunction - Power plant, fight command • Environment, including adverse weather conditions	

HRC 3: Mitigate contributing factors to MAC accidents and incidents.

Mid-Air Collision refers to a collision between aircraft while both are airborne. There is also a high fatality risk associated with these events. Most occurrences reported relate to loss of separation and Trafc Collision Avoidance System (TCAS) Resolution Advisory (RA) warnings.

Examples of contributing factors	Examples of precusor events
• Air traffic controller's workload and fatigue • Communication errors between ATC and Pilot • Released airborne objects such as sky lanterns, kites, firework, rocket and drones • Flight crew training • Aircraft system malfunction (TCAS, Altimeters) • Congested airspace	• Level busts • TCAS RA • Airspace infringements • Loss of separation

HRC 4: Mitigate contributing factors to RE accidents and incidents.

Runway Excursion is a veer off or overrun off the runway surface during both take-off and landing. This is the most prevalent occurrence related to "runway safety". As opposed to previously described events, occurrences related to runway excursions have led, on average, to fewer fatalities. However, the reported occurrences relate to actual excursions rather than potential runway excursions so although the numbers are low the potential severity is high.

Examples of contributing factors	Examples of precusor events
• Heavy rain and/or strong winds • Pilot error and decision making • Runway conditions • Unstabilised approach • Aircraft system malfunction - Thrust reversers, speed-brakes & brakes	• Unstabilised approach that continues to land • Long landings • Too high energy in final approach • Aquaplaning events • Aircraft stopping device failures - Thrust reversers,speed-brakes & brakes • Rejected take-off • Abnormal runway contact

HRC 5: Mitigate contributing factors to RI accidents and incidents.

Runway Incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and take-off of aircraft. Although statistically very few runway incursions result in collisions, there is a high fatality risk associated with these events.

Examples of contributing factors	Examples of precusor events
• Airport signage, marking and lighting • Communication errors (Pilot / ATC) • ATC error • Use of non-standard phraseology • Loss of situational awareness • Runway and taxiway layout • Poor visibility due to adverse weather conditions • High speed taxiing	• Aircraft partially passing stop bars • Runway/Taxiway confusion

HRC 6: To reduce the rate of bird and Wildilfes strikes with damage to aircraft parts.

Bird strike is a collision between a bird and an aircraft. The majority of bird collisions occur near or at airports during take-off, landing, and associated phases of fight. Although most bird strikes do not result in signifcant events, the potential for an aircraft to lose both engines as a result of hitting flocks of large birds is real. The Vietnam ecosystem together with the number of bird strikes reported to CAAV demonstrate that bird strikes is a safety issue that needs to be addressed.

Examples of contributing factors	Examples of precusor events
• Birds inhabiting airport and surrounding areas • Inadequate bird scaring activities • Human settlements in the close proximity of the aerodromes • Garbage dumpsites and landfills in close proximity to the aerodromes • Migration of Birds across the runways of aerodromes • Location of waterbodies in close proximity to aerodromes • Presence of bird attractants within the airports like insects, food waste, water in abandoned projects. • Abattoirs and fish drying activities in close proximity of the aerodromes	• Large flocking birds sighted in close proximity to an aircraft

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

1.6 Operational context

There are **22** certified aerodromes in Vietnam, including **10** international aerodromes. The airspace of Vietnam is classified into **Class A, C, D, E and G**. There were **7.980.186** movements in Vietnam over the period of **2013 to 2024**. There are currently **13** air operator certificates (AOCs) issued by Vietnam, and of those there are **05** issued to operators conducting international commercial air transport operations. Vietnam also has 4 operators, which operate domestic and international air taxi services, **01** operator, which operate domestic flight, primarily on turboprop aircraft, as well as **02** helicopter operators. There are **02** heliports in Vietnam. Common challenges in Vietnam include among others are meteorology, topography, technology and environment.

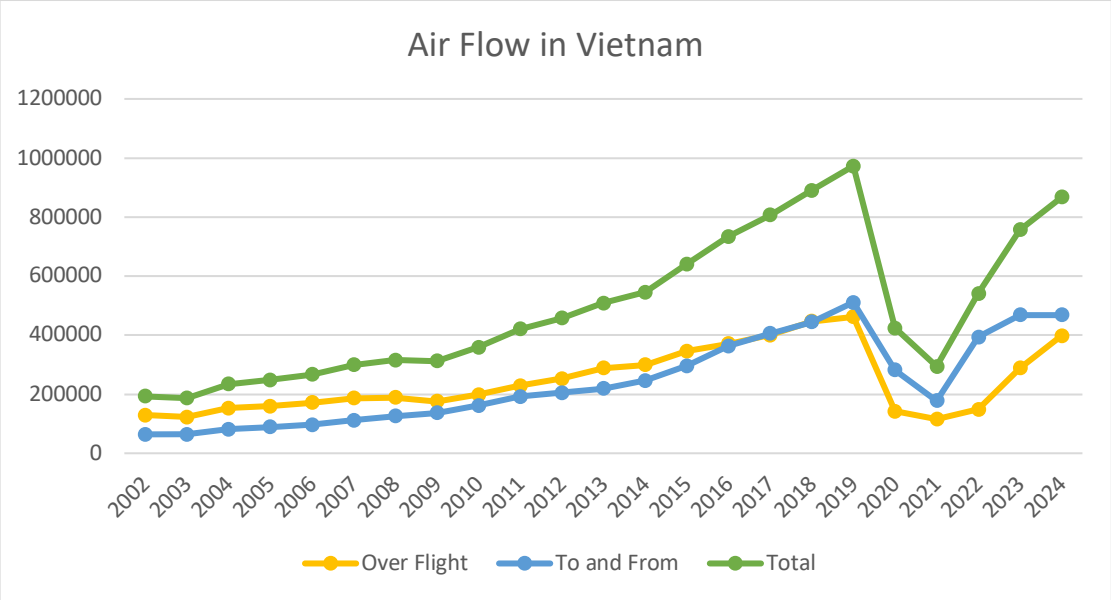


Figure 4 Air Flow in Vietnam

SECTION 2. PURPOSE OF VIETNAM'S NATIONAL AVIATION SAFETY PLAN

The purpose of this National Aviation Safety Plan 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 Vietnam and its industries. The NASP promotes the effective implementation of Vietnam safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between Vietnam 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.

Strategically, NASP prioritize and streamline action in areas of aviation safety by addressing the currently identified high-risk categories (HRCs) of occurrences: controlled flight into terrain; loss of control in-flight; mid-air collisions; runway excursions; and runway incursions. SEIs in these areas contribute to the reduction of the national, regional and eventually global accident rate and the continuous reduction of fatalities.

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.
The NASP has been developed using international safety goals and targets and HRCs from both the GASP and the AP-RASP.

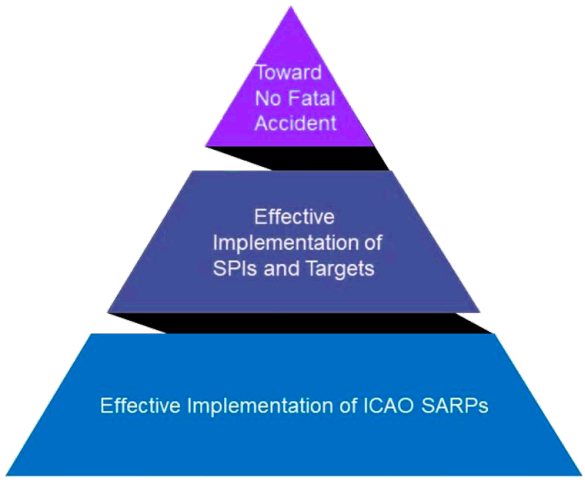


Figure 5 Purpose of Vietnam's NASP

SECTION 3. VIETNAM'S STRATEGIC DIRECTION FOR THE MANAGEMENT OF AVIATION SAFETY

The NASP presents the SEIs that were developed based on the organizational challenges (ORG) and operational safety risks (OPS) roadmaps, as presented in the ICAO Global Aviation Safety Roadmap (Doc 10161), region-specific issues identified by AP- RASP as well as State-specific issues determined through SSP processes, including Vietnam's hazard identification and safety risk management process and its SDCPS.

This plan is developed and maintained by Civil Aviation Authority of Vietnam, in coordination with the MoC and with key aviation.

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 AP-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.	Number of accidents occurring per 100000 departures. Number of fatal accidents. Number of runway safety events	This goal is directly linked to Goal 1 and Target 1.1 of the GASP and linked to Goal I and Target 1 of the AP-RASP.
Goal 2 : Strengthen the State's safety oversight capabilities	2.1 To achieve an Effective Implementation (EI) for all Critical Elements (CE) under safety oversight as 75% by 2028	Overall EI score Percentage of implemented Priority PQs Percentage of implemented PQs Percentage of completed CAPs for areas such as LEG, ORG, AGA, ANS and AIG, OPS, AIR, PEL (using OLF)	This goal is directly linked to Goal 2 and Target 2.1 of the GASP and linked to Goal II and Target 10 of the AP-RASP.
Goal 3 : Implementation an effective State	3.1 To implement the foundation of an SSP by 2026	Percentage of satisfactory implementation of	This goal is directly linked to Goal 3 and Target 3.1 and 3.2 of the GASP and linked to Goal

Safety Programme (SSP)		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	III and Target 3.1 and 3.2 of the AP-RASP
	3.2 To fully implement an effective SSP by 2028	Level of implementation achieved through SSP Gap Analysis (iSTARS) Implementation of an effective SSP	

The SEIs in this plan are implemented through Vietnam's existing safety oversight capabilities and the service providers' safety management systems (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 this NASP.

The NASP also addresses emerging issues, which include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete a typical data-driven analysis. Due to the lack of data, emerging issues cannot automatically be considered as operational safety risks. It is important that Vietnam 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 CAAV for further analysis:

a. Drones operating in the vicinity of aerodromes
b. Laser attacks on aircraft approaching for landing
c. FOD with damage aircraft parts

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 SEIs 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.

CAAV publishes an Annual Safety Report, available on the CAAV website: www.caa.gov.vn. The summary of accidents and serious incidents that occurred in Vietnam, and those for aircraft registered in Vietnam involved in commercial air transport and aircraft involved in general aviation, is shown in the tables below.

Year	Fatal Accidents	None Fatal Accidents	Serious Incidents
Commercial air transport occurrences in Vietnam			
2013-2018	0	0	6
2019	0	0	1
2020	0	0	3
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	1
General aviation aircraft occurrences in Vietnam			
2013-2018	0	0	1
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	1	0
2023	1	0	0
2024	0	0	0

Year	Fatal Accidents	None Fatal Accidents	Serious Incidents
Occurrences involving commercial air transport aircraft registered in Vietnam			
2013-2018	0	0	6
2019	0	0	1
2020	0	0	3
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	1
Occurrences involving general aviation aircraft registered in Vietnam			
2013-2018	0	0	1
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	1	0
2023	1	0	0
2024	0	0	0

SECTION 5. ORGANIZATIONAL CHALLENGES

In addition to the national operational safety risks listed in the NASP, Vietnam 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 Vietnam's safety oversight capabilities and the management of aviation safety at the national level.

The eight critical elements of a safety oversight system are defined by ICAO. is committed to the effective implementation of these eight CEs, as part of its overall safety oversight responsibilities, which emphasize Vietnam's commitment to safety in respect of its aviation activities. The eight CEs are presented in Figure 6 below.
The latest ICAO activities, which aim to measure the effective implementation of the eight CEs of Vietnam's safety oversight system, as part of the ICAO Universal Safety Oversight Audit Programme (USOAP), have resulted in the following scores:

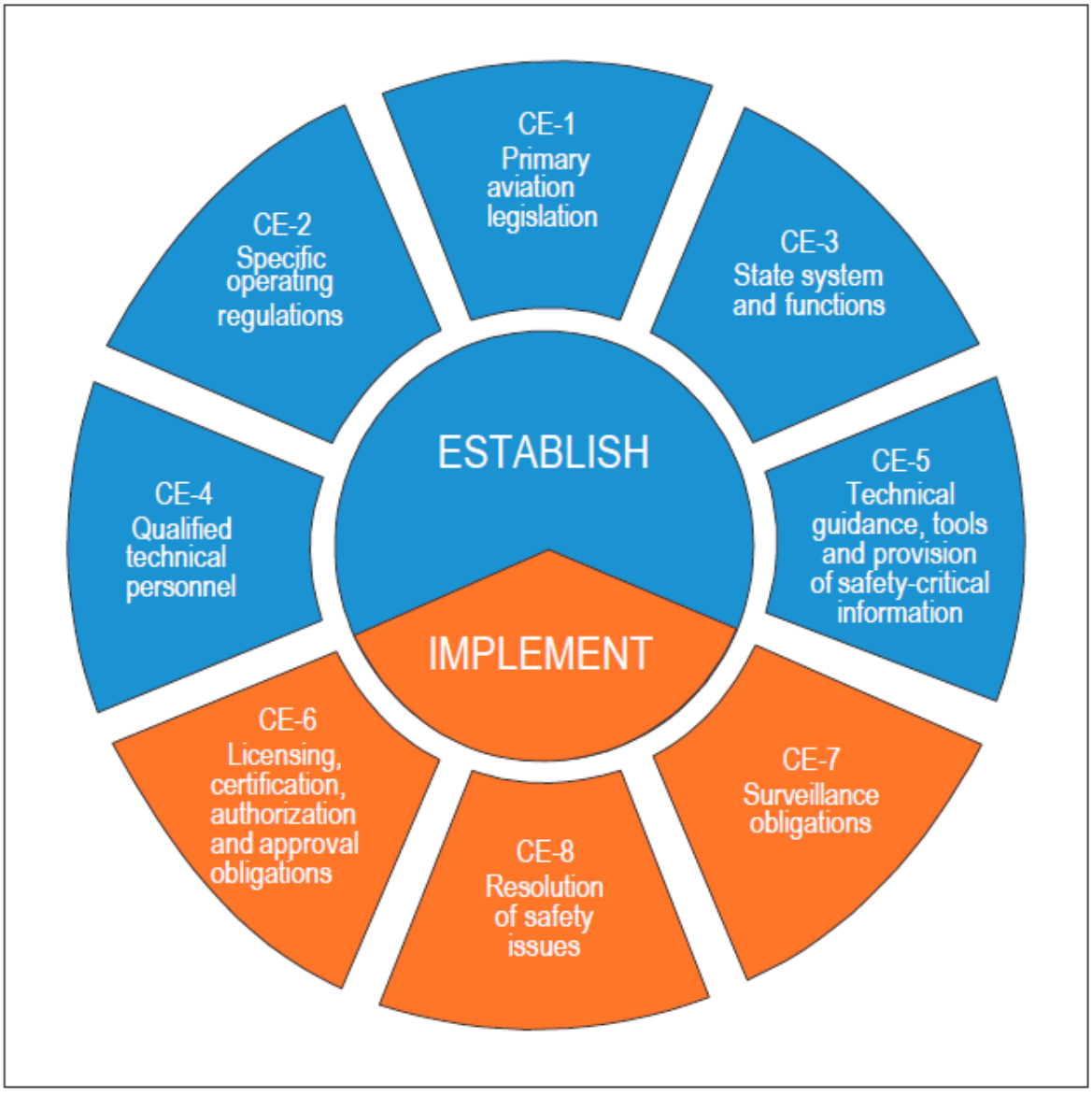


Figure 6 Critical elements of a State's safety oversight system

Overall, EI score							
78.1 %							
EI score by CE							
CE-1	**CE-2**	**CE-3**	**CE-4**	**CE-5**	**CE-6**	**CE-7**	**CE-8**
58.62 %	65.93 %	80.65 %	90.91 %	66.67 %	87.63 %	88.12 %	64.29 %
EI score by audit area							
LEG	**ORG**	**PEL**	**OPS**	**AIR**	**AIG**	**ANS**	**AGA**
71.43 %	81.82 %	85.88 %	85.71 %	79.25 %	30.12 %	91.8 %	83.85 %

The following 03 organizational challenges in the 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, safety oversight activities over the past 10 years, the SSP, as well as on the basis of regional analysis conducted by RASG-APAC.
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 CAAV and those of service providers. These organizational challenges are in line with those listed in the of the GASP, as well as the AP-RASP :

a. Low EI score in 2 area (AIG and LEG) and low EI score under 4 CEs (CE1, CE2, CE5 and CE8).
b. Vietnam has an overall SSP foundation of only 83.19%.
c. Ineffective implementation of State Safety Programme (SSP)

To address the organizational challenges listed above, Vietnam 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.

SECTION 6. MONITORING IMPLEMENTATION

CAAV 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, CAAV will review the NASP every two years or earlier, if required, to keep the identified operational safety risks, organizational challenges and selected SEIs updated and relevant. The CAAV will periodically review the safety performance of the initiatives listed in the NASP to ensure the achievement of national safety goals. If required, CAAV will seek the support of the RASG-APAC and the Vietnamese aviation industries to ensure the timely implementation of SEIs to address national safety issues. Through close monitoring of the SEIs, CAAV will make adjustments to the NASP and its initiatives, if needed, and update the NASP accordingly.

CAAV 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. A periodic 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 Vietnam 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.

Vietnam adopted a standardized approach to provide information at the regional level and to report to the regional aviation safety group (RASG-APAC).
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 Authority of Vietnam
Address :119 Nguyen Son Str, Bo De Ward
Hanoi City, Vietnam 10000.
Email : asica@caa.gov.vn

APPENDIX TO THE NASP

7.1 DETAILED SEIs: NATIONAL OPERATIONAL SAFETY RISKS

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
SEI-1.1.1 (CFIT) Mitigate contributing factors to the risk of CFIT GASP HRC-1	a. Ensure aircraft are equipped with Ground Proximity Warning System (GPWS) in accordance with Annex 6	2025	CAAV (AIR)	AOC AMO ATO	Number of GPWS equipped aircraft	High	Oversight activity inspection / surveillance
	b. Promote the wider use of GPWS beyond the requirements of Annex 6	2025	CAAV (AIR, OPS)	AOC ATO	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders
	c. Issue a Safety Advisory to increase adherence to GPWS warning procedures	2025	CAAV (AIR, OPS) AOC	AOC ATO	Advisory Circular	Med	Advisory Circulars development and publication
	d. Promote greater awareness of approach risks	On-going	CAAV (AIR, OPS, ANS, AGA)	AOC ATO VATM ACV VNAIC	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
	e. Consider the implementation of continuous descent final approaches (CDFA)	2028	CAAV (AIR, OPS, ANS)	AOC ATO VATM VNAIC	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders
	f. Consider the implementation of minimum safe altitude warning (MSAW) systems	2028	CAAV (AIR, OPS, ANS)	AOC ATO VATM VNAIC	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders
	g. Promote the use of GPS-derived position data to feed GPWS	On-going	CAAV (AIR, OPS, ANS, AGA)	VATM ACV AOC ATO	Advisory Circular	Med	Advisory Circulars development and publication
	h. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations	On-going	CAAV (AGA, ANS, AIR, OPS, AIG)	AOC ATO VATM ACV	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents	High	Analysis of MORs, VORs and accident/incident investigation
	j. Identify additional contributing factors, for example: •Flight in adverse environmental conditions •Inaccurate approach design and inadequate documentation •Phraseology used •Pilot fatigue and disorientation	On-going	CAAV (AGA, ANS, AIR, OPS, AIG)	AOC ATO VATM ACV VNAIC			

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
					Number of runway safety events		
SEI-1.1.2 (LOC-I) Mitigate contributing factors to LOC-I accidents and incidents GASP HRC-2	a. Require upset prevention and recovery training in all full flight simulator type conversion and recurrent training programmes	2025	CAAV (OPS, PEL)	AOC ATO	Number of AOC/ATO incorporating UPRT training	High	Advisory Circulars development and publication Oversight of airline and ATO training activities
	b. Ensure that the pilot trainings extensively incorporate human factors such as distraction, complacency, situational awareness etc	2025	CAAV (OPS, PEL)	AOC ATO	Number of AOC/ATO incorporating human factors training	High	Advisory Circulars development and publication Oversight of airline and ATO training activities
	c. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations	On-going	CAAV (AGA, ANS, AIR, OPS, AIG)	AOC ATO VATM ACV	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents Number of runway safety events	High	Analysis of MORs, VORs and accident/incident investigation

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
	d. Evaluate the existing SOPs to insure the effective flight management during adverse weather and recovery of unusual aircraft attitudes.	2025	CAAV (ANS, OPS) AOC ATO	AOC ATO	Number of AOC/ATO incorporating effective flight management during adverse weather and recovery of unusual aircraft attitudes in SOP	High	Oversight of airline and ATO training activities
	e. Identify additional contributing factors, for example: • Adverse weather • Insufficient height above terrain for recovery	On-going	CAAV (AGA, ANS, AIR, OPS, AIG)	AOC ATO VATM ACV	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents	Med	Analysis of MORs, VORs and accident/incident investigation
SEI-1.1.3 (MAC) Mitigate contributing factors to MAC accidents and incidents GASP HRC-3	a. Establish guidance and regulations to ensure aircraft required to be equipped are equipped with airborne collision avoidance system (ACAS), in accordance with Annex 6.	2025	CAAV (AIR)	AOC AMO ATO	Number of ACAS equipped aircraft Regulations and Advisory Circulars	High	Regulation and advisory circulars development and publication Oversight activity inspection / surveillance
	b. Ensure adherence to ACAS warning procedures.	On-going	CAAV (AIR, OPS, ANS)	AOC ATO VATM VNAIC	Advisory Circular	High	Advisory Circulars development and publication Oversight of airline and ATO training activities

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
	c. Promote the improvement of air traffic control (ATC) systems, procedures and tools to enhance conflict management.	On-going	CAAV (ANS)	AOC ATO VATM VNAIC	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders
	d. Promote the improvement of communications systems and procedures, such as controller-pilot datalink	On-going	CAAV (ANS, AIR, OPS)	AOC ATO VATM VNAIC	Advisory Circular	Med	Advisory Circulars development and publication Continuous engagement with stakeholders
	e. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations.	On-going	CAAV (ANS, AIR, OPS, AIG)	AOC ATO VATM VNAIC	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents	High	Analysis of MORs, VORs and accident/incident investigation
SEI-1.1.4 (RE) Mitigate contributing factors to RE accidents and incidents GASP HRC-4	a. Ensure the establishment and implementation of a State runway safety programme and runway safety teams	2026	CAAV (LEG, ORG, AGA, OPS, AIG)	AOC ATO ACV	State runway safety programme	High	Development and publication of the State runway safety programme Runway safety team
	b. Promote the establishment of policy and training on rejected landings, go-arounds, crosswind and tailwind landings (up to the maximum manufacturer-demonstrated winds)	On-going	CAAV (OPS, PEL)	AOC ATO	Advisory Circulars	High	Advisory Circulars development and publication

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
							Continuous engagement with stakeholders
	c. Promote flight crew of runway overrun awareness and alerting systems on aircraft	On-going	CAAV (OPS)	AOC ATO	Advisory Circulars	High	Advisory Circulars development and publication Continuous engagement with stakeholders
	d. Ensure effective and timely reporting of meteorological and aerodrome conditions (e.g. runway surface condition in accordance to the ICAO global reporting format in Annex 14, Volume I, braking action and revised declared distances)	2025	CAAV (AGA)	ACV VNAIC	Reporting system of meteorological and aerodrome conditions	High	Oversight
	e. Certify aerodrome in accordance with ICAO Annex 14, Volume I as well as Doc 9981, PANS-Aerodrome	On-going	CAAV (AGA)	ACV	Regulations	High	Certification / Oversight
	f. Promote the installation of arresting systems if runway end safety area (RESA) requirements cannot be met	On-going	CAAV (AGA)	ACV	Advisory Circulars	High	
	g. Ensure that procedures to systematically reduce the rate of unstabilized approaches to runways are developed and used	2025	CAAV (OPS)	AOC ATO	Procedures development and publication	High	Oversight of airline and ATO
	h. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations.	On-going	CAAV (AGA, AIG)	AOC ATO ACV	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents	High	Analysis of MORs, VORs and accident/incident investigation

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
					Number of runway safety events		
SEI-1.1.5 (RI) Mitigate contributing factors to RI accidents and incidents GASP HRC-5	a. Ensure establishment and implementation of National Runway Safety Programme (NRSP) and Runway Safety Teams (RST)	2026	CAAV (LEG, ORG, AGA, OPS, AIG)	AOC ATO ACV	State runway safety programme	High	Development and publication of the State runway safety programme Runway safety team
	b. Promote the establishment of policy, procedures and training that supports situational awareness for controllers, pilots and airside vehicle drivers	2025	CAAV (OPS, PEL, AGA)	AOC ATO ACV	Advisory Circulars	High	Advisory Circulars development and publication Continuous engagement with stakeholders
	c. Ensure effective use of suitable technologies to assist the improvement of situation awareness, such as improved resolution airport moving maps (AMM), electronic flight bags (EFBs), enhanced vision systems (EVS) and head-up displays (HUD), advanced-surface movement guidance and control systems (A-SMGCS), stop bars and runway incursion warning systems (ARIWS)	2028	CAAV (OPS, AGA)	AOC ATO ACV	Procedures Training	High	Oversight of AOC, ATO and aerodromes
	d. Ensure the use of standard phraseologies in accordance with applicable State regulations and ICAO provisions (e.g. Doc 9432, Manual of Radiotelephony)	2025	CAAV (OPS, AGA)	AOC ATO ACV	Procedures Training	High	Oversight of AOC, ATO and aerodromes
	f. Ensure the identification and publication in the aeronautical information publication (AIP) of hot spots at aerodromes	2025	CAAV (AGA)	ACV VNAIC	AIP		Development and publication of AIP
	g. Ensure that suitable strategies to remove hazards or mitigate risks associated with identified hot spots are developed and executed		CAAV (AGA)	ACV AOC ATO AMO			

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
	h. Validate the effectiveness of the SEIs through the analysis of MORs and VORs and accident/incident investigations.		CAAV (AGA, AIG, OPS)	AOC ATO ACV	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents Number of runway safety events		Analysis of MORs, VORs and accident/incident investigation
SEI - 1.1.6 (BIRD) Mitigate contributing factors to bird/wildlife strikes HRC-6	a. Ensure the establishment and implementation of a National Wildlife Hazard management committee and programme.	2025	CAAV (LEG, ORG, AGA, OPS, AIG)	AOC ATO ACV	Approved National Wildlife Hazard Management Plan letters of appointment to the National Wildlife Hazard Committee	High	Oversight of the Aerodromes
	b. Ensure the establishment and implementation of Local Wildlife Hazard management committees at all Certified aerodromes.	2025	CAAV (LEG, ORG, AGA, OPS, AIG)	AOC ATO ACV	Number of meetings held	High	Oversight of the Aerodromes
	c. Development and implementation of wildlife hazard management plan at certified aerodromes.	2026	CAAV (AGA)	ACV	Number of airports that have developed wildlife hazard management plans percentage of wildlife plan implemented	High	Oversight of the Aerodromes
	d. Ensure the collection, analysis and reporting of bird hazard and bird strikes data is undertaken.	On-going	CAAV (AGA, ANS, AIR, OPS, AIG)	AOC ATO AMO	Number of birdstrikes per	High	Oversight of the Stakeholders

N-HRC 1: Operational Safety Risks – Significant number of accident/serious incident							
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*
				ACV VATM	aerodrome per year		
	e. Ensure better management of vegetation and land use around airports	On-going	CAAV (AGA)	ACV local authorities	Number of bird strikes per aerodrome per year	Med	Surveillance audits and inspection s of the Aerodromes
	f. Validate the effectiveness of the SEIs through the analysis of Birdstrike data and reports fromstakeholders	On-going	CAAV (AGA, AIG, OPS, AIR)	AOC ATO AMO ACV VATM	Number of accidents per 100,000 departures (accident rate) Number of fatal accidents Number of bird strikes per aerodrome per year	High	Analysis of MORs, VORs and accident/incident investigation

7.2 DETAILED SEIs: ORGANIZATIONAL CHALLENGES.

Organizational challenge : Deficiency in Safety Oversight System							
Goal 2: Strengthen the Vietnam's safety oversight capabilities							
Target 2.1 : To improve score for the Effective Implementation (EI) of all Critical Elements (CEs) of the Safety Oversight System as 75% by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
SEI-2.1.1 Consistent implementation	a. Establish primary aviation law and regulations, to empower the competent authority to conduct regulatory oversight (GASP, SEI-1C)	2026	CAAV (LEG, ORG, AGA,	CAAV – All regulatory Department	Primary Legislation Regulations	High	Periodic review by CAAV Management

Organizational challenge : Deficiency in Safety Oversight System							
Goal 2: Strengthen the Vietnam's safety oversight capabilities							
Target 2.1 : To improve score for the Effective Implementation (EI) of all Critical Elements (CEs) of the Safety Oversight System as 75% by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
of and compliance with ICAO SARPs at the national level (GASP SEI-1 & SEI-8)			ANS, AIR, OPS, PEL, AIG)				(ASRMC) until completion
	b. Increase level of compliance with ICAO SARPs and the EI of CEs with emphasis on: ⇨ On CE-1, CE-2, CE-5 and CE-8 (GASP, SEI-1D) and, ⇨ On LEG and AIG areas (GASP, SEI-8)	2026 2028	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)		ICAO USOAP CMA OLF updated regularly a. CAPs b. State Aviation Activity Questionnaire (SAAQ) c. CC/EFOD	High	
SEI-2.1.2 Establishment of an independent regional accident and incident investigation process, consistent with Annex 13 – *Aircraft Accident and Incident Investigation* (GASP SEI-3)	a – Establish an independent accident and incident investigation authority, as per Annex 13 requirements (CE-1 and CE-3) (GASP, SEI-3A)	2026	MOC/CAAV (LEG, ORG, AIG)	CAAV/ FSSD and Legal Department		High	
	b – 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) (GASP, SEI-3B)	2028	CAAV (LEG, ORG, AIG)				
	c – Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support accident and incident investigations (CE-3 and CE-4) (GASP, SEI-3C)	2026	CAAV (LEG, ORG, AIG)				
SEI-2.1.3 Development of comprehensive regulatory oversight framework (GASP, SEI-2)	a. 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 (GASP, SEI-2B)	2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL)	CAAV – All regulatory Department	Chart showing an effective organisation structure Number of VARs, ACs and MOSs, MAAs issued	High	Perodic review by CAAV Management (ASRMC) until completion

Organizational challenge : Deficiency in Safety Oversight System							
Goal 2: Strengthen the Vietnam's safety oversight capabilities							
Target 2.1 : To improve score for the Effective Implementation (EI) of all Critical Elements (CEs) of the Safety Oversight System as 75% by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
					Number of guidance materials		
	b. Establish an effective system to attract, recruit, train and retain qualified and sufficient technical personnel to support regulatory oversight	2028	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL)	CAAV – All regulatory Department	- Assessment and revise as required of current recruitment system and HR policy; - umber/percentage of inspectors recruited after the assessment and assessment of recruitment system and HR policy; - Number of training sessions on safety inspector/oversight - Number / percentage of personnel completing safety inspector/oversight training - Number/ percentage of inspectors retained more than 12 months after recruitment	High	

Organizational challenge : Ineffective State Safety Programme Implementation							
Goal 3: Establish and Manage the State Safety Programme							
Target 3.1 : To effectively implement the foundation of an SSP by 2026 **Target 3.2:** To fully implement an effective SSP by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
SEI-3.1 Start of updated SSP implementation at the national level (GASP, SEI-13)	a. Secure State-level commitment to improve safety (GASP, SEI-13A) b. Conduct update SSP gap analysis (checklist) then the detailed SSP self-assessment (GASP, SEI-13B) c. Establish an SSP implementation team (GASP, SEI-13C) d. Develop an implementation plan for the SSP (GASP, SEI-13D) e. Update SMS regulations for service providers and verify SMS implementation through SMS audit (GASP, SEI-13E)	2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Percentage of satisfactory implementation of SSP foundation PQs Percentage of required CAPs related to the SSP foundation PQs submitted (using OLF) Percentage of required CAPs related to the SSP foundation PQs completed (using OLF) Number of applicable service providers implement an SMS	High	Periodic review by Aviation Safety Risk Manangement Committee (ASRMC)
SEI-3.2 Strategic allocation of resources to start SSP implementation (GASP, SEI-14)	a. Establish a process for planning and allocation of resources to enable SSP implementation and identify areas where resources are needed (GASP, SEI-14A) b. Collaborate with national and appropriate authorities' leadership and stakeholders within the State to support SSP implementation (GASP, SEI-14B) c. Collaborate with ICAO Regional Office, other States and other organizations, as appropriate to train qualified technical personnel to fulfil	2026 2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG) MOC/CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Percentage of satisfactory implementation of SSP foundation PQs Percentage of required CAPs related to the SSP foundation	High	Periodic review by Aviation Safety Risk Manangement Committee (ASRMC)

Organizational challenge : Ineffective State Safety Programme Implementation							
Goal 3: Establish and Manage the State Safety Programme							
Target 3.1 : To effectively implement the foundation of an SSP by 2026 **Target 3.2:** To fully implement an effective SSP by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
	their duties and responsibilities regarding SSP implementation (GASP, SEI-14D)	2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)		PQs submitted (using OLF) Percentage of required CAPs related to the SSP foundation PQs submitted (using OLF)		
SEI-3.3 Strategic collaboration with key aviation stakeholders to start SSP implementation (GASP, SEI-15)	a. Develop an action plan to address the elements identified as missing or deficient during the SSP Gap analysis (SEI-15C). b. 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) (SEI-15E).	2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Percentage of satisfactory implementation of SSP foundation PQs Percentage of required CAPs related to the SSP foundation PQs submitted (using OLF) Percentage of required CAPs related to the SSP foundation PQs completed (using OLF) Level of implementation achieved through SSP Gap Analysis (iSTARS)	High	Periodic review by Aviation Safety Risk Manangement Committee (ASRMC)

Organizational challenge : Ineffective State Safety Programme Implementation							
Goal 3: Establish and Manage the State Safety Programme							
Target 3.1 : To effectively implement the foundation of an SSP by 2026 **Target 3.2:** To fully implement an effective SSP by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
SEI-3.5 Availability of safety data and safety information to support safety management at the national level (Phase 1) (GASP, SEI-17)	a. Establish a legal framework related to the protection of safety data, safety information and other related sources (GASP, SEI-17A) b. Establish a State mandatory occurrence reporting system (GASP, SEI-17B) c. Establish safety data collection and processing systems (SDCPS) to capture, store, aggregate and enable the analysis of safety data and safety information to support their safety performance management activities (GASP, SEI-17C) d. Establish and maintain a process to identify hazards from collected safety data (GASP, SEI-17D) e. Establish and utilize a process to ensure the assessment of safety risks associated with identified hazards (GASP, SEI-17E) f. Establish a State confidential voluntary safety reporting system providing data to the safety database (GASP, SEI-17F)	2026 2025 2026 2026 2026 202	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Level of implementation achieved through SSP Gap Analysis (iSTARS) Establishment of legal provision for protection of safety data Establishment of MOR and VOR system Establishment of safety database Establishment of process for Hazard identification	High	Periodic review by Aviation Safety Risk Manangement Committee (ASRMC)
SEI-3.6 Availability of safety data and safety information to support safety management activities at the national level ((Phase 2) (GASP, SEI-18)	a. Develop the safety objectives to be achieved through the SSP (GASP, SEI-18A) b. Develop safety performance measurement methodologies, aligned with the regional safety metrics, using the established safety risk management process (GASP, SEI-18B) c. Develop safety performance indicators and safety performance targets using the established safety risk management process (GASP, SEI-18C) d. Ensure the establishment of mandatory safety reporting systems by service providers (GASP, SEI-18D)	2026 2026 2026 2025	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Level of implementation achieved through SSP Gap Analysis (iSTARS) Development of safety objectives Development of safety		Periodic review by Aviation Safety Risk Manangement Committee (ASRMC) SPI's

Organizational challenge : Ineffective State Safety Programme Implementation							
Goal 3: Establish and Manage the State Safety Programme							
Target 3.1 : To effectively implement the foundation of an SSP by 2026 **Target 3.2:** To fully implement an effective SSP by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
	e. Encourage establishment of voluntary safety reporting systems as part of service providers' SMS (GASP, SEI-18E) f. 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 (GASP, SEI-18F)	2025 2026			performance indicator Development of safety performance targets Establishment of MOR and VOR scheme by service providers Establishment of communication channel between CAAV and industry		
SEI-3.7 Acquisition of resources to increase the proactive use of risk modelling capabilities (GASP, SEI-19)	a. Identify resources needed to support safety intelligence collection and processing, advanced data analysis, risk modelling and information-sharing capabilities (GASP, SEI-19A) b. Attract, recruit, train, and retain qualified technical personnel to specialize in risk modelling (GASP, SEI-19B) c. Ensure that the Civil Aviation Safety Inspector workforce is trained to perform safety oversight of service providers that have implemented SMS (GASP, SEI-19C)	2026 2026 2025	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO ACV VATM	Level of implementation achieved through SSP Gap Analysis (iSTARS) Establishment of HR policy Number of trained and qualified personnel on SSP/SMS		Periodic review by Aviation Safety Risk Manangement Committee (ASRMC) Training plan follow up
SEI-3.8 Advancement of safety risk	a. Establish data sharing connectivity and integration among the State's aviation safety databases, including the mandatory occurrences reporting	2026	CAAV (LEG, ORG, AGA, ANS, AIR, OPS, PEL, AIG)	AOC AMO ATO	Level of implementation achieved	High	Periodic review by Aviation Safety Risk Manangement

Organizational challenge : Ineffective State Safety Programme Implementation							
Goal 3: Establish and Manage the State Safety Programme							
Target 3.1 : To effectively implement the foundation of an SSP by 2026 **Target 3.2:** To fully implement an effective SSP by 2028							
Safety enhancement initiative	*Action*	*Timeline*	*Responsible entity*	*Stakeholders*	*Metrics*	*Priority*	*Monitoring activity*
management at the national level (GASP, SEI-21)	system, voluntary safety reporting systems, safety audit reports and aviation system statistics (traffic counts, weather information, EI scores, etc.) b. Develop risk modelling capabilities to support monitoring system safety issues and accident/incident prevention c. Encourage information-sharing with industry	 2026 2026		ACV VATM	through SSP Gap Analysis (iSTARS) Establishment of safety data requirement /policy		Committee (ASRMC)

7.3 KEY REFERENCE DOCUMENTS USED TO DEVELOP THE NASP 2025-2028

[1] ICAO GASP 2023-2025 Edition (Doc 10004).
[2] Icao Manual on the Development of Regional and National Aviation Safety Plans 2022 Edition (Doc 10131).
[3] ICAO Global Aviation Safety Roadmap 2023-2025 Edition (Doc 10161).
[4] Icao Manual on Monitoring Implementation of Regional and National Aviation Safety Plans 2023 Edition (Doc 10162).
[5] ICAO Basic Building Block (BBB) Framework, October 2022.
[6] ICAO Annex 19 and consequential amendments to Annexes 1; 6 Parts I and III; and 13.
[7] ICAO Manual on human performance for regulators (Doc 10151) First edition 2021.
[8] ICAO World Civil Aviation Report, Volume 6, 2023 edition.
[9] AP-RASP 2023-2025 Edition.
[10] APAC Annual Safety Report 2022,2023,2024.
[11] Vietnam Aviation State Safety Programme 2013.
[12] EASA Artificial Intelligence Roadmap 2.0, May 2023.