



PAPUA NEW GUINEA

NATIONAL AVIATION SAFETY PLAN

(PNG NASP)

2023-2027

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Executive Summary

The existence of geographical limitations to transportation within Papua New Guinea (PNG) means civil aviation has a significant role to play in enhancing national prosperity through economic growth and the maintenance of social structures.

To this end, Section 6 of the Civil Aviation Act 2000 (as amended) is explicit with regards to matters of national importance:

“A person exercising a power or function under this Act shall recognise and provide for the following matters of national importance:–

- (a) the maintenance of safety and security in civil aviation operations in Papua New Guinea, especially for the travelling public;*
- (b) the compliance by Papua New Guinea with international agreements that relate to civil aviation safety and security;*
- (c) the independence of CASA and the Commission from the providers of air services and aviation related services;*
- (d) the maintenance of air services to provincial and rural communities*

PNG, as a signatory to the Chicago Convention on International Civil Aviation, is committed to the maintenance of internationally accepted standards of safety and the achievement of aviation safety outcomes. Air transport is essential to PNG’s economy, community and market access. A safe and secure aviation system contributes to Papua New Guineans’ confidence in our air transport network. As the world recovers from Covid-19, it will be important that the PNG aviation industry rebounds and grows in a safe and sustainable way, and that we strengthen our safety oversight capabilities.

PNG recognises adequate air navigation services, airport infrastructure and safety governance systems supported by qualified personnel and resources will be essential to enabling a broader economic recovery for PNG.

The PNG National Aviation Safety Plan (NASP) details PNG’s commitment to continuously improve aviation safety management capabilities in order to reduce the risks to aviation. It complements PNG’s State Safety Programme (SSP) and PNG’s National Vision 2050 to support the achievement of an acceptable level of safety performance. Through the NASP and SSP, aviation stakeholders affirm their commitment to the ongoing improvement of aviation safety, sufficient resourcing of activities and increased collaboration at the global, regional and State levels.

The NASP establishes PNG’s safety goals, targets and initiatives consistent with the International Civil Aviation Organization’s (ICAO’s) Global Aviation Safety Plan (GASP) and the Asia Pacific Regional Aviation Safety Plan (AP-RASP). The NASP is subject to a pentennial review cycle in synchronisation with the PNG National Elections cycle and the formation of Government.

PNG’s three (3) aviation safety objectives for 2023–2027 are to:

- (1) Continuously improve PNG’s civil aviation safety outcomes;
- (2) Strengthen PNG’s safety oversight capabilities, capacities and governance;
- (3) Engage constructively with stakeholders at local, regional and international levels;



Statement by the Hon. Minister for Transport and Civil Aviation



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NATIONAL AVIATION SAFETY PLAN (NASP) STATEMENT

The aviation industry in Papua New Guinea (PNG) plays a vital role in the changing economic, political, social development and life of the country, as alternative forms of transport are often not available. Given the complexity of PNG's topography and terrain, air transport for many remote parts of PNG will continue to be the only possible means to link to the main centres of the country with each other.

Infrastructure is the key and essential driver of economic growth and development, however PNG's challenging geography comprising mountainous terrain and many remote islands with scattered population, requires large investments for connecting rural people to urban areas throughout the country. Investing in sustainable infrastructure plays an important role by laying stronger foundations for economic growth, as well as creating demand and providing access to economic and social services.

Land, water and air transport are also a key component of infrastructure consisting of roads, bridges, jetties, wharves, airstrips and airports, etc. and services such as public road transport, ships, aircraft etc. Effective delivery of goods, services and the conduct of socioeconomic activities are enhanced by a good transport infrastructure and service network system.

Papua New Guinea is a signatory to the Convention on International Civil Aviation (Chicago Convention), which established principles and arrangements for the conduct of safe and secure international civil aviation. The International Civil Aviation Organisation (ICAO), which administers the Chicago Convention, undertakes safety and security oversight of signatory States to measure compliance with, and application of, the ICAO Standards and Recommended Practices (SARPs). As part of its ICAO obligations, PNG continues to align its civil aviation laws, rules, standards and practices with the ICAO SARPS, international best practice and with those States in the Asia Pacific Region with which it shares common aviation aspirations.

Aviation infrastructure providers, such as operators of airport, air navigation and meteorological facilities, equipment and services are required to meet PNG's international obligations and the legitimate requirements of civil aviation users in regard to aviation safety. To this end, Government will continue to fund the rehabilitation and upgrading of such facilities and airports to ensure they meet ICAO certification standards.



PNG NATIONAL AVIATION SAFETY PLAN



The Government of Papua New Guinea (GoPNG)'s National Transport Strategy (NTS) policy statement says safety is, and will continue to be regarded, as the paramount requirement in the Government's regulation, provision and facilitation of air transport. Safety standards and safety compliance will not be traded off against other aspects of Government spending in the air transport subsector. Through this policy statement, GoPNG requires the Civil Aviation Safety Authority of PNG (CASA PNG), and state aviation enterprises (SAEs), the National Airports Corporation (NAC) and NiuSky Pacific Ltd (NSP) to make aviation safety its first priority.

In this PNG NASP, GoPNG details its continuing commitment to aviation safety and to the resourcing of activities for the enhancement of aviation safety at the national level.

Yours Sincerely,

HONORABLE WAKE G. GOI, MP
Minister for Civil Aviation





Statement by the Director of Civil Aviation

The Papua New Guinea (PNG) National Aviation Safety Plan (NASP) is the master planning document that contains PNG's strategic direction for the management of aviation safety for the period 2022-2027.

It lists the national safety issues, sets national aviation safety goals and targets, and presents a series of safety enhancement initiatives (SEIs) to address identified safety deficiencies and achieve the national safety goals and targets.

As part of the requirements of the International Civil Aviation Organisation (ICAO) and in line with the Global Aviation Safety Plan (GASP) and Regional Aviation Safety Plan (RASP), the PNG NASP has been developed in line with the GASP goals, targets and global high-risk categories of occurrences (G-HRCs). The NASP is the means to demonstrate PNG's commitment to the implementation of activities for improvement of safety in PNG.

The PNG State Safety Programme (SSP) is an integrated set of regulations and activities aimed at improving safety. These activities include, for example, the establishment of: requirements for the qualification of technical personnel, technical guidance and tools, a process to identify hazards from collected safety data, the assessment of safety risks, and mechanisms for the resolution of safety issues.

Even though PNG is in the process towards full implementation of its State Safety Programme (SSP), the PNG NASP has been developed guided primarily by the GASP and RASP, and used to identify and manage operational safety risks.

The NASP is a single document containing the State's strategy for the management of aviation safety and includes activities to address organisational challenges and enhance organisational capabilities, and the steps necessary to fully implement the PNG SSP.

Mr. Benedict Igo Oraka, ML

Director of Civil Aviation
Civil Aviation Safety Authority of Papua New Guinea



Signature Date: **31 Oct 2025**



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1. Abbreviations and Acronyms

Acronym	Definition
Act	PNG Civil Aviation Act 2000 (<i>as amended</i>)
APRAST	Asia Pacific Regional Aviation Safety Team
AP-RASP	Asia Pacific Regional Aviation Safety Plan
CASA PNG	Civil Aviation Safety Authority of Papua New Guinea
CAR	PNG Civil Aviation Rule
CAOR	PNG Civil Aviation (Offences) Regulation
EI	ICAO Effective Implementation
FIR	Flight Information Region
ICAO	International Civil Aviation Organisation
GASP	Global Aviation Safety Plan
NASP	National Aviation Safety Plan
NASSC	National Aviation Safety and Security Committee
PASO	Pacific Aviation Safety Office
PNG	Papua New Guinea
RAMM	Regional Aviation Ministers' Meeting
RASG	Regional Aviation Safety Group
RASP	Regional Aviation Safety Plan
RPAS	Remotely Piloted Aircraft Systems
SAF	Sustainable Aviation Fuel
SEIs	Safety Enhancement Initiatives
SSP	State Safety Program
USAP	ICAO Universal Security Audit Programme
USAOP	ICAO Universal Safety Audit Oversight Programme



2. Introduction

2.1 Overview of the NASP

PNG is committed to enhancing aviation safety and to the resourcing of supporting activities. A safe aviation system contributes to the economic development of PNG and its industries.

The purpose of the NASP is to continue to reduce aviation fatalities and the risk of fatalities through the development and implementation of a national strategy.

The NASP promotes the effective implementation of a safety oversight system, a risk-based approach to managing safety as well as a coordinated approach to collaboration between PNG, other States, regions and the aviation industry. All stakeholders are encouraged to support and implement the NASP as a strategy for the continuous improvement of aviation safety in PNG.

The NASP is in alignment with the ICAO Global Aviation Safety Plan (GASP) Doc 10004 and the Asia Pacific Regional Aviation Safety Plan (AP-RASP).

2.2 Structure of the NASP

The NASP presents the strategy for enhancing aviation safety for a period of 5 years. It comprises six (6) Sections that cover the Purpose of the NASP, PNG's Strategic Approach to Managing Aviation Safety, the National Operational Safety Risks, Other Safety Issues addressed in the NASP, and a description of how the Implementation of the Safety Enhancement Initiatives (SEIs) in the NASP will be monitored.

2.3 NASP and the SSP

This NASP addresses operational safety risks identified in the ICAO GASP and the AP-RASP and is part of the framework for PNG's SSP. PNG is committed to fully implement an SSP by 2025 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 the NASP address challenges and aim to enhance organisational capabilities related to effective safety oversight.

2.4 NASP Development, Implementation and Monitoring

The Civil Aviation Safety Authority of Papua New Guinea (CASA PNG) is responsible for the development, implementation and monitoring of the NASP, in collaboration with the National Aviation Safety and Security Committee (NASSC) which is chaired by the Director of Civil Aviation and comprises representatives from the:

- (1) Ministry of Transport (DOT),
- (2) Accident Investigation Commission,
- (3) Niusky Pacific Ltd,
- (4) National Airports Corporation and
- (5) Other aviation industry stakeholders.

The NASP is developed in consultation with PNG air operators and other stakeholders, and is in alignment with the GASP, AP-RASP and PNG Government's Vision 2050.

CASA PNG initiates and manages the review of the NASP every 3 years. In collaboration with the PNG aviation industry stakeholders, CASA PNG will lead the identification and assessment of new emerging risks as well as a review of existing risks.

CASA PNG monitors the implementation of action items in the NASP and shares them with the NASSC and with the aviation industry stakeholders at the annual PNG Aviation Safety and Security



Conference. This process provides assurance that safety improvements are continuously discussed, agreed and progressed to achieve our safety objectives under the PNG SSP. Further safety actions may be initiated at these stakeholder engagement sessions and the register of action items updated.

2.5 Safety Objectives, Goals, Targets and Indicators

2.5.1 NASP Safety Objectives

2.5.1.1 The NASP addresses the following three (3) National Safety Objectives:

- (1) Continuously improve PNG's civil aviation safety outcomes.
- (2) Strengthen PNG's safety oversight capabilities, capacities and governance.
- (3) Engage constructively with stakeholders at national, regional and international levels.

2.5.2 NASP Safety Goals

2.5.2.1 The NASP also addresses the following six (6) National Safety Goals:

- (1) Achieve a continuous reduction of operational safety risks.
- (2) Improve PNG's Safety Oversight Capabilities.
- (3) Move towards data-driven regulatory oversight.
- (4) Implement an effective State Safety Plan.
- (5) Increase collaboration at Regional and International levels.
- (6) Enhance Aviation Infrastructure.

2.5.2.2 The NASP has a five (5) year target window from 2023-2027 to achieve all six (6) National Safety Goals.

2.5.3 NASP Target Dates

To address the National Safety Objectives and National Safety Goals listed above, so as to enhance aviation safety at the National level, the NASP contains the following respective target dates:

Safety Objectives	Safety Goals	Target Date
1. Continuously improve PNG's civil aviation safety outcomes	(a) Achieve a continuous reduction of operational safety risks	2023-2027
	(b) Enhance Aviation Infrastructure	
2. Strengthen PNG's safety oversight capabilities	(a) Improve PNG's Safety Oversight capabilities	
	(b) Implement an effective PNG SSP	
	(c) Move towards a data-driven regulatory oversight	
3. Engage constructively with stakeholders at national, regional and international level	(a) Increase collaboration at the Regional and International levels	



2.5.4 Regional Engagement & Goals

2.5.4.1 The Regional Aviation Safety Group –Asia Pacific (RASG-APAC) through the 2020-2022 AP-RASP has established the following Regional Goals:

- (1) Reduce operational risks.
- (2) Improve States' Safety Oversight and Compliance.
- (3) Implement effective SMS and SSP.
- (4) Move towards data-driven regulatory oversight.
- (5) Enhance Aviation infrastructure.

2.5.4.2 PNG is committed to actively engaging with regional aviation safety forums including the:

- (6) Pacific Aviation Safety Office (PASO)
- (7) Regional Aviation Safety Group –Asia Pacific (RASG-APAC)
- (8) Asia Pacific Regional Aviation Safety Team (APRAST)
- (9) Directors General of Civil Aviation (DGCA) Asia/Pacific Region Conferences, and
- (10) Regional Aviation Ministers Meetings (RAMM).



2.5.5 Alignment of PNG's Safety Goals with Global and Regional Priorities

The following table details the relationship of PNG's Safety Goals with the Global and Regional priorities:

	1.	2.	3.	4.	5.	6.
GASP Goals	Achieve decreasing trend of global accident rate	Strengthen States Safety Oversight Capabilities	Implement Effective SSP	Increase collaboration at the regional level	Expand the use of Industry Programmes	Ensure the appropriate infrastructure is available to support safe operations
	1.	2.	3.	4.	5.	6.
AP-RASP Goals	Reduce Operational Risks	Improve States' Safety Oversight and Compliance	Implement Effective SMS and SSP; and	Move towards data-driven regulatory oversight		Enhance Aviation Infrastructure
	1.	2.	3.	4.	5.	6.
PNG State Safety Goals	Achieve a continuous reduction of operational safety risks	Improve PNG's safety oversight capabilities	Implement an effective PNG SSP; and	Increase collaboration at the Regional and International Level		Enhance Aviation Infrastructure

2.5.6 PNG National Safety Goals, Targets and Indicators

The PNG 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 AP-RASP.

PNG Safety Goal	PNG Safety Target	PNG Safety Indicators	Link to GASP and AP-RASP
1. Achieve a continuous reduction of operational safety risks	Maintain a decreasing trend of the national accident rate	1. No fatal accidents 2. No. of accidents occurring in PNG to aircraft over 5700kg involved in scheduled commercial operations	GASP - Goal 1 AP-RASP - Goal 1
2. Improve PNG's safety oversight capabilities	Achieve High ICAO Effective Implementation (EI) score (> 80%).	1. % of ICAO PQs implemented nationally 2. % of ICAO PQ Corrective Action Plans (CAPs) implemented nationally <i>Note: ICAO has planned an ICVM for PNG in April 2025.</i>	GASP - Goal 2 AP-RASP - Goal 2



PNG Safety Goal	PNG Safety Target	PNG Safety Indicators	Link to GASP and AP-RASP
3. Implement an effective SSP	100% implementation of SSP Level 3 in PNG	Section 5 SSP	GASP - Goal 3 AP-RASP - Goal 3
4. Move towards a data-driven safety oversight	Above 90% migration to data driven risk based safety oversight	Organisational Risk Profiling (ORP) of aviation document holders.	GASP - Goal 3 AP-RASP - Goal 3
5. Increase collaboration at the Regional and International Level	Participate and attend 15 Regional and International Aviation conferences, educational seminars, meetings and other forums	1. PNG Aviation Safety & Security Conference 2. No of regional and international civil aviation meetings attended by PNG delegates.	GASP - Goal 4
6. Enhance Aviation Infrastructure	Ensure PNG has the appropriate Air Traffic Management systems, Airspace infrastructure, aerodrome and other national infrastructure to support safe operations	No. of aviation infrastructure project completed	GASP - Goal 6 AP-RASP - Goal 5

2.5.7 NASP Safety Goals and PNG Government Vision 2050

The NASP is aligned with key PNG Government Development frameworks and Development Plans which are:

- (1) Vision 2050
 - (a) Pillar 1 - Human capital development, gender, youth and people empowerment
 - (b) Pillar 3 - Institutional development and service delivery
 - (c) Pillar 7 - Strategic planning, integration and control
- (2) The PNG Development Strategic Plan (DSP- 2010-2030) – Part 4.8



(a) Transport Sector Development:

The Goal is to establish a transportation network that links all of PNG.

(b) Aviation Sector: Key Strategies Areas:

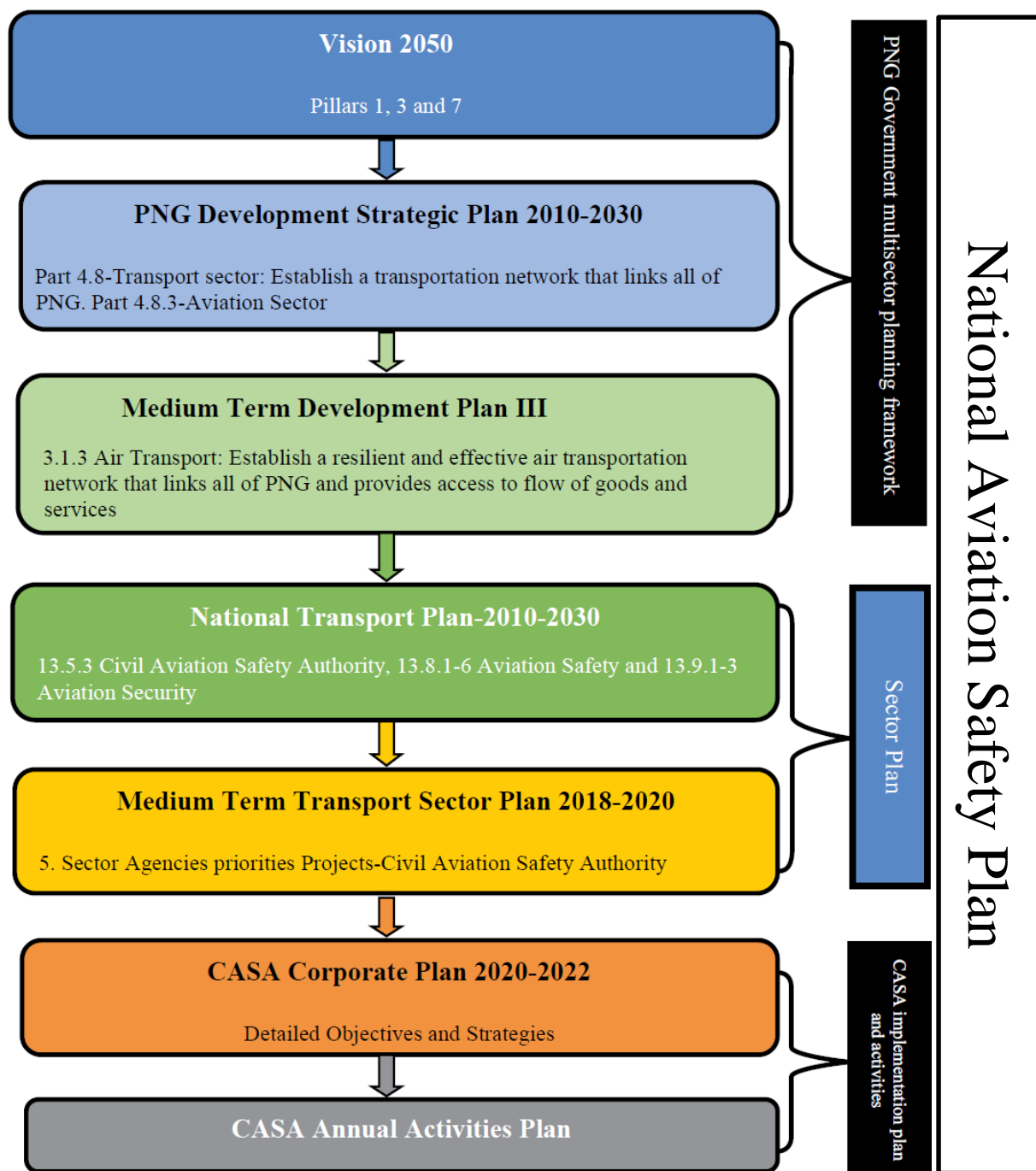
- Share of regional airports meeting international certification.
- Airports upgraded for higher seating capacity aircraft
- Number of unused airstrips rehabilitated

(3) The Medium-Term Development Plan (MTDP) III (2018-2022) – Part 3.1.3

- (a) Infrastructure: To develop a sustainable infrastructure network that is resilient to disasters and provides access for mobility of goods and services
- (b) Transport: Goal is to establish a resilient & environmentally compatible transportation network that links all of PNG and provides access to flow of goods and services
- (c) Air Transport: Goal is to establish a resilient and effective air transportation network that links all of PNG and provides access to flow of goods and services
- (d) Investment: 2.2.2: Air Transport Safety Program and 3.4.3: Rural Airstrip Rehabilitation Program

(4) National Transport Strategy (NTS) Vol 3. – Part 13.5.3

- (a) 13.5.3 Civil Aviation Safety Authority
- (b) 13.8.1-6 Aviation Safety
- (c) 13.1-3 Aviation Security



2.6 Papua New Guinea Operational Context

The following summarises the PNG operational context:

2.6.1 Aerodromes:

Currently there are 22 certified aerodromes in PNG, 2 of which are international aerodromes.

2.6.2 Airspace:

PNG airspace comprises the Port Moresby (AYPM) Flight Information Region (FIR) and is classified into 2 Classes of airspace namely Class A and Class F.



2.6.3 Aircraft Movements:

There is was an average of 65-70 movements per day in the first quarter of 2023 equating to an annual figure of 25,550.

2.6.4 Air Operator Certificate:

There are currently 22 air operator certificates (AOCs) issued by the Director, including the national airline Air Niugini which conducts international and domestic commercial air transport operations.

2.7 NASP Key Safety Priorities

Globally under the GASP and regionally in the RASP, five (5) high risk categories have been identified as Key Safety priorities. These are also covered in the NASP, and they are:

- (1) Runway Incursions.
- (2) Runway Excursions.
- (3) Mid-air Collisions.
- (4) Loss of Control In-flight.
- (5) Controlled Flight into Terrain (CFIT).

2.7.1 COVID-19 Disruptions

The unexpected and sudden disruption to international and domestic air operations due to the Covid-19 pandemic gave rise to additional safety risks as follows:

- (1) Reduced competency of flight crew and air traffic controllers that were laid off
- (2) Reduced organisational focus on safety

2.7.2 Remotely Piloted Aircraft Systems (RPAS)

There is increasing use of commercial and recreational Remotely Piloted Aircraft Systems (RPAS or drones) in PNG.

RPAS technology continues to develop with newer and more sophisticated models contributing further to the widespread use of RPAS in various sectors including essential services and new areas such as the delivery of medicines to remote communities.

The challenge is to safely integrate RPAS operations into the PNG airspace system and Air Traffic Management (ATM) environment.

RPAS regulations in PNG are ICAO compliant and incorporate regulatory best practices.

They include Civil Aviation Rule Part 102 for unmanned air operator certification and operation, Part 47 for RPAS registration and Part 61 for Remote Pilot Licenses.

2.7.3 Infrastructure

Major aviation infrastructure projects, in particular airport and terminal buildings upgrades, are currently work-in-progress in PNG.

Airport operators and stakeholders such as the resource sector companies are investing heavily with a view to increasing capacity and improve efficiency, however, safety remains the primary consideration.



2.8 NASP State Safety Goals

Noting the safety challenges, the NASP outlines six (6) State Safety Goals, which underpin the development of Safety Enhancement Initiatives (SEIs) for the 5-year period 2023 to 2027.

2.8.1 Achieve a continuous reduction of operational safety risks

As the international travel borders reopen following the covid-19 pandemic, we must pre-emptively mitigate pandemic-related safety and operational risks that have been identified. These risks can manifest in the operating environment and/or areas where PNG air operators operate. The measures are targeted interventions as well as measures taken by PNG aviation document holders under their own Safety Management Systems (SMS).

2.8.2 Improve PNG's safety oversight capability

CASA PNG intends to establish and implement robust regulatory frameworks and effective processes that provide clear direction and guidance for PNG aviation document holders in Industry and are in line with International best practices. CASA PNG will adopt a collaborative approach and engage the aviation industry in the development of civil aviation policies and regulations.

2.8.3 Enhancing efforts to strengthen the surveillance and safety oversight regime,

CASA PNG will work together with the PNG aviation Industry to strengthen aviation safety culture in PNG to enable individuals and organisations to internalize safety considerations and take initiatives to proactively address safety risks.

2.8.4 Implement an effective SSP

We will enhance safety management at the State (SSP) and Industry (SMS) levels to ensure the continuous improvement of PNG's SSP and associated governance.

2.8.5 Move towards a data-driven regulatory oversight

CASA PNG is installing and deploying specialist aviation regulatory software called 'EMPIC' to help PNG develop a data-driven proactive and predictive risk management modelling capability that will inform safety decision-making and the implementation of graduated enforcement processes.

2.8.6 Increase Collaboration at the Regional and International level

PNG will endeavor to collaborate with ICAO, PASO and other partners in the Asia Pacific region to promote the harmonization of best practices, provide technical and investigation assistance through the PNG AIC. We will encourage domestic, regional and international Industry participation at our annual PNG Aviation Safety and Security Conference to collaborate on current and emerging issues.

2.8.7 Enhance Aviation Infrastructure

We will ensure that PNG has the appropriate air traffic management systems, airspace, aerodrome and other national capabilities (e.g. meteorological infrastructure) to support safe operations.



2.9 Safety Enhancement Initiatives (SEIs)

The SEIs in this plan are implemented through PNG's existing safety oversight capabilities and the service providers' SMS. SEIs derived from the ICAO global aviation safety roadmap were identified to achieve the national safety goals and targets presented in the NASP.

Some of the National SEIs are linked to overarching SEIs at the Regional and Global levels and help to enhance aviation safety internationally. The full list of the SEIs is presented in the Appendix to the NASP.

State Safety Goal	ID	Safety Enhancement Initiatives (SEIs)	ICAO Critical Element (CE)
1. Achieve a continuous reduction of operational safety risks	1.1	Mitigate contributory factors to CFIT accidents and incidents	CE-2; CE-5
	1.2	Mitigate contributory factors to LOC-I accidents and accidents	CE-2; CE-5
	1.3	Mitigate contributory factors to Mid-air collision	CE-2; CE-5
	1.4	Mitigate contributory factors to Runway excursions/incursions accidents and incidents	CE-2; CE-5
2. Improve PNG's safety oversight capability	2.1	Ensure PNG's regulatory services and compliance monitoring of the aviation industry to assure aviation safety performance meets regulatory requirements	CE-6; CE-7
	2.2	Ensure PNG's safety oversight capabilities is responsive to new or emerging threats or trends	CE-2; CE-4; CE-5
3. Implement an effective SSP	3.1	Ensure the continuous improvement of PNG's SSP and associated governance	CE-3
	3.2	Standardise and streamline PNG Industry's SMS obligation to ensure effective implementation and continuous improvement	CE-2; CE-5
4. Move towards a data-driven regulatory oversight	4.1	Develop a PNG, data-driven proactive risk management modelling capability	CE-8
5. Increase Collaboration at the Regional and International level	5.1	Encourage industry participation in the annual PNG Aviation Safety and Security Conference and in other industry defined safety programmes	CE-7
	5.2	Strengthen PNG's participation and engagement at ICAO, PASO, APrAST, RAMM and other regional and international forums	N/A
6. Enhance Aviation Infrastructure	6.1	Ensure PNG has the appropriate Air Traffic Management systems and Airspace infrastructure to support safe operations	N/A
	6.2	Ensure PNG has the appropriate Aerodrome infrastructure to support safe operations	N/
	6.3	Ensure PNG has other national infrastructure and capabilities (e.g. meteorological infrastructure) to support safe operations	A N/ A



3. Papua New Guinea's Strategic Approach to Managing Safety

The NASP is the master planning document containing the strategic direction for the management of aviation safety for the 5-year period 2023 to 2027. This plan lists national safety issues, sets national aviation safety goals and targets, and presents a series of safety enhancement initiatives (SEIs) to address identified safety deficiencies and achieve the national safety goals and targets.

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

The NASP has been developed using international safety goals and targets and HRCs from both the GASP (www.icao.int/gasp) and the AP-RASP. These are highlighted in the text, where applicable.

The SEIs listed in this NASP support the improvement of safety at the wider regional and international levels and include several actions to address specific operational safety risks and recommended SEIs for individual States set out in the .t Papua New Guinea has adopted these SEIs and has included them in this plan. Cross-references are provided to the for individual SEIs where relevant.

4. National Operational Safety Risks

The NASP includes SEIs that address national operational safety risks, derived from lessons learned from operational occurrences and from a data-driven approach. These SEI may include actions such as:

- (1) rule-making.
- (2) policy development.
- (3) targeted safety oversight activities.
- (4) safety data analysis; and
- (5) safety promotion.

CASA PNG publishes an Annual Safety Report, which is available on the CASA PNG website. A summary of accidents and serious incidents in PNG, and those for aircraft registered in PNG involved in commercial air transport is presented in the table below:

Year	Fatal Accidents	Non-Fatal Accidents	Serious Incidents
2017	1	2	97
2018	1	2	102
2019	2	2	100
2020	0	3	110
2021	0	2	96
2022	0	4	90
2023	0	5	105

The NASP presents the SEIs that were developed based on the organizational challenges (ORG) and operational safety risks (OPS), as presented in the ICAO global aviation safety roadmap, as well as State-specific issues identified by CASA PNG. This plan is developed and maintained by CASA PNG, in coordination with all stakeholders and is updated at least every 5 years.

5. Other Safety Issues

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

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



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

PNG's Overall EI score							
60.7 %							
EI Score by CE (2018)							
CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
96.7%	64.29 %	73.68 %	54.29 %	54.47 %	68.06 %	58.97%	23.91 %
EI Score by Audit Area							
LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
86.36 %	62.5 %	46.37 %	54.54 %	82.79 %	26.76 %	68.22 %	66.05 %



6. PNG's Emerging Issues

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

The NASP addresses the following emerging issues, which were identified by CASA PNG for further analysis:

6.1 Emerging Technologies

Rapid advances in aircraft and other emerging technologies contributes to making aviation the safest mode of transport. Emerging technology and the enhancement of existing technologies plays a critical role in meeting PNG's future aviation efficiency and capacity requirements. The modernisation of PNG's Air Traffic Management systems recently have improved communication, navigation and surveillance systems. PNG has implemented Automatic Dependent Surveillance -Broadcast (ADS-B) across PNG to enhance the accuracy and reliability of surveillance throughout the country, while air navigation is increasingly based on the Global Navigation Satellite System (GNSS).

6.2 Cyber-Threats:

Cyber-threats are a growing concern to civil aviation, particularly, for States like PNG striving to transition to new technology in the safety oversight information systems, air traffic management, air navigation and airport information systems space. Cyber-attacks may cause widespread damage and disruption to civil aviation. Upgrading from legacy-based systems to IP-Based networks and the use of Public communication services that increases cyber-security risks need to be carefully managed.

6.3 Environmental considerations, E-VTOL operations and Vertiport Operations:

The introduction of the more environmentally-friendly electric and hybrid-electric propulsion systems has the potential to transform the aviation industry offering significant benefits over the existing internal combustion engines. Electric Vertical Take-off and Landing (E-VTOL) piloted vehicles including the retrofit of existing aircraft, soon to be offered as piloted 'Air Taxis' in places like Australia is an emerging issue that PNG is monitoring closely as we would need to develop appropriate regulatory frameworks.

6.4 Sustainable Aviation Fuel (SAF)

The 41st ICAO Assembly, in 2022, adopted a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050, in support of the United Nations Framework Convention on Climate Change Paris Agreement's temperature goal. This historic agreement reinforces the leadership of ICAO on issues relating to international aviation and climate change. In accordance with ICAO Assembly Resolution A41-21, States are encouraged to strive to achieve net-zero emissions by 2050. ICAO emphasizes that achieving net-zero requires considering technological advancements, operational improvements and fuels (such as SAF).

Under the ICAO LTAG, one of the three possible scenarios of increasing levels of ambition, is by using fuels, which has the largest potential to reduce CO₂ emissions. Aviation fuels include: SAF based on biomass, waste, and atmospheric CO₂; Lower Carbon Aviation Fuels (LCAF) based on petroleum; and Non-drop-in Fuels such as hydrogen and electricity.



7. Monitoring and Implementation

The NASP includes SEIs that address national operational safety risks, derived from lessons learned through operational occurrences and from a data-driven approach system. These SEI may include actions such as: rule-making, policy development, targeted safety oversight activities, safety data analysis, and safety promotion. CASA PNG publishes an Annual Safety Report which will be available on its website. Summaries of accidents and serious incidents in PNG, for PNG registered aircraft involved in commercial air transport operations are published by the PNG Accident Investigation Commission (PNG AIC) on their website.



Appendix A.1 – Detailed SEIS: National Operational Safety Risks

PNG Goal 1: Achieve a continuous reduction of operational safety risks PNG Target: Maintain a decreasing trend of the national accident rate							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	NASP	Monitoring Activity
1.1 <i>Mitigate contributory factors to CFIT accidents and incident</i>	1.Implement Satellite-based Augmentation systems to enable vertically guided and continuous descent approaches	2023-2027	NiuSky	CASA PNG, NAC, DOT			
	2. Improve Flight Data Analysis Program (FDAP) guidance to enable air operators to look for CFIT pre-cursors as part of FDAP.	2023	CASA PNG	AOC holders, Pilots, LAMES			
	3.Promulgate Airworthiness AC to accept non-required, non-certified safety-enhancing technology	2023	CASA PNG	AOC holders, LAMEs			



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PNG Goal 1: <i>Achieve a continuous reduction of operational safety risks</i> PNG Target: <i>Maintain a decreasing trend of the national accident rate</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
1.2. <i>Mitigate contributory factors to LOC-I accidents and accidents</i>	1. Improve Flight Data Analysis Program (FDAP) guidance to enable air operators to look for LOC-1 pre-cursors.	2023-2027	CASA PNG	AOC Holders, pilots, LAMEs			
	2. Carry out surveillance and educational roadshows on aircraft/engine reliability, maintenance & overhaul	2023-2027	CASA PNG	AOC holders, pilots, LAMEs			

PNG Goal 1: <i>Achieve a continuous reduction of operational safety risks</i> PNG Target: <i>Maintain a decreasing trend of the national accident rate</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
1.3. <i>Mitigate contributory factors to Mid-air collision (MAC) accidents and incidents</i>	1. Improve Flight Data Analysis Program (FDAP) guidance to enable air operators to look for MAC pre-cursors.	2023-2027	CASA PNG	AOC Holders			
	2. Conduct Public Awareness Roadshows on RPAS Safety rules	2023-2027	CASA PNG	General Public, RPAS Sellers,			



PNG NATIONAL AVIATION SAFETY PLAN



PNG Goal 1: *Achieve a continuous reduction of operational safety risks*
 PNG Target: *Maintain a decreasing trend of the national accident rate*

SEI	Action	Timeli ne	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
1.4 <i>contributory factors to Runway excursions /incursions accidents and incidents</i>	1.Revive the National Runway Safety Action Group	2023-	CASA PNG	NAC, AOC			
	2.Promote establishment of local runway safety teams / champions	2023- 2027	CASA PNG	NAC, AOC Holder			
	3.Improve Flight Data Analysis Program (FDAP) guidance to enable air operators to look for MAC pre- cursors.	2023- 2027	CASA PNG	AOC Holders, Pilots, LAMEs			



Appendix A.2 – Detailed SEIS: Other Safety Issues

PNG Goal 2: <i>Improve PNG's Safety Oversight Capabilities</i> PNG Target: <i>By 2023, reach an effective implementation score of above 90%</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
2.1 <i>Ensure PNG's regulatory services and compliance monitoring of the aviation industry to assure aviation safety performance meets regulatory requirements</i>	1. Establish and implement a risk-based audit methodology across PNG aviation industry.	2023	CASA PNG	All PNG Aviation Document Holders			
	2. Implement an ISO 9001 quality-assured, risk-based process for the assessment of continued operational safety.	2023	CASA PNG	All PNG Aviation Document Holders			
2.2 <i>Ensure PNG's safety oversight capabilities is responsive to new or emerging threats or trends</i>	1. Develop a new RPAS policy to manage the safe integration of RPAS into PNG airspace	2023	CASA PNG	NAC, NiuSky PNG Ltd, AOC holders			
	2. Implement cyber-security requirements for PNG aviation industry participants	2023	CASA PNG	NAC, NiuSky PNG Ltd, AOC holders			



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PNG Goal 3: <i>Implement an Effective SMS</i> PNG Target: <i>By 2025, SSP to be fully implemented in PNG</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
3.1 <i>Ensure the continuous improvement of PNG's SSP and associated governance</i>	1. SSP Agencies to develop. Implement and enhance workforce strategies	2025	CASA PNG, NAC, NiuSky, All aviation document holders	All Industry			
3.2 <i>Standardise and streamline PNG Industry's SMS obligation to ensure effective implementation and continuous improvement</i>	2. Conduct Industry Roadshows to educate PNG industry on SSP	2025	CASA PNG	All Industry			

PNG Goal 4: <i>Move towards data-driven regulatory oversight</i> PNG Target: <i>By 2023, implement EMPIC fully and attain full ISO 9001 certification</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
4.1. <i>Develop a PNG, data-driven proactive risk management modelling capacity</i>	1. Launch and Implement EMPIC 2. Establish a State level risk register	2023 2023	CASA PNG CASA PNG	All Aviation Industry participants			



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PNG Goal 5: <i>Increase collaboration at the regional and international level</i> PNG Target: <i>Develop a PNG, data-driven proactive risk management modelling capability</i>							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
5.1 <i>Encourage industry participation in the annual PNG Aviation Safety and Security Conference and in other industry defined safety</i>	Enhance the PNG Annual Conference programme to be streamed on social media for more reach	2023-2027	CASA PNG	All			
5.2 <i>Strengthen PNG's participation and engagement at ICAO, PASO, APRAST, RAMM and other regional and international forums</i>	1.Continue to engage bilaterally and multilaterally with regional partners such as PASO to improve efficiency, safety and harmonise services	2023-2027	CASA PNG	All			



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PNG Goal: 6. Enhance Aviation Infrastructure							
PNG Target: By 2027, Ensure PNG has the appropriate Air Traffic Management systems, Airspace infrastructure, aerodrome infrastructure and other national infrastructure to support safe operations							
SEI	Action	Timeline	Responsible Entity	Stakeholders	Metrics/Indicators	Priority	Monitoring Activity
6.1 <i>Ensure PNG has the appropriate Air Traffic Management systems and Airspace infrastructure to support safe operations</i>	Install and upgrade current systems with new technology CNS/ATM systems consistent with adjacent ATS jurisdictions	2023-2027	NiuSky Pacific Ltd	All			
6.2 <i>Ensure PNG has the appropriate Aerodrome infrastructure to support safe operations</i>	Upgrade aerodrome infrastructure in accordance with PNG Government development plans through Civil Aviation Development Improvement Programme (CADIP)	2023-2027	National Airports Corporation	All			
6.3 <i>Ensure PNG has other national infrastructure and capabilities (e.g. meteorological infrastructure) to support safe operations</i>	Review Department of Transport Air Transport Division aviation policies to restructure and support resourcing of agencies such as the National Weather Service	2023-2027	Department of Transport and Infrastructure	All			