**CIVIL AVIATION SAFETY AUTHORITY
OF PAPUA NEW GUINEA**

# Aviation Cybersecurity in Papua New Guinea

**ICAO APAC Aviation Cybersecurity Seminar
12th-14th March 2025
ICAO APAC Regional Office
Bangkok, Thailand**

# Introduction

## Brief overview of the Civil Aviation System in PNG

| Description | Total |
|---|---|
| Number of Aircraft on the PNG Register | 210 |
| Number of Certified Airports | 24 |
| Number of Rural Airstrips | 150 to 200 depending on maintenance status. There are 600 or more known Airstrips. |
| Air Operators | 22 Local and 8 Foreign |
| Maintenance Organizations | 20 Local and 13 Foreign |
| Total Number of Pilots | 1199 |
| Total Number of Aircraft Maintenance Engineers | 732 |
| Total Number of Air Traffic Controllers | 98 |

# PNG Strategy in terms of Cybersecurity

- PNG has adopted ICAO Annex 17, amendment 18 and the security related aspects of Annex 9 - Facilitation. PNG recognizes that aviation security and cybersecurity are critical for the sustainable development of air transport and that they need to be prioritized and appropriately resourced.

- PNG is committed to addressing Cybersecurity in Aviation. The State has captured the Strategic Objectives of the Muscat Declaration in its Policy and Corporate Documents.

- PNG is in the process of ratifying the *Convention on the Suppression on Unlawful Acts to International Civil Aviation* and the *Protocols Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft* (Beijing 2010) amongst others, hopefully by June 2025.

# PNG's alignment to ICAO's Aviation Cybersecurity Framework

- ICAO Documents & Guidelines:
  - ICAO Aviation Cybersecurity Strategy
  - ICAO Cybersecurity Action Plan
  - ICAO Annex 17 (Security) and Annex 19 (Safety Management)
  - ICAO Doc 9985 – Guidance on Air Traffic Management Security

- ICAO Global Aviation Security Plan (GASeP)

| Guidance Material | | Appropriate Authority |
|---|---|---|
| • Aviation Security Manual Document 8973<br>• Annex 17<br>• Air Traffic Management Security Manual (Doc 9985 – Restricted)<br>• ICAO Aviation Cybersecurity Strategy<br>• ISO 27001 | **International** | • International Civil Aviation Organization (ICAO)<br>• International Standards Organization (ISO) |
| • National Security Policy<br>• National Cybersecurity Policy 2021<br>• National Cybersecurity Strategy 2024-2030<br>• PNG Government Cybersecurity Standards Guidelines and Best Practices 2023 v1<br>• Cybercrime Act 2016<br>• National Civil Aviation Security Programme (NCASP) | **National** | • National Security Agency<br>• PNG Department of Information Communication Technology (DICT)<br>• National Information Communication Technology Authority (NICTA)<br>• Civil Aviation Safety Authority of PNG (CASAPNG) |
| • Aviation Security Risk Assessment Methodology (AVSRAM)<br>• Civil Aviation Rules (CARS)<br>• CASAPNG ICT Policy | **Aviation Authority** | CASAPNG |
| • IT Polices<br>• Assessment Checklists | **Aviation Industry** | PNG Aviation Industry |

# PNG's Risk Management Approach

- PNG has adopted a risk-based, data driven approach to proactively mitigate the existing and emerging security incidents and risks.

- In accordance with Aviation Security Risk Assessment Methodology, PNG applies the following:

1. Risk Identification
2. Risk Evaluation
3. Risk Mitigation

# Challenges in PNG's Aviation Cybersecurity

- Limited Resources:

  Shortage of skilled cybersecurity professionals.

- Technology Gaps:

  Outdated infrastructure and difficulty integrating modern cybersecurity solutions.

- Awareness & Training:

  Need for cybersecurity awareness and capacity building among aviation stakeholders.

# Way Forward for Aviation Cybersecurity in PNG

- Strengthen the Legislative Framework for Aviation Cybersecurity.

- Invest in cybersecurity infrastructure, training, and capacity building.

- Enhance regional and international collaboration for threat intelligence sharing.

- Conduct regular cybersecurity audits and risk assessments.