



International Civil Aviation Organization  
Asia and Pacific Office

**Twelfth Meeting of the Asia Pacific Accident Investigation Group  
(APAC-AIG/12)**

*(Bangkok, Thailand, 28-29 August 2024)*

**Agenda Item 4: Enhancing Accident Investigation Capabilities**

**PAPUA NEW GUINEA'S AIG EFFECTIVE IMPLEMENTATION AND CAPABILITIES  
BASED ON THE 2023 ICAO USOAP FULL-SCOPE AUDIT**

*(Presented by Papua New Guinea / PNG Accident Investigation Commission (AIC))*

**SUMMARY**

Under the ICAO USOAP, Critical Elements (CEs) assess a state's safety oversight capabilities, including accident and incident investigation. This evaluation aids in establishing or enhancing a safety oversight system through legal provisions, regulations, policies, and procedures.

This working paper will present the PNG AIG's Effective Implementation and Capabilities, as evaluated in the recent ICAO Full Scope USOAP Audit.

**1. INTRODUCTION**

1.1 As an independent accident/incident investigation authority, how can we best measure our preparedness to respond to an accident/incident, and conduct a safety investigation to uncover safety issues, while maintaining compliance with ICAO Standards and Recommended Practices (SARPs).

1.2 In 2023, the Independent State of Papua New Guinea (PNG) underwent a full-scope ICAO Universal Safety Oversight Audit Programme (USOAP) audit, achieving an Effective Implementation score of 89.1% in AIG. This represents a significant improvement from the 26.76% score in the previous 2009 audit.

**2. DISCUSSION**

**2.1 PNG AIG's Preparation Phase for the 2023 ICAO Audit**

2.1.1 In preparation for the 2023 ICAO USOAP Audit, PNG utilized the Protocol Questions and their associated guidance materials for the AIG audit area to show compliance with ICAO SARPs.

2.1.2 During this process, several areas needing improvement, appropriate documentation, and coordination efforts were identified to bolster PNG's adherence to ICAO SARPs. These areas were:

- *Amendment of the Policy & Procedures Manual (Fifth Edition).*
- *Upkeep of filing of investigation and training files.*

- *Coordination with other organizations and agencies to establish MOUs to enhance PNG's capabilities.*
- *Coordination with the civil aviation stakeholders, particularly the regulator, to establish a unified procedure for the receipt of ICAO Annex amendments and subsequent legal and procedural amendments.*
- *Identify the technical needs of the AIC and establish a pool of experts to assist during investigations on a case-by-case basis.*
- *Ministerial directive from the Minister for Transport and Civil Aviation expressly directing the AIC to comply with the SARPs of ICAO Annex 13 relating to coordination and cooperation with other States in accident investigations as required, by reference.*

2.1.3 Additionally, PNG AIG's capabilities assessed during the ICAO audit included:

- *A chip-level flight data recovery laboratory,*
- *An engineering workshop for evidence analysis,*
- *Drone technology for air and underwater investigations,*
- *Field equipment for both underwater and overwater work,*
- *Suitable PPE,*
- *An up-to-date State Safety Database,*

## 2.2 **Audit Areas**

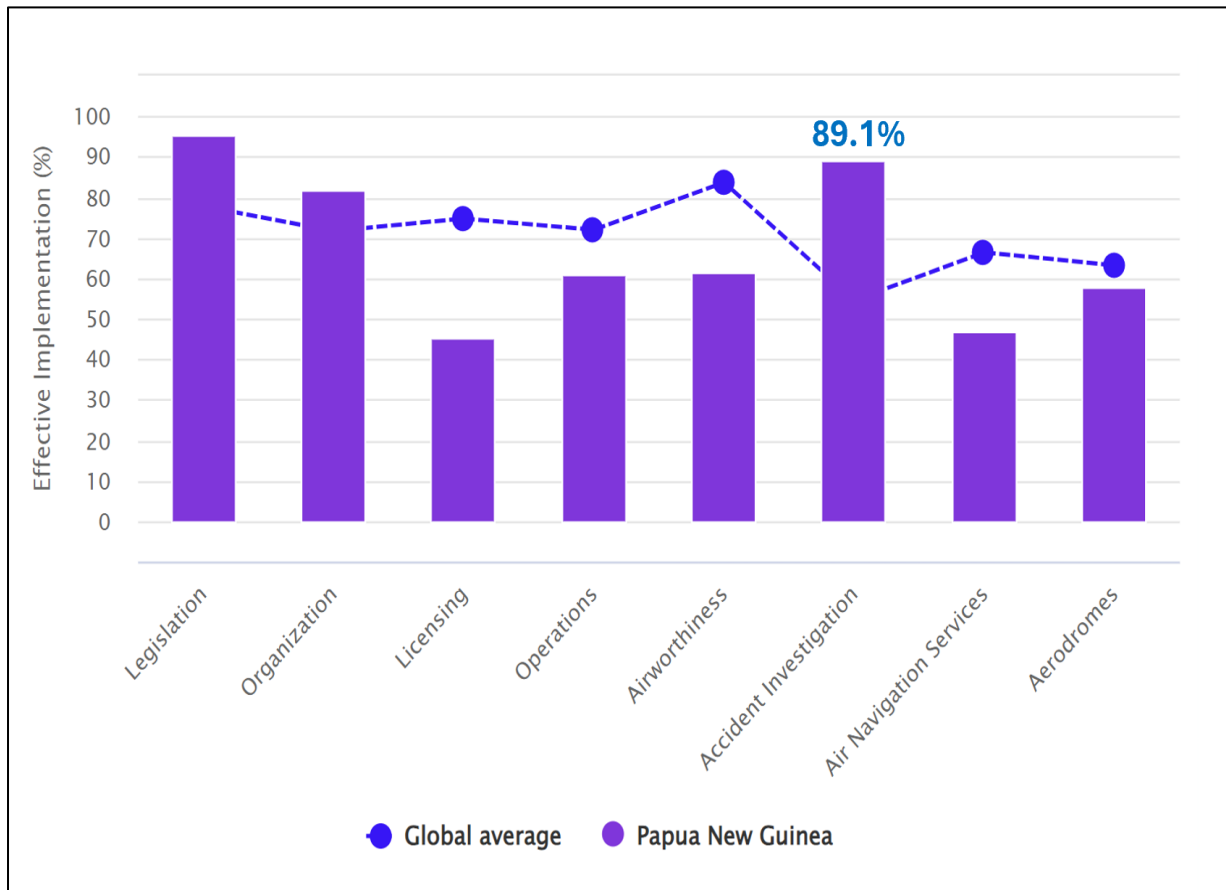
2.2.1 The Accident Investigation Commission, a mandated authority in PNG for AIG, facilitated the AIG Audit Area of the 2023 ICAO Audit. The applicable critical elements for the AIG audit area were:

- *CE-1 – Primary aviation legislation*
- *CE-2 - Secondary aviation legislation*
- *CE-3 – State systems and functions*
- *CE-4 – Qualified technical personnel*
- *CE-5 – Technical guidance, tools, and provisions of safety-critical information*
- *CE-8 – Resolution of Safety issues*

## 2.3 **2023 ICAO Audit Result**

2.3.1 The Final Report of the ICAO audit highlighted a significant improvement from the last Full Scope Audit in 2009, with the AIG audit area achieving an effective implementation score of 89%. This progress is largely attributed to the efforts in enhancing the State's AIG performance and compliance with ICAO SARPs.

2.3.2 PNG's Effective Implementation (%) in AIG.



## 2.4 Corrective Action Plan

2.4.1 During and after the audit, the following deficiencies in the State's AIG area were identified with subsequent corrective actions taken and corrective action plans established:

Critical Element	Total PQs	Sat PQs	Non-Sat. PQs	Area of Concern (Non-Sat.)	Remarks / Corrective Action
CE-1	8	5	3	Non-disclosure of CVR recordings and airborne image recordings	Amend the current primary aviation legislation (Civil Aviation Act) to: <ul style="list-style-type: none"> <li>Expressly state the organizational independence of the AIC by ICAO Doc 9756 Part I, Section 2.1.17</li> <li>Ensure that CVR, Airborne Image Recorded data, and other investigation records required to be protected under ICAO Annex 13 Para 5.12 are protected perpetually under the Act for use only for safety improvement purposes</li> <li>Ensure the non-disclosure of investigation records (other than CVR recordings, airborne image recordings, and transcripts from such recordings) are protected perpetually under the Act for use only for safety improvement purposes.</li> </ul> Plan: Establish Standalone Transport Safety Act.
				Non-disclosure of non-disclosure of investigation records (other than CVR recordings, airborne image recordings)	
				Establishment of an independent accident investigation authority	
CE-2	12	10	2	Transposition of provisions of Annex 13 into its legal framework	Amend the current primary aviation legislation (Civil Aviation Act) to: <ul style="list-style-type: none"> <li>Transpose the most recent amendment of ICAO Annex 13.</li> <li>Implement existing procedures for amendment of the Civil Aviation Act.</li> </ul> Plan: Establish regulations for the AIC
				Amendment of its accident and serious incident investigation enabling regulations and national standards	
CE-3	9	6	3	Reporting structure that ensures independence	Amend the current primary aviation legislation (Civil Aviation Act) to capture the reporting structure that ensures independence
				Staffing Need Methodology	Establish a mechanism to identify the need for staffing.
				Assistance to aircraft accident victims and their families	Establish a system for assisting aircraft accident victims and their families
CE-4	4	4	0	Not applicable	All satisfactory
CE-5	41	40	1	Adoption of the definitions listed in Chapter 1 of Annex 13	Amend the Civil Aviation Act to adopt the definitions listed in Chapter 1 of Annex 13.
CE-8	9	9	0	Not applicable	All satisfactory
Total	83	74	9		

2.4.2 Most of the ICAO findings for the AIG audit area that arose from the 2023 ICAO USOAP Audit were related to CE-1: primary legislation, and CE-2: specific operating regulations. PNG will address these issues by amending the current Civil Aviation Act as an interim solution. At the same time, the AIC will work towards establishing an independent Transport Safety Investigation Act.

### **3. ACTION BY THE MEETING**

3.1 The Meeting is invited to note the experiences shared by PNG, which have significantly enhanced its investigation preparedness and improved its AIG effective implementation score.

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