



International Civil Aviation Organization
Asia and Pacific Office

**Thirteenth Meeting of the Asia Pacific Accident Investigation Group
(APAC-AIG/13)**

(New Delhi, India, 30-31 October 2025)

Agenda Item 3: Update on ICAO AIG-related requirements and activities

**ADDRESSING SYSTEMIC CHALLENGES IN ACCIDENT AND INCIDENT
INVESTIGATION (AIG) OVERSIGHT CAPABILITIES IN THE ASIA PACIFIC
REGIONAL AVIATION SAFETY PLAN (AP-RASP) 2026-2028**

(Presented by Thailand and the Secretariat)

SUMMARY

Recent ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) data show that Accident and Incident Investigation (AIG) is the lowest-scoring safety oversight component in the Asia Pacific (APAC) region. Key deficiencies include insufficient qualified technical personnel (AIG/CE-4) and the absence of an independent Accident Investigation Authority (AIA).

This paper highlights systemic organizational challenges affecting safety oversight and proposes targeted regional actions to strengthen AIG capabilities, enhance the effectiveness of safety oversight, and improve overall regional safety performance. These priorities will be addressed in AP-RASP 2026–2028 through specific goals, targets, and coordinated regional initiatives aligned with the ICAO Global Aviation Safety Plan (GASP) and commitments under the Beijing and Delhi Ministerial Declarations.

1. INTRODUCTION

1.1 The Global Aviation Safety Plan (GASP) establishes the global framework for aviation safety, defining goals, indicators, and targets to enhance safety oversight and promote continuous improvement. The Asia Pacific Regional Aviation Safety Plan (AP-RASP) adapts these global objectives into regional priorities and actionable strategies to strengthen safety oversight capabilities across the Asia Pacific (APAC) region.

1.2 The Asia Pacific Ministerial Conference on Civil Aviation, through the Beijing Declaration and the Delhi Declaration, reflects high-level political commitments to prioritize aviation safety. These declarations emphasize effective safety oversight, robust safety management, transparent safety information sharing, fostering a positive safety culture, and progressively improving safety oversight capabilities to meet or exceed the global average Universal Safety Oversight Audit Programme (USOAP) Effective Implementation (EI) scores.

1.3 In alignment with these commitments and the GASP framework, the AP-RASP 2026–2028 leverages data from the USOAP Continuous Monitoring Approach (CMA) to assess regional safety oversight capabilities. As of July 2025, the APAC region’s overall EI score is 66.60%, below the global average of 70.30%. Analysis reveals persistent systemic and organizational challenges, particularly in staff competence, resource allocation, and institutional frameworks, hindering effective safety oversight.

1.4 Deficiencies in specific ICAO Critical Elements (CEs) and their corresponding Audit Areas (AAs) highlight these systemic issues. Data analyzed for the AP-RASP 2026–2028 identifies Accident and Incident Investigation (AIG) as the region’s most critical challenge, with an EI score of 49%, significantly lower than the next lowest area, Aerodromes and Ground Aids (AGA), at 62%.

1.5 Systemic deficiencies in AIG capabilities constrain the ability of States to meet their safety oversight obligations. An independent investigation system is fundamental to an effective State Safety Programme (SSP) implementation, as it enables the identification of safety deficiencies and the development of preventive measures. Addressing these gaps is also essential for States in APAC in achieving the Global Aviation Safety Plan (GASP) target of 75 per cent Effective Implementation (EI) by 2028.

1.6 Accordingly, the AP-RASP 2026–2028 aims to address these AIG deficiencies through specific regional targets and coordinated actions to strengthen AIG structures, build sustainable investigation capacity, and promote effective learning from safety occurrences across the region.

2. DISCUSSION

2.1 Analysis of USOAP CMA data for the APAC region identifies Accident and Incident Investigation (AIG) capabilities as the most critical challenge in the regional safety oversight framework. A review of the lowest-scoring Priority Protocol Questions (PPQs), as illustrated in the regional heat map (Figure 1), reveals that AIG components dominate the region’s deficiencies, reflecting systemic shortfalls across multiple Critical Elements (CEs), rather than isolated gaps in individual States.

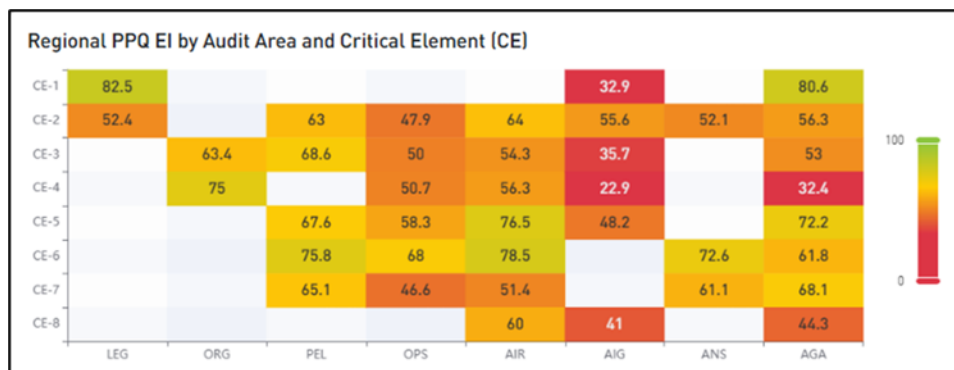


Figure 1: Regional PPQ Heat Map

- The lowest-scoring PPQ regionally is AIG/CE-4 (Aircraft Accident and Incident Investigation - Qualified Technical Personnel), aligning with the global priority in the GASP 2026–2028, which highlights insufficient qualified personnel in the AIG domain.
- The third lowest-scoring PPQ, following AGA/CE-4, is AIG/CE-1 (Aircraft Accident and Incident Investigation - Primary Aviation Legislation), indicating a

need for States to strengthen legislative frameworks governing accident and incident investigations to align with ICAO Annex 13 and related guidance.

- c) These weaknesses are further underscored by the fourth lowest EI score in APAC under AIG/CE-3 (Aircraft Accident and Incident Investigation - State Civil Aviation System and Safety Oversight Functions).
- d) AIG/CE-8 (Aircraft Accident and Incident Investigation - Resolution of Safety Issues), the region's fifth lowest-scoring PPQ, highlights shortfalls in the effective management and resolution of safety recommendations and deficiencies identified through the investigation process.

2.2 Analysis of the Priority Protocol Questions (PPQs) under AIG/CE-3 (Table 1) reveals specific challenges:

- a) PQ 6.113 addresses the sufficiency of AIG personnel (a key challenge discussed in 2.1(a)).
- b) PQ 6.101 highlights the challenge faced by APAC States in establishing an independent Accident Investigation Authority (AIA). Effective CE-3 implementation (State Civil Aviation System and Safety Oversight Functions) relies on robust CE-1 (Primary Aviation Legislation). However, as noted in 2.1(b), deficiencies in CE-1 across APAC States impede an effective independent AIA, necessitating comprehensive legislative and institutional reforms.

PQ	Questions
6.101	Has the State established an investigation authority with a clear and documented structure and in a manner that ensures independence from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation?
6.113	Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

Table 1: PPQs of AIG/CE-3

2.3 The lack of institutional independence remains a significant barrier to improving AIG capabilities. Recent surveys by the APAC AIG indicate that only approximately 40% of APAC States/Administrations have established a fully independent AIA. This objective, carried over from the AP-RASP 2023–2025 and reinforced by the APAC Ministerial Declaration, underscores the ongoing challenge and the need for sustained focus in the AP-RASP 2026–2028 cycle.

2.4 To address critical deficiencies identified in both personnel capacity (CE-4) and institutional independence (independent AIA), the AP-RASP 2026–2028 aims to strengthen AIG capabilities across the region by setting the following targets:

- a) [Target 2.2] By 2028, all APAC States shall improve their Effective Implementation (EI) scores for qualified technical personnel (CE-4) in the area of aircraft accident and incident investigation (AIG) to at least the baseline global average.

- b) [Target 2.4] By 2028, at least 70 per cent of APAC States shall establish an independent AIA in accordance with ICAO Annex 13 provisions.

Note: Although AIG/CE-8 (Resolution of Safety Issues) is ranked as a top five deficiency (see 2.1(d)), the AP-RASP 2026–2028 prioritizes the foundational issues of personnel competency (CE-4) and institutional independence (CE-1/CE-3). Strategies to address CE-8 will be handled through regional information-sharing and best-practice initiatives.

2.5 Other Regional Targets that are relevant to AIG include:

- a) Goal 3 Establish and manage State safety programmes (SSPs)
- i. [Target 3.1] By 2026, all APAC States to assess the level of implementation of their SSP
 - ii. [Target 3.2] By 2028, all APAC States to establish an SSP
- b) Goal 4 Increasing Regional Collaboration
- i. [Target 4.1] By 2026, the APAC region to identify APAC States that need assistance to address highest priority safety issues based on their effective Implementation (EI) Groups:
 - Group 1: EI < 50 %
 - Group 2: 50 % < EI < 75 %
 - ii. [Target 4.2] By 2028, the APAC region to facilitate the required assistance to the APAC States as identified in Target 4.1 to address the highest priority safety issues
 - iii. [Target 4.4] By 2028, RASG-APAC to increase the percentage of States actively leading RASG activities

2.6 AP-RASP 2023 – 2025 already established initiatives related to increasing AIG personnel competency and SSP implementation, as outlined in the Terms of Reference of the APAC-AIG (see Appendix) and monitored through AIG Yearly Work Programme, AP-RASP 2026–2028 proposes additional regional strategies to complement and be streamlined with existing initiatives in achieving the targets outlined in 2.4 and 2.5:

- a) Support the development of a standardized regional training programme for AIG personnel.
- b) Implement targeted training and capacity-building activities based on identified needs and priorities.
- c) Provide technical assistance to support the establishment and strengthening of independent AIA.
- d) Promote regional information-sharing and collaborative investigation practices through Asia Pacific Regional Aviation Safety Group (RASG-APAC) and ICAO platforms.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) Note the systemic challenges, targets, and proposed strategies in AIG areas identified for the AP-RASP 2026-2028;
- b) Discuss potential regional initiatives and support mechanisms to strengthen AIG capabilities; and
- c) Facilitate coordination and resource allocation among APAC States to achieve the established targets.

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APPENDIX

Excerpt from APAC-AIG Terms of Reference

3.2 The APAC-AIG will accomplish the following:

- Develop and promote a regional accident/incident investigation cooperative framework in the form of the *Asia Pacific Code of Conduct on Cooperation Relating to Civil Aviation Accident/ Incident Investigation*;
- Develop and maintain a *Database of APAC Accident Investigation Authorities* in order to strengthen coordination between States/Administrations in accident/incident investigation;
- Conduct surveys of accident investigation training needs in the Asia Pacific region and identify States/Administrations and international organizations able to provide that training as required;
- Disseminate accident/incident investigation related communications from ICAO and other regions to States/Administrations in the Asia Pacific region; and
- Support the ICAO APAC Office in its technical assistance to States/Administrations in the area of accident/incident investigation and align the objectives and roadmap of AP-RASP.

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