

**60th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

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AGENDA ITEM 3: AVIATION SAFETY

**STRENGTHENING REGIONAL AVIATION SAFETY THROUGH
THE ASEAN FOREIGN OPERATOR SAFETY ASSESSMENT
(AFOSA) PROGRAMME**

(Presented by Singapore, co-sponsored by Indonesia, Lao PDR, Malaysia, Myanmar, Thailand
and Vietnam)

SUMMARY

This paper discusses ASEAN Members States' experience in implementing a harmonised regional approach for surveillance of foreign operators through the ASEAN Foreign Operator Safety Assessment (AFOSA) Programme. Key elements of this ASEAN initiative are elaborated to illustrate how a collaborative ramp inspection framework can strengthen regional aviation safety, through data sharing, technical exchanges and pooling of inspector training resources. Safety insights from AFOSA's ramp inspection data are also highlighted for States' consideration.

STRENGTHENING REGIONAL AVIATION SAFETY THROUGH THE ASEAN FOREIGN OPERATOR SAFETY ASSESSMENT (AFOSA) PROGRAMME

1. INTRODUCTION

1.1 The aviation sector of the Association of Southeast Asian Nations (ASEAN) has experienced remarkable growth over the past decade, increasing interconnectivity between ASEAN Member States and driving both economic development and tourism. This growth trajectory is set to continue, with the International Air Transport Association (IATA) forecasting passenger volumes in the Asia-Pacific Region to triple by 2043. Such expansion brings significant challenges in maintaining a high consistent level of operational safety across the region, including in the oversight of foreign aircraft operations.

1.2 ICAO Annex 6 Part 1 requires States to establish a surveillance programme for foreign operators operating into their territory. While States can develop and implement their own surveillance programme tailored to its own needs and circumstances, there are advantages in neighboring States adopting a common surveillance programme. Such a common surveillance programme would enable States to exchange safety insights on common foreign operators, tap on common training resources for their inspectors, and share the workload in developing and maintaining surveillance protocols and ramp inspection standards. A common surveillance programme could hence provide enhanced surveillance of foreign operators.

2. BACKGROUND OF AFOSA

2.1 Established in 2017, AFOSA is an ASEAN initiative that standardises foreign aircraft safety inspections across ASEAN Member States. Drawing from international guidance and best practices, such as ICAO Document 8335 and the EU Safety Assessment of Foreign Aircraft (SAFA) Programme, AFOSA aims to enhance safety oversight of foreign operators in the region through two key mechanisms: enhancing Member States' capabilities in evaluating safety of foreign aircraft operations, and developing a standardised system for collecting, sharing, and analysing ramp inspection data.

2.2 The AFOSA programme is managed by a Committee comprising National Coordinators from each ASEAN Member State. One National Coordinator is appointed as Lead to oversee programme development and implementation. The Committee drives programme harmonisation, data consolidation, and safety analysis, while organising regular technical exchanges and inspector training among Member States.

3. DISCUSSION

3.1 AFOSA encountered several challenges in its formative years, mainly in standardising inspection protocols, establishing initial training for inspectors to perform AFOSA ramp inspections, and in creating a tool for safety data collection and analysis of ramp inspection reports. AFOSA adopted three key strategies to overcome these challenges.

Regional Collaboration and Multi-Level Engagement

3.2 The AFOSA programme operates through a comprehensive multi-tiered engagement framework among ASEAN Member States. At the strategic level, the progress of the programme is overseen by the ASEAN Transport Ministers Meeting and Senior Transport Officials Meeting. The AFOSA Committee, comprising technical experts, steers operations through annual National Coordinator (NC) Meetings. Technical collaboration between Member States takes place on dedicated platforms including sharing sessions, the Inspector Attachment Programme (IAP), and AFOSA Ramp Inspection Weeks. The AFOSA Ramp Inspection Week has been particularly useful for the programme to maintain its momentum. Launched in May 2024, Member States conduct simultaneous foreign aircraft ramp inspections during Ramp Inspection Week, culminating in a collective debriefing to share

experiences and strengthen technical knowledge amongst inspectors from various Member States. The initiative was well received, and the frequency of the Ramp Inspection Week has been increased to twice annually.

Capacity Building Through Regional Training

3.3 The IAP was established as an initial training programme for all AFOSA ramp inspectors. Hosted annually by a volunteer Member State, the training programme has helped ASEAN Member States steadily increase their pool of AFOSA ramp inspectors. To enhance training efficiency, the IAP was enhanced in 2023 with the introduction of a train-the-trainer component. Under this new framework, nominated inspectors undergo on-the-job training to become AFOSA IAP instructors. Once qualified, these instructors can deliver the training in their own State, reducing the costs associated with sending inspectors for overseas training. This also allows Member States to establish sustainable internal training capabilities.

Digitalisation and Data Sharing

3.4 Beyond an online report submission system, AFOSA accommodates digital transformation initiatives by ASEAN Member States, including their independently developed inspection tools for ramp inspection data collection. For instance, CAA Malaysia developed its own Ramp Inspection (RAIN) application to facilitate data collection for both their domestic and foreign operator inspections. While ASEAN Member States may develop their own digital tools to support ramp inspections, the ramp inspections are still completed using the same protocols and standards. This flexibility facilitates data sharing and consolidation of ramp inspection information, which allows for visualisation dashboards to still be achievable despite the use of different data collection tools. Insights are disseminated to AFOSA National Coordinators.

3.5 Data sharing was envisaged during the formation of AFOSA when in 2017, ASEAN Member States adopted terms of references to establish protocols for confidential data sharing. The contribution of ramp inspection data by each Member State enables safety trend analysis and data-driven decision making. The collective dataset provides valuable insights, such as the identification of potential areas of safety concerns in relation to foreign operators serving multiple ASEAN destinations, which a Member State may not be able to identify from its own set of data. Regular analysis of this consolidated data at AFOSA National Coordinators' meetings guide Member States in the planning of surveillance activities in their own territories.

3.6 With these three strategies, AFOSA has progressed through the years and enhanced cooperation among Member States. The evolution of AFOSA demonstrates ASEAN's commitment to continuous improvement in foreign operators' surveillance.

4. SAFETY INSIGHTS FROM AFOSA PROGRAMME

4.1 Between 2023 to 2024, Member States completed 970 inspections of 220 foreign operators from 69 States under the AFOSA programme. This includes 131 operators from 25 APAC States. The proportion of completed inspections on APAC and non-APAC operators is shown in Chart 1.

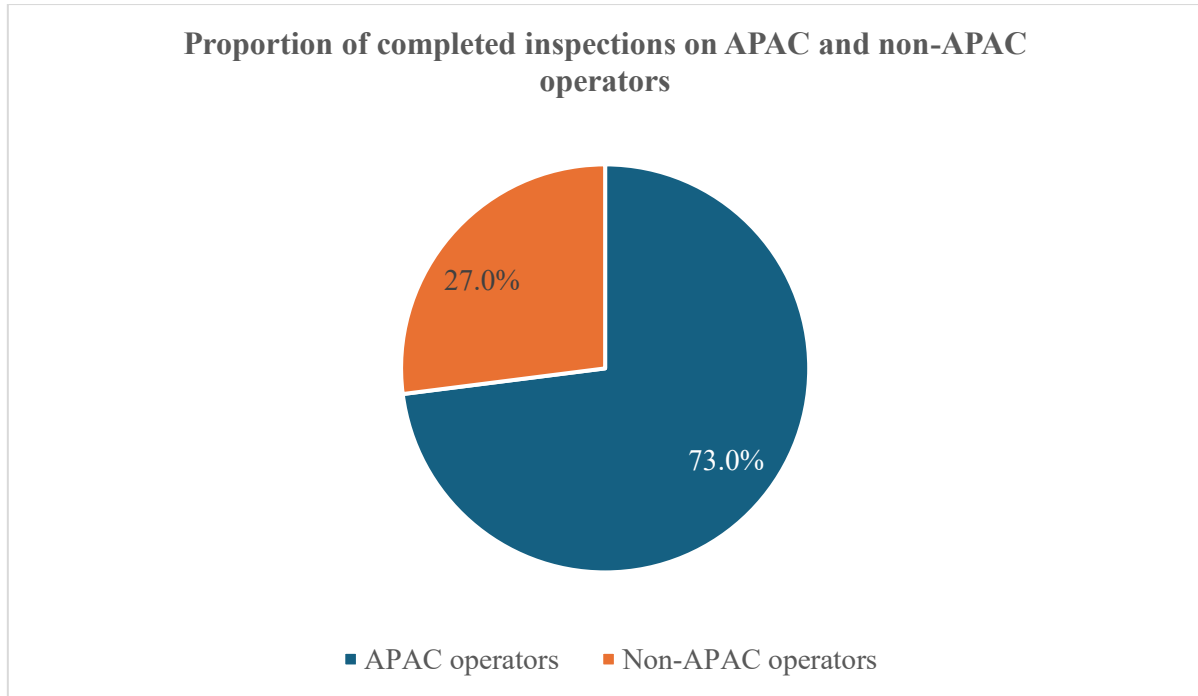


Chart 1 – Proportion of completed inspections on APAC and non-APAC operators

4.2 Under the AFOSA programme, findings are categorised into observations, minor, significant and major, depending on the severity of the findings. The findings per inspection in each category for APAC and non-APAC operators are shown in Chart 2.

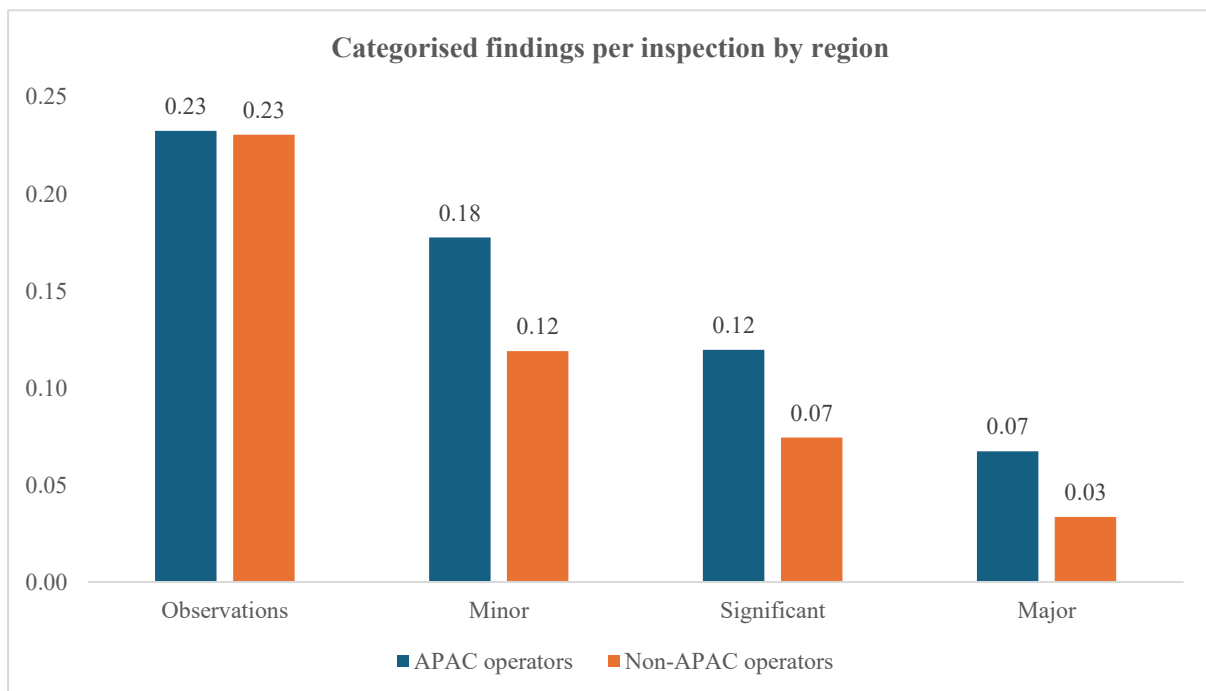


Chart 2 – Categorised findings per inspection by region

4.3 From the chart, we can see that APAC operators generally have more findings per inspection in minor, significant and major categories, compared to non-APAC operators. For APAC operators, the key findings were in the following areas:

- a) Flight Deck
 - Defect notification and rectification e.g. Maintenance actions performed but not recorded.
 - Equipment e.g. Terrain database outdated and significant changes for the authorised operation area(s) within dispatch limits /conditions.
- b) Cargo
 - Cargo stowage e.g. Cargo found incorrectly secured and restrained in all directions such as net, straps and lock assemblies missing or inappropriately installed.
 - General condition of cargo compartment e.g. Equipment installations not in compliance with applicable requirements.
- c) Cabin Safety
 - General condition of cabin e.g. Damaged/missing covers exposing sharp edges of cabin items and unserviceable brakes of service carts.
 - Access to emergency exit e.g. Floor/carpet in poor condition affecting rapid evacuation, and cabin crew seat unable to retract automatically impeding access to emergency exit.
- d) Aircraft External Condition
 - Doors and hatches e.g. Door operation safety instructions missing/unreadable.

4.4 States should consider enhancing their safety oversight regime to focus on the areas identified by the AFOSA programme above.

5. ACTION BY THE CONFERENCE

5.1 The Conference is invited to:

- a) Note that AFOSA implementation has enabled ASEAN Member States to enhance regional aviation safety through harmonised ramp inspections and data sharing on foreign operators;
- b) Consider how AFOSA implementation has raised inspector training capacity among ASEAN Member States through technical exchanges and pooling of training resources; and
- c) Review the key safety insights identified by AFOSA and for Asia-Pacific States/Administrations to consider enhancing their safety oversight regime on the areas of focus for its own operators.

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