



International Civil Aviation Organization
Asia and Pacific Office

Fourteenth Meeting of the Regional Aviation Safety Group – Asia and Pacific Regions (RASG-APAC/14)

(Bangkok, Thailand, 28-29 November 2024)

Agenda Item 2: Updates from ICAO, APRAST and APAC-AIG outputs for RASG-APAC consideration and approval

UPDATES FROM THE SAFETY ENHANCEMENT INITIATIVES WORKING GROUP (SEI WG)

(Presented by APRAST's SEI WG)

SUMMARY

Since the RASG-APAC/13 meeting in December, the SEI WG has met in-person and virtually to accomplish a large scope of work. Much progress has been made in the following areas:

1. Establishing a mechanism for addressing global high-risk categories such as Runway Safety (RS);
2. Introducing new concepts to share information such as focused discussions and regional safety advisories; and
3. Revising SEI Outputs for Currency and Validity.

1. INTRODUCTION

1.1 The objective of the Safety Enhancement Initiatives Working Group (SEI WG) as stated in the Terms of Reference (ToR), is to assist in the development, implementation, and review of SEIs to reduce aviation risks. These SEIs could be established based on the analysis of regional data, international initiatives, or risks and issues identified through the USOAP CMA process. Notably, the identified SEIs should be prioritised to ensure that those that have the greatest potential for reducing safety risk are examined first.

1.2 At the 13th Meeting of the RASG-APAC in December 2023, the members decided to empower the APRAST and its Subgroups to adopt certain Decisions and Conclusions to simplify the processes and shorten development time for all APRAST work outputs. APRAST can adopt, inter alia, Decisions and Conclusions related to “all technical and operational aspects of APRAST work within its TORs including the development of regional guidance material for publication in ICAO APAC website” (ref. RASG-APAC Procedural Handbook – 3rd edition, Appendix B, section 4.0).

2. DISCUSSION

2.1 Since the RASG-APAC/13 Meeting in December 2023, the SEI WG has met twice (2) in-person and held four (4) virtual meetings to accomplish the scope of ongoing work defined in the ToR and the Work Programme. The progress made in the recent year is highlighted in the following areas below.

Establishing a mechanism for addressing global high-risk categories such as Runway Safety (RS)

2.2 As agreed during the SEI WG Breakout Session at the APRAST/21 meeting, the SEI WG agreed to pursue a new methodology in addressing RS to complement existing safety outputs found on the ICAO website. Increased focus on the G-HRCs of Runway Incursion (RI) and Runway Excursion (RE) is pertinent given the growing occurrence rate of taxi errors which are precursor events to runway incursions highlighted by Singapore at APRAST/20, and in light of a runway incursion and subsequent collision that occurred at Haneda Airport in Tokyo, Japan, which resulted in five fatalities on 2 January 2024.

2.3 In addition, this effort supports a recent recommendation made by the APRAST's Safety Reporting and Programme Working Group (SRP WG). According to the SRP WG, the APAC region averages 2.6 RI accidents / serious incidents per year between 2017 and 2022, making it the highest region together with EURNAT with RI events. The SRP WG identified primary causal factors such as communications, loss of position and traffic awareness by pilot and controllers, issues concerning ATC training, and lack of Flight Deck Crew Resource Management. The SRP WG highlighted that 40 percent of APAC States currently have low Effective Implementation (EI) scores with respect to the implementation of the basic building blocks for aerodrome and ground aides in at least of one the following areas: aerodrome design, aerodrome maintenance and/or operational area management.

2.4 The Global Action Plan for the Prevention of Runway Incursions (GAPPRI), published in 2024 under the framework of the ICAO Global Aviation Safety Plan and Global Aviation Runway Safety Action Plan, was chosen as suitable reference material for this work. The GAPPRI report part 1 contains 127 actionable recommendations for States, airport operators, air navigation service providers, aircraft operators, manufacturers, and the research community. These tasks needed to be prioritised to ensure the most effective implementation of fundamental safety recommendations. The SEI WG adopted and defined three prioritisation criteria – Essential, Intermediate/Mid-term, and Advanced/Long Term.

2.5 A more granular implementation tracking template was developed to understand the regional implementation status of the GAPPRI recommendation and provide feedback on areas where further resources may be required. This implementation tracking template is organized by the three prioritization criteria and intended to supplement the current APRAST monitoring tool.

2.6 The implementation tracking template will be distributed by State Letter by the end of the calendar year and completion in accordance with a five-month timeline. The preliminary results of each area will be collated and discussed during APRAST/23 for the consideration of the APRAST plenary (ref. Decision APRAST 22/2).

Introducing new concepts to share information such as focused discussions and regional safety advisories.

2.7 The exchange of safety data and safety information at the regional level through collaboration between State and industry enables the validation of existing safety risks, detection of emerging hazards and risks, and facilitates effective and timely action.

2.8 The Asia Pacific-Regional Aviation Safety Plan (AP-RASP) introduced action item A.IV.4 to establish a mechanism for regional aviation safety data collection and sharing. A working group was formed to develop a proposal for this initiative and has proposed two initiatives to enhance aviation safety data sharing: (1) a focused discussion (potentially evolving into a "Safety Day") at APRAST meetings to address key regional safety risks, and (2) enhancing the APAC Aviation Safety Report to incorporate more diverse data/information sources.

2.9 Recognizing the proposal of the AP-RASP working group, the SEI WG introduced a "focused discussion" during the APRAST/22 plenary to facilitate active participation by members and partners. It was intended to emphasize the SEI WG's ongoing effort to share safety information with States/Industry via multiple communication mediums that don't require the full process of SEI development.

2.10 This focused discussion addressed the impacts of safety culture in relation to a recent OEM analysis on the difference between hard landings and firm landings and highlight the unintended safety hazards stemming from hardline organizational policies that put an overemphasis on preventing them. Subsequently, pilots are being penalized by the data being collected. This excessive focus, coupled with the fear of punitive action, has led to longer landing distances and a heightened risk of abnormal runway contact and runway excursion.

2.11 Boeing presented its analysis on hard landings versus firm landings and the SEI WG Industry co-chair presented on 'just and fair culture.' The Meeting, along with 148 online participants, actively engaged in the half-day focused discussion to ask questions and exchanged ideas on the concepts and risks with the goal of enhancing aviation safety in the region. The Meeting also shared their perspectives, and views on the impact of a safety culture to mitigate a hard landing that may lead to runway excursion risk or abnormal runway contact.

2.12 Due to its success, the APRAST agreed to have focused discussions in future plenary sessions to highlight specific safety topics and encourage open discussion. The States and the working groups were requested to suggest topics for future focused discussions and the ICAO Secretariat may choose to have the discussion during the plenary session or individual working group sessions.

2.13 The exchange of safety data and safety information cannot be limited to certain individuals in certain meetings. In addition to focused discussions, the SEI WG co-chairs set a vision to complement the SEI development process by brainstorming multiple communication mediums to share safety information for safety matters not requiring a full 10-step process. The goal of these new mediums is to have a mechanism that allows for timely dissemination of critical safety information and/or highlight specific mitigations found in existing guidance such as elements found in existing SEI safety outputs.

2.14 At APRAST/22, the APRAST adopted the concept of a RASG-APAC Safety Advisory (RSA) as a new communication mechanism to complement existing SEI safety tools and allow for timely dissemination of critical safety information and/or highlight specific mitigations found in existing SEI guidance. The APRAST members agreed to recommend ToR changes to the RASG-APAC to institutionalize such a mechanism. By formalising the RSA concept within the RASG-APAC ToR, all RASG-APAC contributing bodies would benefit by having this communication option for the region. (ref. Decision APRAST 22/4 and RASG-APAC/14 Working Paper, *Establishment of a RASG-APAC Safety Advisory*).

Revising SEI Outputs for Currency and Validity

2.15 Runway Safety (RS) is a high-risk category of occurrence identified in the Global Aviation Safety Plan and the Asia Pacific Regional Aviation Safety Plan. To mitigate the risk of RS in commercial aviation such as runway excursions (RE), RASG-APAC/4 endorsed guidance material and training for aerodrome operators.

2.16 The SEI outputs are continuously reviewed for currency and validity by the APRAST's SEI WG. The SEI WG has completed its review of RE/7, *Guidance material and training program for runway pavement, maintenance and operations from aerodrome operator's perspective*, and RE/2, *Guidance material on Unstablized Approach*. Based on the feedback from the SEI WG members, the outputs of RE/7 and RE/2 are still considered current and valid for implementation. The champions of each SEI made revisions based upon the feedback of APRAST members.

2.17 The APRAST has approved the proposed output revisions, and the ICAO Regional Office will update the safety tool section of the ICAO APAC website (ref. Decision APRAST 22/3 and Decision APRAST 22/5)

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) Note the extensive work by the APRAST's SEI WG over the last year; and
- b) Inform their respective stakeholders of the SEI revisions for their implementation.

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