

International Civil Aviation Organization Asia and Pacific Office

# Twenty-fourth Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/24)

(Bangkok, Thailand, 01 to 05 December 2025)

Agenda Item 5: Presentations – State / Industry / ICAO

# TOWARDS A HARMONISED APPROACH TO LITHIUM-ION POWER-BANK CARRIAGE AND USE IN AIRCRAFT CABINS

Presented by Association of Asia Pacific Airlines (AAPA) and International Air Transport Association (IATA)

#### **SUMMARY**

This paper addresses the increasing risk of lithium-battery fires involving passenger power banks and the varying application of mitigation measures. Based on the increasing concerns on the carriage and use of power banks on board aircraft and the Hong Kong CAD APRAST/23 experience paper, it proposes coordinated regional guidance to align with ICAO Doc 9284 and recent ICAO RASG-APAC Advisory (June 2025). The paper seeks APRAST's endorsement to develop harmonised operational guidance under the SEI WG (OPS WG) to mitigate cabin fire risks and improve passenger communication consistency.

#### 1. INTRODUCTION

- 1.1 Recent power-bank-related fire events in the Region—including a ground hull loss and an in-flight overhead-bin fire—underscore the urgency of a harmonised regulatory response.
- 1.2 ICAO's APRAST APAC RASG Safety Advisory (June 2025) recommends that airlines, aerodromes, and CAAs review risks, align practices where practicable, enhance passenger awareness, and share lessons to support a harmonised, risk-based approach
- 1.3 While ICAO Doc 9284 provides baseline requirements, varying national and airline measures have created operational confusion and enforcement challenges.

### 2. DISCUSSION

- 2.1 **Current Landscape** Regional States (e.g. Korea, China including Hong Kong) have implemented additional measures restricting overhead-bin stowage and in-flight use.
- 2.2 **Safety Data** AAPA's 2025 survey with Airlines in the Asia Pacific region on Lithium Battery Regulatory Compliance and Implementation Challenges shows 100 % compliance with ICAO standards but wide procedural variation among airlines.

2.3 **Risks** – Variations in national and airline policies contribute to inconsistent passenger understanding and compliance, elevating the risk of lithium-battery fire incidents and triggering disruptive behaviour when expectations differ

#### 2.4 Recommended Harmonisation

- 2.4.1 Carriage only in carry-on baggage; compliance with ICAO and IATA watt-hour and quantity limits;
- 2.4.2 No stowage in overhead bins; keep on the person or in seat-pocket and easy-access locations to enable rapid intervention;
- 2.4.3 No inflight charging of power banks unless or until ICAO guidance advises otherwise;
- 2.4.4 Clear prohibitions should apply to damaged or swollen power banks, as well as to any units exceeding 160 Wh, in passenger baggage. Where appropriate or when future guidance so provides, more restrictive limits (e.g. lower watt-hour thresholds or quantity restrictions per passenger) may be applied in accordance with evolving international safety standards;
- 2.4.5 Common communication for passengers and crew procedures across States.
- 2.4.6 The latest IATA Dangerous Goods Regulations (DGR) provides a common baseline for operators, from which airlines may implement more stringent requirements, and may regularly review and update related safety risk assessments within their Safety Management Systems.
- 2.5 Alignment with ICAO and AP-RASP Supports AP-RASP 2026–2028 OPS WG actions on fire-smoke and emerging hazard mitigation.

#### 3. ACTION BY THE MEETING

- 3.1 The Meeting is invited to:
  - a) Note the increasing number of power-bank fire incidents and safety challenges;
  - Encourage States and ICAO APAC RO to coordinate development of harmonised technical, passenger-awareness guidance and outreach materials on carriage and usage of passenger power banks, reflecting knowledge of recent experience and aligned with ICAO deliberations;
  - c) Encourage States to widely share incident data and good practices through APRAST channels on related safety data and mitigations.