International Civil Aviation Organization

Thirteenth Meeting of Performance Based Navigation Implementation Coordination Group (PBNICG/13)

(Bangkok, Thailand, 14-16 October 2026)

Agenda Item 5: Review PBN Implementation and Operational Guidance Document

UPDATE ON THE GUIDANCE MATERIAL FOR GNSS RFI AND ASSOCIATED DATA LINK DISRUPTION COORDINATION AND REPORTING PROCEDURES VERSION 1.0

(Presented by Secretariat)

SUMMARY

This paper provides an update on the work of the Procedures for GNSS and Data Link Disruption Ad Hoc Group established by ATM/SG/12. It presents Version 1.0 of the draft Asia/Pacific Regional Guidance Material for GNSS RFI and Associated Data Link Disruption Coordination and Reporting Procedures.

1. INTRODUCTION

1.1 The Twelfth Meeting of the Air Traffic Management Sub-Group (ATM/SG/12) of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) established the Procedures for GNSS and Data Link Disruption Ad Hoc Group to collect and analyse data relating to Global Navigation Satellite System (GNSS) Radio Frequency Interference (RFI) and its associated data link disruption events. The key deliverable of the Ad Hoc Group was to develop harmonized regional procedures for reporting, coordination and information sharing.

1.2 The increasing reliance on GNSS-based navigation, surveillance and communication systems has heightened the vulnerability of aviation operations to interference. GNSS RFI events, including jamming and spoofing, have demonstrated the potential to simultaneously degrade multiple systems, affecting navigation performance, surveillance integrity, and data link operations.

1.3 Given the impact of such events on international civil aviation, a coordinated regional mechanism for detection, reporting, and response would be necessary to ensure the safety and efficiency of air navigation in the Asia and Pacific (APAC) region.

2. DISCUSSION

Progress of the Procedures for GNSS and Data Link Disruption Ad Hoc Group

2.1 Since its establishment in October 2025, the Ad Hoc Group has undertaken structured work in accordance with its Terms of Reference (TOR), starting from data collection, review of existing reporting practices, to the development of a harmonized regional framework.

2.2 The Ad Hoc Group started with members sharing their current reporting and coordination processes as well as GNSS RFI event data.

2.3 Based on the shared information on current reporting and coordination processes, the Ad Hoc Group then consolidated the best practices and lessons learnt to develop the draft regional guidance material with structured procedures encompassing detection, validation, reporting, coordination, mitigation, and post-event review.

2.4 IATA has published Global Navigation Satellite System (GNSS) Radio Frequency Interference Safety Risk Assessment for use by airlines and included as reference in this Guidance Material.

2.5 The work of the Ad Hoc Group concludes upon the adoption of the regional guidance material by ATM/SG/14.

2.6 Upon the publication of the guidance material on the ICAO APAC Office eDocuments webpage, States/Administrations and stakeholders are encouraged to apply the guidance material, as appropriate, to support harmonized reporting, coordination and information sharing relating to GNSS RFI and associated data link disruption events.

2.7 The ongoing collection, monitoring and analysis of GNSS RFI events in the APAC region will thereafter be undertaken under the Spectrum Review Working Group (SRWG) under the CNS SG, including its GNSS RFI Ad-hoc Expert Group, for continued analysis of GNSS RFI events for trends and maintain regional situational awareness.

Development of Regional Guidance Material

2.8 The draft Asia/Pacific Regional Guidance Material for GNSS RFI and Associated Data Link Disruption Coordination and Reporting Procedures (Version 1.0) provides a harmonized and practical framework to support regional management of GNSS interference events.

2.9 The material is intended as non-binding guidance for States, ANSPs, and aviation stakeholders, complementing existing ICAO Standards and Recommended Practices (SARPs) while integrating operational, technical, and regulatory considerations.

Planned Way Forward

2.10 The guidance material will be presented on APANPIRG and published on the ICAO APAC Office eDocuments webpage.

2.11 States/Administrations and stakeholders are encouraged to apply the regional guidance material, as appropriate, to support harmonized regional reporting and coordination arrangements relating to GNSS RFI and associated data link disruption events.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper

b) discuss any relevant matters as appropriate.

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