

**61ST CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGION**

*Kuala Lumpur, Malaysia
7 – 11 September 2026*

AGENDA ITEM 4: AIR NAVIGATION

**NATIONAL GOVERNANCE MECHANISM AND TECHNICAL
WORKING GROUPS IN SUPPORT OF THE GLOBAL AIR
NAVIGATION PLAN**

(Presented by Thailand)

INFORMATION PAPER

SUMMARY

This paper presents Thailand's National Airspace and Air Navigation Master Plan (NANP) and its three-tier national governance mechanism for implementation. The mechanism consists of the Civil Aviation Board at the policy level, the Sub-Committee on Airspace Management at the strategic level, and seven Technical Working Groups (TWGs) at the operational level. The seven TWGs cover: (1) Airspace Organization and Management; (2) Air Traffic Management; (3) Communication, Navigation, Surveillance and Spectrum; (4) Information Management; (5) Aerodrome; (6) Aeronautical Meteorological Service; and (7) Unmanned Aircraft System Integration. Together, these bodies drive Thailand's systematic implementation of the ICAO Global Air Navigation Plan (GANP), Asia/Pacific Seamless ANS Plan and ASEAN Air Navigation Service Master Plan.

NATIONAL GOVERNANCE MECHANISM AND TECHNICAL WORKING GROUPS IN SUPPORT OF THE GLOBAL AIR NAVIGATION PLAN

1. INTRODUCTION

1.1 The international Civil Aviation Organization (ICAO) has established the Global Air Navigation Plan (GANP, DOC 9750) as the overarching strategic framework for developing and implementation of air navigation services (ANS) worldwide. The GANP employs the Aviation System Block Upgrades (ASBUs) as a performance-based planning methodology, enabling States to implement ANS improvements in a structured and interoperable manner.

1.2 At the Asia/Pacific regional level, the Asia/Pacific Seamless ANS Plan (APAC Seamless ANS Plan) has been developed under the auspices of ICAO to provide a coordinated framework for harmonizing air navigation services across the Asia/Pacific region. The APAC Seamless ANS Plan identifies regional performance objectives and implementation priorities that complement the GANP, promoting interoperability, seamless flight operations, and the progressive elimination of operational inefficiencies across Asia/Pacific airspace.

1.3 At the sub-regional level, ASEAN Member States have endorsed the ASEAN Air Navigation Service Master Plan, which further translates the objectives of the GANP and the APAC Seamless ANS Plan into ASEAN-specific priorities and implementation targets, considering the operational characteristics, traffic growth projections, and infrastructure capacities particular to the ASEAN region.

1.4 In fulfillment of its obligations as a Contracting State of ICAO and as a Member State of ASEAN, Thailand has developed its National Airspace and Air Navigation Master Plan (NANP). The NANP constitutes Thailand's national strategic roadmap for the systematic modernization of its airspace system and air navigation services, aligned with the GANP, the APAC Seamless ANS Plan, and the ASEAN Air Navigation Service Master Plan.

2. DISCUSSION

2.1 Thailand's National Airspace and Air Navigation Master Plan (NANP)

2.1.1. The NANP provides a comprehensive, long-term strategic vision for Thailand's national airspace system and air navigation services. It identifies strategic priorities, performance objectives, and implementation timelines across all functional ANS domains, structured in accordance with the performance-based and ASBU-aligned approach advocated by ICAO. Implementation progress is tracked against key performance indicators (KPIs) consistent with the GANP Performance Framework, enabling benchmarking at both the national and regional levels.

2.2 National Governance Mechanism

2.2.1 To ensure coherent policy direction, strategic coordination, and operational execution of the NANP, Thailand has established a three-tier national governance mechanism. The three tiers comprise: (a) the Civil Aviation Board at the policy level; (b) the Sub-Committee on Airspace Management at the strategic level; and (c) seven Technical Working Groups at the operational level. The following paragraphs describe the mandate and functions of each tier.

Tier 1 – Policy Level: Civil Aviation Board

2.2.2 The Civil Aviation Board constitutes the governance body for civil aviation in Thailand. At the policy level, the Board is responsible for establishing the strategic direction and overarching policy frameworks for national airspace management and air navigation services, approving the NANP and its revisions, and providing high-level guidance to subordinate bodies on matters of national and international significance. The Board's decisions set the policy boundaries within which all subordinate governance structures operate.

Tier 2 – Strategic Level: Sub-Committee on Airspace Management

2.2.3 The Sub-Committee on Airspace Management operates directly under the Civil Aviation Board at the strategic level. The Sub-Committee is responsible for translating the policy directives of the Board into strategic plans and operational frameworks, overseeing the progress and outputs of the seven Technical Working Groups, reviewing their periodic reports, and escalating significant issues to the Board as appropriate. The Sub-Committee serves as the primary coordination mechanism between policy intent and technical execution.

Tier 3 – Operational Level: Technical Working Groups

2.2.4 Seven Technical Working Groups (TWGs) operate under the authority of the Sub-Committee on Airspace Management. Each TWG is composed of subject matter experts drawn from relevant national agencies and is responsible for detailed planning, coordination, implementation, and monitoring of ANS modernization activities within its respective functional domain. The mandate and scope of each TWG are described in the following paragraphs.

2.2.4.1 Airspace Organization and Management Technical Working Group (AOM TWG) - This TWG develops Thailand's national airspace system under the Flexible Use of Airspace (FUA) concept, establishing clear regulations, standards, and procedures for both navigational and special use airspace. The TWG periodically reviews and redesigns airspace structures to maximize operational efficiency and prepares the national airspace framework to accommodate emerging operations, including unmanned aircraft systems and flights above Flight Level 600.

2.2.4.2 Air Traffic Management Technical Working Group (ATM TWG) – This TWG develops capacity and management frameworks to accommodate growing air traffic volumes safely and efficiently. Its work promotes Collaborative Decision Making (CDM) among all relevant agencies, civil-military coordination, reduced aircraft separation, and the application of decision-support technologies and information systems. The TWG also develops contingency plans to sustain ATM service continuity under abnormal conditions.

2.2.4.3 Communication, Navigation Surveillance and Spectrum Technical Working Group (CNSS TWG) - This TWG develops CNS infrastructure to support national airspace management and ATM operations, with due regard for the cost-effectiveness of deployed technologies and aircraft avionics capabilities. The TWG also establishes mechanisms to manage cybersecurity risks and radio frequency interference, safeguarding the integrity and reliability of aviation CNS systems.

2.2.4.4 Information Management Technical Working Group (IM TWG) - This TWG develops information systems for flight operations and ATM in accordance with the System Wide Information Management (SWIM) concept, enabling seamless data exchange to support automated and advanced flight operations across all stakeholders.

2.2.4.5 Aerodrome Technical Working Group (AD TWG) - This TWG enhances aerodrome capacity in alignment with national airspace and air navigation development, through systematic capacity assessments, infrastructure improvement planning, and implementation of Airport Collaborative Decision Making (A-CDM). The TWG also develops ground facilities and navigation aids to accommodate growing air traffic demand.

2.2.4.6 Aeronautical Meteorological Service Technical Working Group (MET TWG) - This TWG improves the accuracy and timeliness of aeronautical meteorological data to support safe and efficient flight planning amid increasing traffic volumes. Meteorological information will be developed in the Weather Information Exchange Model (WXXM) format, enabling seamless integration with other aviation information systems and ATM decision-support tools.

2.2.4.7 Unmanned Aircraft System Integration Technical Working Group (UASI TWG) - This TWG develops the regulatory framework, airspace access procedures, and coordination mechanisms required for the safe integration of unmanned aircraft systems into Thailand's national airspace, ensuring alignment with ICAO standards and evolving global best practices.

2.3 Monitoring, Reporting, and Performance Review

2.3.1 In addition to the seven Technical Working Groups, Thailand has established the Coordination and Monitoring Working Group (CM). The CM Working Group serves as the cross-cutting coordination and oversight mechanism within the NANP governance framework. It liaises with each of the seven Technical Working Groups to integrate their respective implementation plans into a coherent national program, monitors progress across all functional domains to ensure consistency and responsiveness to evolving operational and policy circumstances, and tracks performance against the key performance indicators (KPIs) established in the NANP to ensure that strategic targets are achieved in a timely and coordinated manner.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to note the information contained in this Paper.

— END —