



BASELINE ANALYSIS OF ATC SEPARATION STANDARDS WITHIN APAC STATES AND BETWEEN ADJACENT FIRS

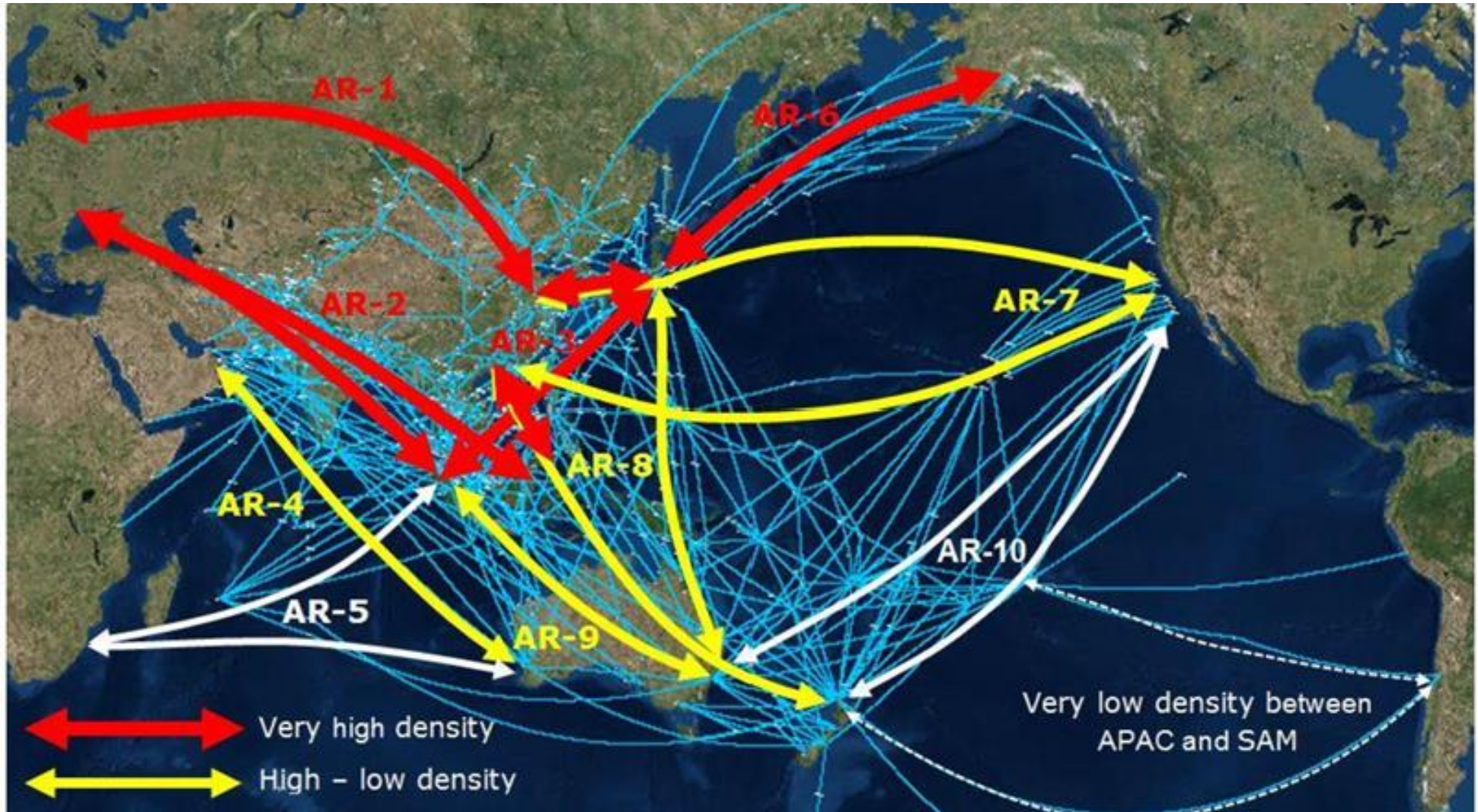


**INTERNATIONAL
CIVIL AVIATION
ORGANIZATION**



Introduction - References

- — AN-Conf/14 Report, ICAO Montréal, 2024 — Recommendation 3.1/1
- — APANPIRG/36 Report — Decision 36/7
- — AP30-10/TF Kick-off Meeting Report, 21 April 2026 (VTC)
- — ICAO Doc 4444 PANS-ATM
- — APAC Seamless ANS Plan (current edition)
- — APAC ANP Volume III (under revision; target end-2026)
- — ATC Separation Minima Survey, 2026



**CHART GEN II-APAC-1 - HOMOGENEOUS ATM AREAS AND MAJOR TRAFFIC FLOWS
IDENTIFIED IN THE ASIA AND PACIFIC REGIONS**

APAC ANP, Volume II Part I (GEN)
Amendment No. APAC-II 16/06 (January
2017)

TABLE GEN II-1 - HOMOGENEOUS ATM
AREAS AND MAJOR TRAFFIC FLOWS
IDENTIFIED IN THE ASIA AND PACIFIC
REGIONS

High Density Air Routes and Areas



AR1
Between Europe and East Asia – north
of the Himalayan Mountains



AR2
Between Europe and South/Southeast
Asia – south of the Himalayan
Mountains (includes Inter-Asian flow
from India to Southeast Asia)



AR3
Between Southeast Asia and East Asia



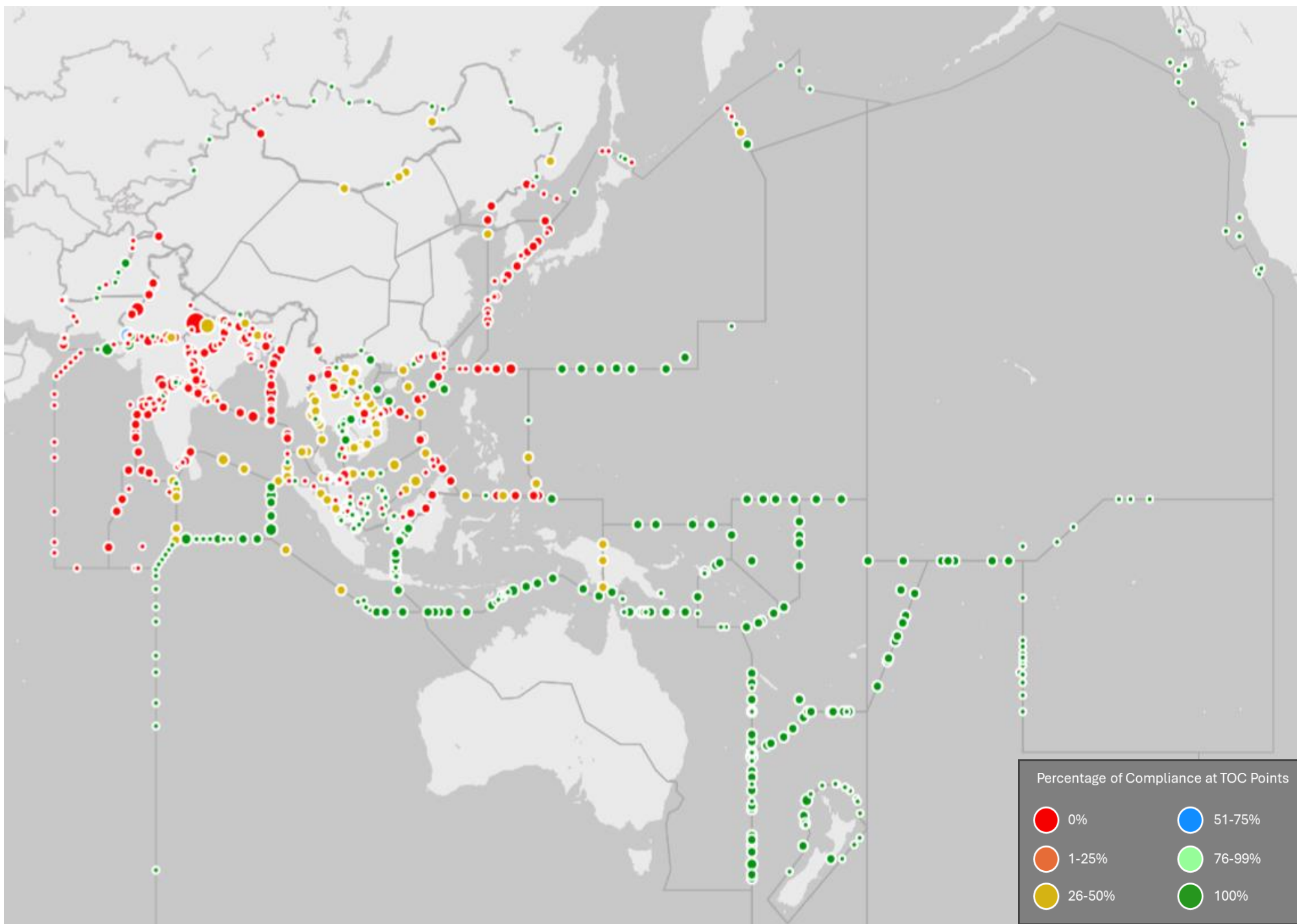
AR6
Between East Asia and North America
– North Pacific

Assessing the ATC Separation Survey Results

The Q2 2026 baseline survey covers 1,229 TOC points across 34 APAC States/FIRs, drawing on the most recent data submissions to ICAO Secretariat. The analysis was carried out against two frameworks:

- a) Existing APAC Seamless ANS Plan (target: 50 NM for Category R airspace, 10 NM for Category S airspace).
- b) Project 30/10 (target: ≤ 30 NM for oceanic/remote (Category R airspace), ≤ 10 NM elsewhere (Category S airspace)).

***ATC Separation at
TOC Survey based on
Existing APAC
Seamless ANS Plan
Expectations***



ICAO Project 30/10

AN-Conf/14 Recommendation 3.1/1 (August 2024)

Member States shall reduce ATC longitudinal separation minima to:

Environment	Target
Remote/Oceanic (Category R)	≤ 30 NM
Elsewhere (Category S)	≤ 10 NM

APANPIRG/36 Decision 36/7

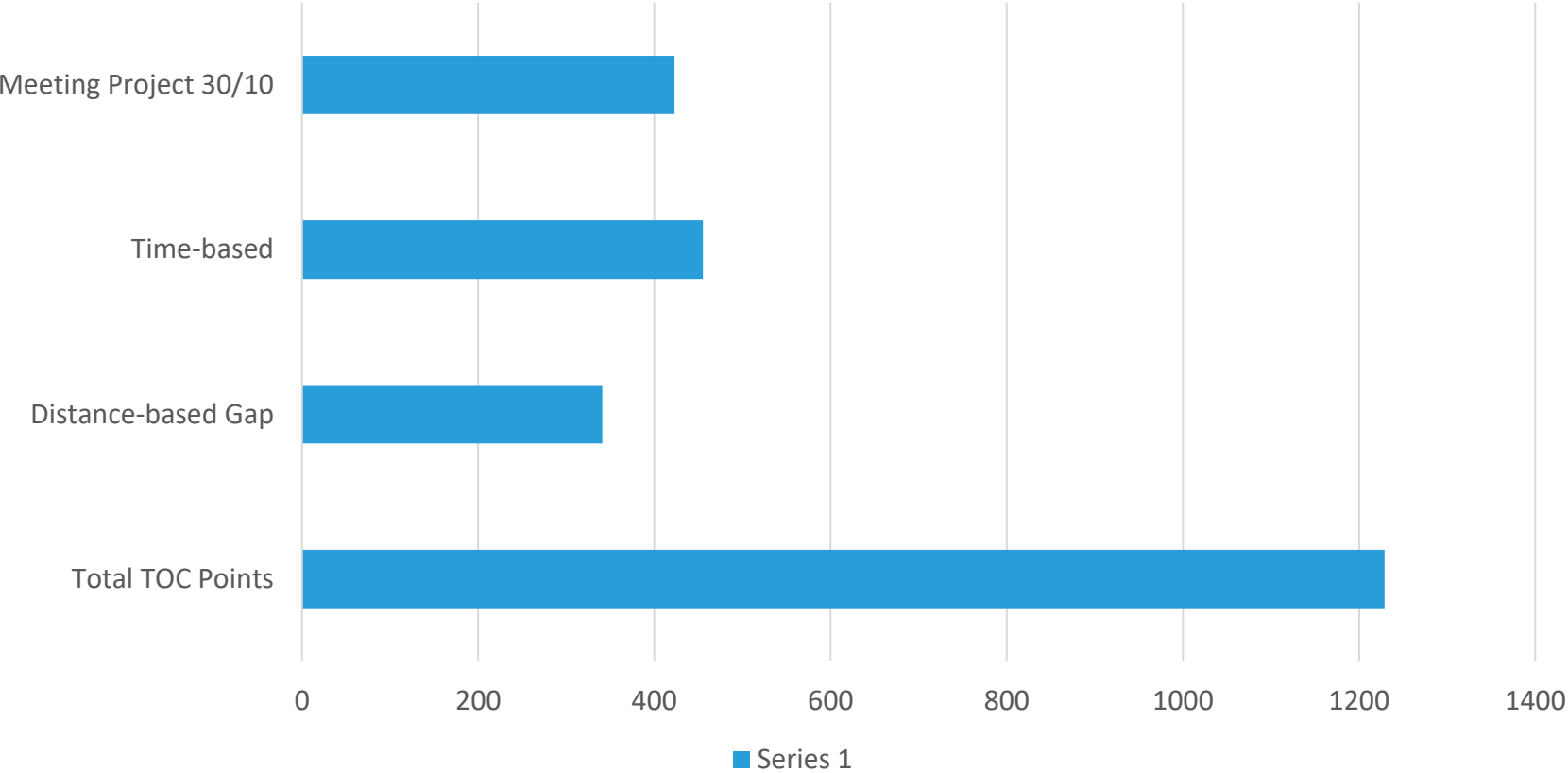
Established the Asia/Pacific Project 30/10 Task Force (AP30-10/TF) under the ATM Sub-Group to coordinate regional implementation.

Survey Scope and Classification

Data	Analysis Categorization	
1,229 TOC points 34 Asia/Pacific States & FIRs <i>(Data from most recent ICAO Secretariat submissions)</i>	Category R/S → R Category R → S	≤30 NM
	Category S → S	≤10 NM

Note: Time-based separation values identified separately.

Regional Snapshot – Q2 2026 Baseline



Readiness by TOC Category – Large Disparities

	Category R → S TOC	Category R/S → R TOC	Category S → S TOC	Total	Percentage
Acceptable Separation Standards	≤ 30 NM	≤ 30 NM	≤ 10 NM		
Compliant	44	249	48	341	27.7%
Not compliant	132	147	609	888	72.3%
Total	176	396	657	1229	100%

Key Findings & State Readiness Tiers

Regional Patterns – Group of States

Tier	Accepting States / FIRs
Ready (100%)	Cambodia, Fiji, New Zealand, United States
Near Ready (70–99%)	Australia
Partial (10–69%)	Japan, Indonesia
Gap / Near-Zero (<10%)	Bangladesh, China, Hong Kong China, DPR Korea, India, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, Viet Nam

Time-based Separation

Accepting FIR	Time-based TOC Points	% of FIR
Yangon	32	100.0%
Delhi	29	93.5%
Dhaka	18	90.0%
Chennai	55	88.7%
Kolkata	83	83.8%
Mumbai	69	82.1%
Male	15	78.9%

Key Findings

- the Q2 2026 Baseline Survey is the first quantitative assessment of ATC separation standards in the APAC region classified against the Project 30/10 targets.
- only 27.7% of TOCs are compliant with Project 30/10 target;
- 423 (34.4%) TOC points currently subjected to time-based longitudinal separation;
- 455 (37.0%) TOC points currently subjected to distance-based separation exceeding Project 30/10 target;
- Category S → S TOC represents the largest volume of challenge: 888 (72.3%) TOC points currently subjected to longitudinal separation minima of more than 10 NM; and
- survey data currency is a limiting factor.

Project 30/10 Implementation Plan

- It is envisaged that implementation of Project 30/10 across the APAC region will be completed by 2028. Therefore, all States/Administrations should concentrate efforts to ensure adequate staffing, effective training, coordination with adjacent FIRs, and, where required, modernization of CNS-ATM capabilities.
- To facilitate tracking of Project 30/10 and streamline reporting of implementation status to APANPIRG and its contributory bodies, States/Administrations are expected to complete the Project 30/10 Implementation Plan Tracking template provided in **Appendix A** to this paper.

Project 30/10 Implementation Plan

PROJECT 30/10 IMPLEMENTATION PLAN TRACKING

No.	TOC Point	Affected FIRs	Category of Airspace	Current Longitudinal Separation Implemented	Other Information	Implementation Plan
1.	e.g. IGOGU	e.g. Chennai / Kuala Lumpur	e.g. $R \leftrightarrow R$	e.g. 50 NM	e.g. RNAV 10, CRA formal service arrangement under coordination	e.g. Trial for 30 NM: 01/10/2026 e.g. CRA arrangement: 01/01/2027 e.g. Full implementation: 01/04/2027
2.	e.g. SAPAM	e.g. Bangkok (Cat. S) / Kuala Lumpur (Cat. R)	e.g. $R \leftrightarrow S$	e.g. 10 minutes	e.g. RNAV 10, Coordination ongoing between Malaysia and CRA	e.g. CRA arrangement: 01/01/2027 e.g. Trial for 30 NM: 01/04/2027 e.g. Full implementation: 01/07/2027
3.						
4.						
5.						

Note 1: for "Category of Airspace" column, select one of the following:

- a) $R \leftrightarrow R$ (requires implementation of longitudinal separation ≤ 30 NM); or*
- b) $R \leftrightarrow S$ (requires implementation of longitudinal separation ≤ 30 NM); or*
- c) $S \leftrightarrow S$ (requires implementation of longitudinal separation ≤ 10 NM).*

Note 2: for Category $R \leftrightarrow S$, indicate the airspace category for each FIR in the "Affected FIRs" column.

Note 3: date format must be DD/MM/YYYY.

Action by the meeting

The meeting is invited to:

- a) note the information contained in this paper;
- b) urge States/Administrations to provide Project 30/10 implementation plan status using the template provided in **Appendix A**;
- c) urge States/Administrations to report progress to ATM/SG/14; and
- a) discuss any relevant matters as appropriate.