

INTERNATIONAL CIVIL AVIATION ORGANIZATION



FINAL REPORT

**SEVENTH MEETING OF THE ASIA/PACIFIC AERODROME DESIGN AND
OPERATIONS TASK FORCE (AP-ADO/TF/7)**

BANGKOK, THAILAND, 17 TO 20 FEBRUARY 2026

The views expressed in this Report should be taken as those
of the Meeting and not the Organization

Approved by the Meeting and published by the
ICAO Asia and Pacific Office, Bangkok

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INTRODUCTION

1. Meeting

1.1 The Seventh Meeting of Asia/Pacific Aerodrome Design and Operations Task Force (AP-ADO/TF/7) was held in Bangkok, Thailand from 17 to 20 February 2026.

2. Attendance

2.1 48 participants from 12 Member States and 2 International Organizations attended the Meeting.

2.2 The List of Participants is placed at **Attachment 1** to the Report.

3. Opening of the meeting

3.1 Sqn. Ldr. Dr. Somchanok Tiamtiabrat, Chairperson of AP-ADO/TF welcomed and provided opening remarks to the participants of the Meeting.

4. Officers and Secretariat

4.1 Sqn. Ldr. Dr. Somchanok Tiamtiabrat, Chairperson of AP-ADO/TF presided over the meeting. Dr. Punya Raj Shakya, Regional Officer/AGA, ICAO Asia/Pacific Office was the Secretary of the Meeting and assisted by Ms. Saranya Weerarakdecha, AGA Officer.

5. Language and Documentation

5.1 The working language of the meeting and all documentation were in English. There were 21 Working Papers, 3 Information Papers, and 2 Presentations considered by the Meeting. A List of Papers is included at **Attachment 2** to this Report.

6. Draft Conclusions, Draft Decisions and Decisions – Definition

6.1 The AP-ADO/TF/7 recorded its actions in the form of Draft Conclusions, Draft Decisions and Decisions within the following definitions:

- a) **Draft Conclusions** deal with matters that, according to APANPIRG Terms of Reference, require the attention of States, or action by the ICAO in accordance with established procedures;
- b) **Draft Decisions** deal with the matters of concern only to APANPIRG and its contributory bodies; and
- c) **Decisions** of the AP-ADO/TF relate solely to matters dealing with the internal working arrangements of the AP-ADO/TF.

7. Terms of Reference of AP-ADO/TF

7.1 The Terms of Reference of AP-ADO/TF, with an amendment approved by the Seventh Meeting of the Aerodrome Operations and Planning Subgroup (AOP/SG/7) (3 - 6 July 2023), includes inter alia the following:

TERMS OF REFERENCE**ASIA/PACIFIC AERODROME DESIGN AND OPERATIONS TASK FORCE (AP-ADO/TF)**

(Second amendment to TOR approved by AOP/SG/7, 3 – 6 July 2023, Bangkok, Thailand)

Objective:

The main purpose of the AP-ADO/TF is to achieve some specific deliverables of the AOP/SG through the systematic work of the Task Force.

Scope of works:

To meet the above objective the AP-ADO/TF shall carry out the following tasks:

- (1) **Study and discuss** aerodrome SARPs and guidance materials related to aerodrome planning, design and operations including PANS-Aerodromes and provide expert advice and clarification to APAC States on any issues related to the implementation of the requirement specified in the SARPs and guidance materials.
- (2) **Review and discuss** AOP parts of the Global Air Navigation Plan (GANP), the Asia/Pacific ANP and Seamless ANS Plan and formulate amendment proposals to the APAC ANP Table AOP I - 1 and Table AOP II – 1 as necessary.
- (3) **Review** provisions of facilities and services at international aerodromes specified in AOP Table of ANP through monitoring the following information published in the AIP and other official documents of the States:
 - Upcoming new concept of obstacle limitation surfaces;
 - visual aids;
 - rescue and firefighting services and emergency planning;
 - assessment and reporting of the runway surface condition;
 - preventive maintenance programme;
 - runway safety programme including establishment of a runway safety team at international aerodromes;
 - SMGCS & A-SMGCS;
 - Pavement Strength reporting (ACR/PCR)
- (4) **Review and discuss** Airport Operations Plan (AOP), Airport Operations Centre (APOC) and Total Airport Management (TAM) provisions of GANP;
- (5) **Assist in conducting** seminars/workshops/trainings for the aerodrome regulatory and aerodrome operator staff in APAC Region;
- (6) **Identify** experts in various AOP fields and **maintain** Asia/Pacific database;
- (7) **Participate** in ICAO's activities/initiatives in aerodromes, if necessary.

Composition: The Task Force is composed of subject matter experts nominated by APAC States/Administrations and International Organization satisfying the criteria:

- (1) Minimum 3 years of experience in Aerodrome Regulatory functions of CAA or in Aerodrome Operations at international airports or in the International Organizations;
- (2) Familiar with Annex 14, PANS-Aerodromes (Doc 9981) and its guidance materials, GANP, GASP, APAC Seamless ANS Plan, APAC ANP; and
- (3) The nominated expert would continue to be a member for a minimum of three consecutive years.

Additional membership could be invited from other Regions, if required.

Working Methods: The Task force will hold at least one face-to-face meeting a year. Video teleconference may be held in lieu of face-to-face meeting when travel restrictions are in place. The work would be carried out through electronic correspondences and web conference as far as practicable.

Time frame: The tenure of the Task Force would last until September 2026.

8. List of Draft Conclusions, Draft Decisions and Decisions

Draft Conclusion AP-ADO/TF/7 – 1: Sharing updates on aerodrome-related information

Draft Conclusion AP-ADO/TF/7 – 2: Guidance on the Serviceability Levels of Sequence Flashlight (SFL)

Draft Conclusion AP-ADO/TF/7 – 3: Regional Guidance for the Risk Assessment and Mitigation Measures for Lights with Hazardous Effects

Draft Conclusion AP-ADO/TF/7 – 4: Asia/Pacific Guidance on Strength Assessment and Classification of Unpaved and Grassed Runway

Draft Decision AP-ADO/TF/7 – 5: Proposal for Amendment to AP-ADO/TF's TOR

Agenda Item 1: Adoption of Provisional Agenda (WP/01)

The Provisional Agenda was adopted by the Meeting without amendment.

- Agenda Item 1: Adoption of Provisional Agenda
- Agenda Item 2: Review Outcome of Relevant Meetings
- Agenda Item 3: Regional Air Navigation Plan, Part II, Tables AOP I-1 & II-1 and Asia/Pacific Seamless ANS Plan
- Agenda Item 4: Planning, Design, Construction and Operation of Aerodromes
- Agenda Item 5: Asia and Pacific Regional Guidance:
- Risk Assessment for Lights with the Hazardous Effects
 - Strength assessment and classification for grass and unpaved runway
 - Measurable conspicuity standards for runway and taxiway markings to provide aerodrome operators and regulators with clear, objective criteria for evaluating marking effectiveness
 - Assessment and mitigation of glare and glint from solar panels installed at or in the vicinity of the aerodrome
 - Circumstances/situation where the phrase “**as far as practicable and/or wherever practicable**” would be needed for flexibility of the implementation of SARPs
 - Interrelationship between ICAO Annex 10 Volume I, ICAO Annex 14 volume I and Aerodrome Design Manual (DOC 9157) Part 6 for visual and non-visual aids installation on runway and taxiway strips and RESA
- Agenda Item 6: Airport Innovation
- Agenda Item 7: AP-ADO/TF Task List
- Agenda Item 8: Any other business
- Agenda Item 9: Provisional Agenda, Date and Venue for the Next Meeting
-

Agenda Item 2: Review Outcome of Relevant Meetings

Action Items of 60th Conference of Directors General of Civil Aviation (WP/02)

2.1 AP-ADO/TF/7 reviewed the action items of 60th Conference of Directors General of Civil Aviation (DGCA/60, Sendai, Japan, 28 July to 1 August 2025) relevant to aerodrome design and operations.

Discussion Paper	Action Item	Description
Agenda Item 3: Aviation Safety		
DP/3/15	60/7	Acknowledging that runway incursion is one of the global and regional High-Risk Categories (HRCs), the Conference encouraged States/Administrations to provide responses to the Global Action Plan for Prevention of Runway Incursion (GAPPRI) implementation tracking template (ICAO APAC State Letter AP001/25 refers) to widen the analysis of common challenges in APAC and implement the GAPPRI recommendations
DP/3/25	60/14	Recognizing the importance of the harmonization of aerodrome standards globally, the Conference encouraged States/Administrations to use the applicable guidance material when considering the adoption of ICAO Annex 14 SARPs into National Aerodrome Standards.
Agenda Item 7: Aviation and Environment		
DP/7/02 DP/7/08	60/44	Recognizing the urgent need for sustainable, climate-resilient airports and adaptation aligned with ICAO’s environmental goals to meet growing demand and mitigate climate impacts, the Conference encouraged States/Administrations to: a) Engage with regional initiatives for climate resilience at airports and ensure alignment with ICAO’s relevant guidance related to climate change adaptation and State Action Plans; and b) Support regional knowledge sharing and use of case studies to define and disseminate best practices tailored to the region’s sustainability and resilience goals.
Agenda Item 8 - Capacity Development and Implementation		
DP/8/04	60/50	Acknowledging that the changes to the Annex 14 OLS SARPs require a paradigm shift, the Conference urged States/Administrations to share their implementation plans or experiences with ICAO and to utilize ICAO’s implementation support initiatives to implement the revised OLS SARPs at the earliest opportunity.
Agenda Item 9 – Updates		
DP/9/03	60/55	The Conference urged the States/Administration to collaborate and continue to work towards achieving the commitments of the Delhi Declaration.

2.2 AP-ADO/TF/7 noted the EASA’s Information Paper on the Baseline Safety and State Oversight of Ground Handling in the New EU Regulations, which highlights the European Union model of a proportionate and flexible approach to regulating ground handling, and highlights the similarities and differences from the ICAO standards and recommendations, with the aim of supporting regional

dialogue and mutual learning in the Asia Pacific. This Information Paper (IP/03/04) is available at: <https://www.icao.int/APAC/meetingdocs?fid=872> (under Agenda Item 3 – Aviation Safety).

2.3 AP-ADO/TF/7 reminded States/Administrations to take necessary actions in accordance with 60th DGCA Conference Action Items and noted that the Theme Topic for the 61st Conference of DGCA was “*Smart Skies: Emerging Technologies for Safe, Secure, Sustainable and Efficient Aviation*”. The 61st DGCA Conference would be hosted by Malaysia in 2026.

Relevant Outcomes of APANPIRG/36 (WP/03)

2.4 The Secretariat presented the outcomes of the 36th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/36) which was held in Bangkok, Thailand from 24 to 26 November 2025.

2.5 AP-ADO/TF/7 acknowledged that APANPIRG/36 had adopted the following Conclusions related to aerodrome design and operations:

- i) *Conclusion APANPIRG/36/3: Runway Surface Condition Assessment – Adoption of Technology; and*
- ii) *Conclusion APANPIRG/36/4: Acknowledgement of Wildlife Strike as One of the High-Risk Category of Occurrences (HRCs) for Asia and Pacific Regions.*

2.6 The Final Report of APANPIRG/36 published at <https://www.icao.int/APAC/meetingdocs?fid=7023> provided the detailed descriptions of the above Conclusions.

2.7 AP-ADO/TF/7 noted that at APANPIRG/36 AOP Chairman highlighted the following challenges in AOP fields:

- a) Certification of military aerodromes used for international operations;
- b) Safety oversight and safety management of Ground Handling Services;
- c) Slow Implementation of GRF and Runway Safety Team;
- d) Slow pace of transition from ACN-PCN to ACR-PCR Method of Reporting Pavement Bearing Strength; and
- e) Wildlife strike hazard reduction.

2.8 AP-ADO/TF/7 also noted that the AOP/SG planned to conduct following activities in 2026 to address the above challenges:

- a) Organize Workshop on Civil/Military Cooperation in aerodrome certification;
- b) Invite States/Industry (aerodrome operator, airlines operator and ground handling agent) to present their good practices in AP-AA/WG/8 Meeting/or Organize Workshop in Ground Handling Services;
- c) Encourage States/Industries to opt Aerodrome Assistance Go-Team/Runway Safety Go-Team Mission on a cost recovery basis to obtain assistance for implementation of GRF and RST establishment;
- d) Organize Workshop with the support from US FAA on Aerodrome Pavement Design and Evaluation including ACR-PCR Method of Reporting Pavement Bearing Strength; and

- e) Assistance to States on wildlife strike hazard reduction through the implementation of Asia/Pacific wildlife Hazard Management Go-Team Technical Assistance Mission.

Relevant Outcomes of AOP/SG/9 (WP/04)

2.9 The Secretariat presented the outcomes of the Ninth Meeting of the Aerodromes Operations and Planning Sub-group (AOP/SG/9, 30 June to 4 July 2025, Bangkok, Thailand) relevant to aerodrome design and operations.

2.10 AP-ADO/TF/7 also acknowledged that the AOP/SG/9 had adopted eight Conclusions as below:

- i) *Conclusion AOP/SG/9-1: Workshop on Transposition of Annex 14 SARPs into National Aerodrome Standards;*
- ii) *Conclusion AOP/SG/9-2: Clarification of Clause Interpretations in ICAO Annex 14 Volume I*
- iii) *Conclusion AOP/SG/9-3: Tolerance on marking of wind direction indicator's circular band, and runway and taxiway edge lights;*
- iv) *Conclusion AOP/SG/9-4: Provision of Graphical Illustrations for the Placement of Signs in ICAO Design Manual (Doc 9157), Part 4 Visual Aids;*
- v) *Conclusion AOP/SG/9-5: Review of Switch-over Time Requirements for Outer Part (from 300 – 900 m) of the CAT II/III Approach Lighting System;*
- vi) *Conclusion AOP/SG/9-6: Guidance on Transposition of Annex 14 SARPs into National Standards;*
- vii) *Conclusion AOP/SG/9-8: Guideline for Runway Classification; and*
- viii) *Conclusion AOP/SG/9-9: ICAO Asia/Pacific Wildlife Hazard Management Workshop.*

2.11 The Final Report of AOP/SG/9 published at <https://www.icao.int/APAC/meetingdocs?fid=554> provided the detailed descriptions of the above Conclusions.

Agenda Item 3: Regional Air Navigation Plan, Part II, Tables AOP I-1 & II-1 and Asia/Pacific Seamless ANS PlanAsia/Pacific Air Navigation Plan (WP/05)

3.1 The Secretariat presented the structure of the Asia/Pacific Air Navigation Plans (APAC ANPs) and the procedures for the amendment of these Plans. All three Volumes of Asia/Pacific Air Navigation Plan and the template of Proposal for Amendments (PfA) to APAC ANPs provided at <https://www.icao.int/APAC/Pages/APAC-eANP.aspx>.

3.2 States and Administrations were reminded of the following items when preparing the Proposal for Amendment to Table AOP II-1 of APAC ANP Volume II:

- a) the required level of protection expressed by means of an aerodrome rescue and firefighting (RFF) category number, determined in accordance with *Annex 14, Volume I, 9.2*, would be provided under column 2;
- b) changes in the level of protection normally available at an aerodrome for RFF should not be detailed in this Table, but should be notified to the appropriate air traffic services unit and aeronautical information services units, in accordance with *Annex 14, Volume I, 2.11.3* and *2.11.4*. Further guidance is available in *ICAO Doc 9137 Airport Services Manual, Part 1 – Rescue and Firefighting, Chapter 16*;
- c) the aerodrome reference code (RC) selected for aerodrome planning purposes in accordance with *Annex 14, Volume I, 1.6* should be provided under column 3; and
- d) the critical design aircraft selected for determining RC, RFF category and pavement strength should be provided under column 6. Only one critical aircraft type should be shown, if it was used to determine all three elements. Otherwise, different critical aircraft types should be shown for different elements.

3.3 AP-ADO/TF/7 recalled the Conclusion APANPIRG/33/1 adopted by APANPIRG/33 (22 to 24 November 2022, Bali Indonesia):

Conclusion APANPIRG/33/1: Proposal for Amendment to Asia/Pacific ANP Volume I, Table AOP I-1 and ANP Volume II, Table AOP II-1

That, Asia Pacific States/Administrations are urged to:

- a) *review the aerodromes listed in APAC ANP Volume I, Table AOP I-1;*
- b) *review the ANP Volume II, Table AOP II-1 for the list of facilities and services to be provided by the State concerned at each aerodrome that is listed in Table AOP I-1; and*
- c) *initiate and send to ICAO APAC Office proposals for amendment to APAC ANP Volume I, Table AOP I-1 and ANP Volume II, Table AOP II-1 in accordance with the template provided in **Appendix B to the Report on Agenda Item 3.1**, if their international aerodromes are not yet listed in Table AOP I-1 or require any amendments to update the information provided in Tables AOP I-1 and AOP II-1.*

3.4 AP-ADO/TF/7 was informed that APAC Office had completed processing of PfA for four States/Administrations (India, Japan, New Zealand and Sri Lanka) in 2025 and APAC ANP Volumes I & II had been amended accordingly. The PfA submitted by Australia, Cambodia and China in 2025 is in progress.

3.5 AP-ADO/TF/7 noted that among 385 international aerodromes in Asia and Pacific Regions only 356 international aerodromes had been listed in Asia/Pacific Region ANP Volume I by 22 January 2026. The detailed information of aerodromes yet to be listed in APAC ANP by Asia Pacific States/Administrations provided in **Appendix A** to the AP-ADO/TF/7 Report.

3.6 AP-ADO/TF/7 reminded China to follow up on the PfA for APAC ANP Volumes I & II and thanked the States/Administrations for their continued updates on the APAC ANP Volumes I & II. In addition, the Meeting requested India and Nepal to submit the PfA for APAC ANP Volumes I & II.

Agenda Item 4: Planning, Design and Construction of Aerodromes

Requesting States/Administrations to Share Updates on Aerodrome-Related Information (WP/06)

4.1 The Secretariat presented a proposal requesting States/Administrations to share updates on aerodrome-related information as follows:

- a) International Aerodromes to be Published in the ANP;
- b) Certification of Aerodromes;
- c) Publication of the Status of Certification of Aerodromes in AIP;
- d) Implementation of the Global Reporting Format (GRF);
- e) Implementation of Aircraft Classification Rating-Pavement Classification Rating (ACR-PCR);
- f) Implementation of Airport Master Plan;
- g) Implementation of Wildlife Hazard Management Programme (WHMP); and
- h) Runway Safety Team (RST).

4.2 States/Administrations are requested to submit updates on the above information to the ICAO APAC Office by the end of February of each year. The Secretariat will develop the form for reporting the progress on the above requested information and disseminate it to the States/Administrations.

4.3 In response to India and Philippines’ query regarding information on the implementation of Airport Master Plan, the Secretariate clarified that it is up to the States/Administrations to provide information on the implementation status of individual aerodromes. However, States/Administrations should provide at least this information for all aerodromes used for international operations.

4.4 AP-ADO/TF/7 endorsed the proposal for States/Administrations to submit the requested information to the ICAO APAC Office by the end of February each year and agreed to present the following Draft Conclusion for agreement by the Eight Meeting of the Asia/Pacific Aerodrome Assistance Working Group (AP-AA/WG/8) and the Eight Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM/WG/8) and for consideration by AOP/SG/10.

Draft Conclusion AP-ADO/TF/7 – 1: Sharing updates on aerodrome-related information	
What: That, APAC States/Administrations be invited to submit updates on aerodrome-related information to the ICAO APAC Office by the end of February each year.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: For monitoring and reporting of the implementation progress of the aerodrome design and operation provisions and key safety initiatives.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 17-Jul-26	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX	

Intersection Take Off Holding Position Indicator – Concept (WP/10)

4.5 Intersection take offs are commonly used by Code C aircraft at major international aerodromes to improve runway throughput. However, at aerodromes with parallel taxiways near runways, such as Kempegowda International Airport (VOBL), the effective wingtip clearance available during intersection holding can be significantly reduced due to aircraft cockpit visibility limitations and pilot stopping behaviour.

4.6 The WP/10, presented by India, discussed on the results of a study conducted at Kempegowda International Airport (VOBL), Bengaluru, focusing on the development and implementation of a specialized Intersection Take Off Holding Indicator (ITOHPI) system. This working paper proposes visual and illuminated guidance solutions to ensure safe alignment and clearance for departing aircraft during intersection take-offs.

4.7 The paper recommends conducting a pilot trial of ITOHPI at selected intersections, evaluating results through SMS processes, sharing outcomes with ICAO APAC, and exploring the concept's applicability for regional guidance or future SARP development.

4.8 Malaysia, supported by IFALPA, suggested that providing appropriate training to the pilots may be more effective than introducing a new system or additional visual aids.

4.9 AP-ADO/TF/7 agreed to form a SWG consisting of SMEs from India (Lead) supported by Malaysia, Pakistan and IFALPA to conduct further study and analysis of the Intersection Take Off Holding Position Indicator Concept proposed by India and decided to add into the AP-ADO/TF Task List as Task 7/1.

Review on Provision of the Stop Bar Lighting Configuration for the Stop Bars at the Intermediate Holding Position (WP/11)

4.10 ICAO Annex 14 recommends stop bars at Intermediate Holding Positions (IHPs) to enhance safety and provide visual traffic control. However, applying the requirement to extinguish 90 m of taxiway centre line (TCL) lights beyond the stop bar poses practical challenges at many airports such as Geometry constraints as many taxiway layouts cannot provide the required 90 m controllable TCL segment beyond the IHP stop bar and other associated challenges such as additional switching may affect other taxiway routes and reduce guidance for aircraft approaching from different directions.

4.11 Hence the WP/11, presented by India, is proposed to discuss and provide a recommendation to modify the clause 5.3.20.13 as given- "When 90 m TCL light control is not feasible at IHPs due to justified site conditions, the maximum practicable length may be extinguished."

Establishing the Serviceability Levels for the Sequence Flashlight / System (WP/12)

4.12 Annex 14, Volume I requires Sequence Flashlight (SFL); CAT I operations for full approach lighting system and CAT II/III operations for last 300 m to the end of the system. A typical installation comprises 30 lights for CAT I and 21 lights for CAT II/III. However, there is ambiguity in declaring the serviceability levels for these lights as specific serviceability levels are not defined. For example, if one of the lights does not function or does not flash as per the frequency, it is unclear whether the system should still be considered functionally fit for the operations.

4.13 The WP/12, presented by India, discussed the need to establish the serviceability levels for SFL system and recommended serviceability levels based on guidance from CASA, Part 139 (Aerodromes) Manual of Standards. The paper also invited expert feedback from States/Administrations and industry for possible inclusion in ICAO Annex 14, Volume I and related guidance.

4.14 AP-ADO/TF/7 agreed that guidance on the serviceability levels of sequence flashlight is necessary and should be incorporated into the ICAO Aerodrome Design Manual (Doc 9157) Part 4 – Visual Aids or Airport Service Manual (Doc 9137) Part 8 – Airport Operational Services. Therefore, the following Draft Conclusion is formulated for endorsement by the AOP/SG/10 and for consideration by APANPIRG/37.

Draft Conclusion AP-ADO/TF/7 – 2: Guidance on the Serviceability Levels of Sequence Flashlight (SFL)	
What: That, the guidance on the serviceability levels of Sequence Flashlight (SFL) to be provided in ICAO Aerodrome Design Manual (Doc 9157) Part 4 – Visual Aids or Airport Service Manual (Doc 9137) Part 8 – Airport Operational Services.	Expected impact: <input checked="" type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: As specific serviceability levels of SFL are not defined in any ICAO document.	Follow-up: <input type="checkbox"/> Required from States
When: 17-Jul-26	Status: Draft to be adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input checked="" type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX	

Proposal on Promoting the New “Vertical No-Entry Center-Line Lights” to Reduce Runway Incursion Risk (WP/13)

4.15 ICAO Annex 14, Volume I recommends that “no-entry bar” be installed at the reverse-direction entry of a one-way exit taxiway to provide a clear warning to aircraft and vehicles against inadvertent entry, thereby reducing the risk of incursion. WP/13, presented by China, proposed that retrofit the centre line lights along a one-way rapid exit taxiway, upgrade them to bi-directionally controllable light fixtures.

4.16 In normal direction (exiting the runway), the lights display alternating yellow/green, with functionality identical to the original centre line lights, ensuring normal taxi guidance. In reverse direction (entering the runway), the lights emit a steady red light, providing a clear and continuous visual warning to any pilot or vehicle driver attempting to enter from the incorrect direction. This approach makes full use of the existing infrastructure and significantly reduces retrofitting costs, construction complexity and operational impact. The solution has already been applied at three domestic airports in China. Based on successful pilot results, the plan was to finalize the relevant product and engineering standards, amend domestic regulations, and establish a formal nationwide promotion program within the first quarter of 2026.

Initiatives in Developing Skilled Work Force at Airports (IP/03)

4.17 India presented a paper emphasizing the need to develop a skilled airport workforce—an ongoing challenge due to the aviation sector’s highly specialized nature. As the number of airports continues to grow, the complexity of maintaining adequate safety and security standards will also increase. The Aeronautical Ground Lighting (AGL) system is one such area where training and retaining qualified personnel remains particularly difficult.

4.18 To address this, Bangalore International Airport has developed an AGL Training and Experience Centre to develop AGL professionals at all levels. This IP/03 outlines the objectives, operational framework and training methodology of the centre and examines its role in enhancing the system’s performance. This also provide the basic structure for a training centre and how this could improve the thought process of the staff in building a safe and efficient Airport.

4.19 Training at the centre combines mandatory theoretical modules, hands-on practical sessions, competency assessments, and exposure to OEM based maintenance procedures. Courses cover key topics such as photometric compliance, calibration of systems like PAPI and approach lighting, ALCMS operation, inset fixture maintenance, transformer pit management, and regulatory requirements including serviceability standards.

4.20 The paper invited the Task Force to note this initiative and discuss opportunities for wider adoption of similar training models across the region.

Agenda Item 5: Asia and Pacific Regional Guidance

Risk Assessment and Mitigation Measures for Lights with Hazardous Effects (WP/07)

5.1 On behalf of the Small Working Group (SWG) for Task 5/4, India presented the final draft of the Regional Guidance for the Risk Assessment and Mitigation Measures for Lights with Hazardous Effects (**Appendix B**). The draft was developed by a SWG led by India and supported by Nepal, Thailand and Republic of Korea.

5.2 This regional guidance focused on the impact and the mitigation measures, especially for the non- aeronautical ground lights creating hazardous effects on the aircraft operations. It aimed to provide the regional guidance for mitigating the serious hazard to the aircraft operations by the lights other than aeronautical ground lighting system and provide the possible solutions which could be implemented at airports.

5.3 AP-ADO/TF/7 reviewed the draft guidance material and recommended for submission to AOP/SG/10 for approval and seek for the comments from Aerodrome Operation and Infrastructure Section of Air Navigation Bureau. APAC States and industry would be invited to provide feedback after it’s publication on ICAO APAC Website at e-Documents and after approval by AOP/SG/10 in July 2026. AP-ADO/TF/7 endorsed the following Draft Conclusion for consideration by AOP/SG/10:

Draft Conclusion AP-ADO/TF/7 – 3: Regional Guidance for the Risk Assessment and Mitigation Measures for Lights with Hazardous Effects			
What:	That,	Expected impact:	
	(a) the Regional Guidance for the Risk Assessment and Mitigation Measures for Lights with Hazardous Effects be adopted by AOP/SG/10 and published on ICAO APAC website; and	<input type="checkbox"/> Political / Global	
	(b) seek the comments on this guidance material from Aerodrome Operation and Infrastructure Section of Air Navigation Bureau.	<input type="checkbox"/> Inter-regional	
		<input type="checkbox"/> Economic	
		<input type="checkbox"/> Environmental	
		<input checked="" type="checkbox"/> Ops/Technical	
Why:	For reference by APAC States/Administrations.	Follow-up:	<input checked="" type="checkbox"/> Required from States
When:	17-Jul-26	Status:	Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input checked="" type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

Asia/Pacific Guidance on Strength Assessment and Classification of Unpaved and Grassed Runway (WP/08)

5.4 Papua New Guinea, on behalf of the Small Working Group (SWG) for Task 5/5, presented the final draft of the Asia/Pacific Guidance on Strength Assessment and Classification of Unpaved and Grassed Runway (**Appendix C**). The draft was developed by a SWG led by Papua New Guinea and supported by Australia, Nepal and New Zealand.

5.5 The draft regional guidance includes guidance on classification of runway surface type, bearing capability assessment, inspection and reporting, significant precipitation, and risk mitigation. The surface bearing capability assessment guidance covers 3 methods including the aircraft experience method, vehicle-based method, and empirical method.

5.6 AP-ADO/TF/7 reviewed the draft guidance material and recommended for submission to AOP/SG/10 for approval and seek for the comments from Aerodrome Operation and Infrastructure Section of Air Navigation Bureau. APAC States and industry would be invited to provide feedback after it’s publication on ICAO APAC Website at e-Documents and after approval by AOP/SG/10 in July 2026. AP-ADO/TF/7 endorsed the following Draft Conclusion for consideration by AOP/SG/10:

Draft Conclusion AP-ADO/TF/7 – 4: Asia/Pacific Guidance on Strength Assessment and Classification of Unpaved and Grassed Runway			
What:	That,	Expected impact:	
(a)	the Asia/Pacific Guidance on Strength Assessment and Classification of Unpaved and Grassed Runway be adopted by AOP/SG/10 and published on ICAO APAC website; and	<input type="checkbox"/>	Political / Global
(b)	seek the comments on this guidance material from Aerodrome Operation and Infrastructure Section of Air Navigation Bureau.	<input type="checkbox"/>	Inter-regional
		<input type="checkbox"/>	Economic
		<input type="checkbox"/>	Environmental
		<input checked="" type="checkbox"/>	Ops/Technical
Why:	For reference by APAC States/Administrations.	Follow-up:	<input checked="" type="checkbox"/> Required from States
When:	17-Jul-26	Status:	Draft to be adopted by Subgroup
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input checked="" type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

Establishment of a Minimum Conspicuity Standard for Runway and Taxiway Markings in ICAO Annex 14, Volume 1 (WP/09)

5.7 Malaysia presented progress on the establishment of a measurable minimum conspicuity standard for runway and taxiway markings for possible inclusion in ICAO Annex 14, Volume I. The proposal aims to enhance aerodrome safety by introducing objective and measurable criteria such as contrast ratio, retro-reflectivity, marking dimensions, and environmental considerations to ensure markings remain clearly visible under varying operational, lighting, and weather conditions. The initiative supports global harmonization by providing aerodrome operators and regulators with consistent benchmarks for assessing marking effectiveness.

5.8 Following AP-ADO/TF/6, a Small Working Group led by Malaysia, with support from India, Thailand, Vietnam, and ACI, was established to develop these measurable criteria. WP/09 outlined the agreed working definition of conspicuity and describes the adopted methodology including both off-airport and on-airport field testing. Off-airport testing assessed marking performance and durability in a controlled environment, while on-airport testing at Kuala Lumpur International Airport evaluated the impact of aircraft operations, weather, and surface conditions on marking performance.

5.9 Initial findings indicate that environmental conditions and sampling timing significantly influence measurement results, particularly for luminance (Qd) and retro-reflectivity (RL) values. Operational constraints, including runway occupancy time and traffic density, also affected the testing methodology, leading to refinements such as reduced sampling points and adjusted measurement frequency. AP-ADO/TF/7 was invited to note the progress of Task 6/1 and to discuss the proposed methodology and field-testing approach.

5.10 Malaysia informed the meeting that this paper aims to provide the progress of the SWG’s work in determining the criteria, measurement and parameter for evaluating the marking conspicuity, and once these are finalized, the SWG may suggest any necessary operational changes.

5.11 The Secretariate suggested that it may be useful to include the information on marking deterioration and the baseline performance with respect to the number of aircraft movements to provide correlation between rate of marking deterioration and aircraft movements.

5.12 Malaysia encouraged the States/Administrations to provide inputs to this guidance.

Suggestions on Reducing Ambiguous Expressions in Standards and Improving the Compliance Management Mechanism (WP/14)

5.13 China presented WP/14 which highlighted an impact on the uniformity and seriousness in the implementation of Annex 14 Volume I SARPs due to inclusion of the ambiguous expressions such as "wherever practicable" in Annex 14, Volume I.

5.14 Taking 3.4.3 of Annex 14, Volume 1 (width of runway strips) as an example, although it stipulates specific width values, it simultaneously adds the qualification "wherever practicable", which leads to ambiguity in the scope of application of this crucial safety requirement. If it is truly impossible to meet the requirement, the proper approach should be to initiate a formal deviation application and approval process.

5.15 Civil Aviation Administration of China (CAAC) has established a formal procedure based on risk assessment through the "Provisions on the Management of Operational Safety Deviations and Exemptions for Commercial Transport Airports".

Assessment and Mitigation of Glare and Glint from Solar Panels Installed at or in the Vicinity of the Aerodrome (WP/15)

5.16 WP/15, presented by Malaysia, provided an update on the progress of Task 6/2 under the AP-ADO/TF, which aims to develop regional guidance on the assessment and mitigation of glare and glint from solar PV installations at or near aerodromes.

5.17 With the increasing adoption of solar energy at airports to support sustainability goals, concerns have emerged regarding potential glare impacts on pilots and air traffic control operations. In response, a Small Working Group led by Malaysia with participation from India, Philippines, and Sri Lanka, and possible contribution from Singapore was established to develop regional guidance.

5.18 A structured roadmap has been developed, targeting completion of the draft guidance by Q4 2026. The intended outcome is a practical regional framework that enables States to safely implement solar PV systems while ensuring that aviation safety is not compromised.

5.19 AP-ADO/TF/7 supported the timeline proposed in this working paper.

Development of Guidance Material on the Use of "As Far As Practicable" (AFAP) and Related Phrases in ICAO Annex 14, Volume I (WP/16)

5.20 Nepal, on behalf of the Small Working Group (SWG) for Task 6/3, presented proposal on the development of ICAO regional guidance material to clarify the interpretation and application of the phrase "As Far As Practicable"/ "Wherever practicable" and similar conditional expressions used in ICAO Annex 14, Volume I, to promote consistent implementation, oversight, and auditing by States.

5.21 ICAO Annex 14, Volume I contains roughly 65 instances of "as far as practicable/wherever practicable" and 30 instances of "as long as possible," spread across Standards, Recommended Practices, and Attachment A. Annex 14, Volume I provides no definition of "practicable," no method for identifying or documenting constraints, and no criteria for determining when full compliance is infeasible. As a result, States apply inconsistent thresholds for technical feasibility, economic viability, operational impact, and equivalent level of safety compliance,

undermining uniform SARPs implementation, regulatory transparency, and predictability of audit outcomes.

5.22 These conditional phrases are not discretionary. They impose an obligation to reach the maximum achievable level of compliance under real constraints and to implement alternative measures that deliver equivalent level of safety when full compliance is not possible. To standardize application across the APAC region, guidance is required defining “practicable,” specifying criteria for determining impracticability, detailing documentation requirements for aerodrome operators, outlining authority approval expectations, providing examples of acceptable alternative means of compliance, and establishing an assessment methodology for inspectors and operators.

5.23 Nepal invited China to join this SWG and invited States/Administrations to share their practices to support the development of this Guidance Material.

5.24 In response to query from India, the Secretariate clarified that the intention of this task was to provide different examples of mitigation measures proposed by aerodrome operator(s) and accepted by the regulators and after their implementation they have delivered an equivalent level of safety, which may be used by other States/Administrations of similar geographical challenges. The Secretariat also encouraged States/Administrations to minimize the use of such phraseology in their regulations.

Interrelationship Between ICAO Annex 10 Volume I, ICAO Annex 14, Volume I and Aerodrome Design Manual (Doc 9157) Part 6 for Visual and Non-Visual Aids Installation on Runway and Taxiway Strips and RESA (WP/17)

5.25 Nepal, on behalf of the Small Working Group (SWG) for Task 6/4, presented proposal on Asia/Pacific regional guidance on installing visual and non-visual navigational aids on runway and taxiway strips and RESA.

5.26 Visual and non-visual aids (e.g., approach lighting supports, meteorological equipment, radio navigational aids) are often located near runways and taxiways and if inappropriately installed may present a significant hazard to aircraft in the event of aircraft undershooting, overshooting or veering-off from runway during landing, take-off or ground maneuvering of aircraft.

5.27 A SWG including the experts from Nepal, Australia, India, Fiji and New Zealand is working to develop this guidance material. The SWG has studied the provisions in the ICAO SARPs for frangibility and siting of objects in operational areas as mentioned in ICAO Annex 14, Volume I Aerodrome Design and Operations, ICAO Annex 10, Volume I Radio Navigational Aids, ICAO Annex 3 Meteorological Service for International Air Navigation and Aerodrome Design Manual Part 6 (ICAO Doc 9157) which was presented to AP-ADO/TF/7.

5.28 Nepal invited States/Administrations to share their national regulation, guidance and best practises related to the frangibility and siting of navigational aids in the operational areas and encouraged the States/Administrations to engage experts from Annex 10 to have more discussion and collaboration in developing this regional guidance.

5.29 India informed the Meeting that all the equipment are installed outside the graded areas of runway strip.

5.30 AP-ADO/TF/7 agreed that the Task Force should coordinate or collaborate with the experts from the CNS background and suggested to present this Working Paper to the forthcoming meeting of the CNS Subgroup to get their views specially on the location of the glide path hut as well as localizer hut and associated equipment.

Agenda Item 6: Airport InnovationDigital Applications for Airport Whole Life Cycle Based on Data and Simulation (WP/18)

6.1 WP/18, presented by China, provided information on the digital application scenarios across the site selection, planning, design, construction, and operation of the airports.

6.2 The application of digital technology is insufficient in traditional airport construction, which results in high labor costs and low operational efficiency in the construction and operation of airport. China proposed a digital application system for airport whole-life-cycle management. The system is based on digital twin foundation, full-process simulation and data-driven intelligence. By leveraging technologies including digital twins, simulation, and artificial intelligence, this system could achieve functions including intelligent site selection, parametric design methodologies, and digital construction processes.

6.3 The Secretariat invited China to present the paper on the real application of the various tools and technology starting from site selection to design, construction and operation of airport to the next AP-ADO/WG or AOP/SG Meeting.

Agenda Item 7: AP-ADO/TF Task List

Task List of AP-ADO/TF (WP/19)

7.1 WP/19 provided the task list of AP-ADO/TF for review and update by the meeting.

7.2 The Meeting updated the task list of AP-ADO/TF and the updated task list provided in

Appendix D.

Agenda Item 8: Any other business

Proposal for an Amendment to Terms of Reference of AP-ADO/TF (WP/20)

8.1 The Secretariat presented a proposal for an amendment to the current terms of reference of AP-ADO/TF.

8.2 As work under the new scope added to the TOR of AP/ADO/TF, which was approved by AOP/SG/7 in July 2023, is yet to be progressed, there would be a need to address future challenges due to the periodic amendments to Annex 14, Volume I and II, PANS-Aerodromes (Doc 9981) and other ICAO Documents related to aerodrome design and operations. The Secretariat proposed that the name of this Task Force should change to Asia/Pacific Aerodrome Design and Operations Working Group (AP-ADO/WG) and function on a permanent basis, until it is dissolved by the AOP/SG.

8.3 AP-ADO/TF/7 supported the proposal for an amendment to the current terms of reference of AP-ADO/TF and endorsed the following Draft Decision for consideration by AOP/SG/10:.

Draft Decision AP-ADO/TF/7-5: Proposal for Amendment to AP-ADO/TF's TOR	
What: That, the name of Asia/Pacific Aerodrome Design and Operations Task Force be changed to Asia/Pacific Aerodrome Design and Operations Working Group (AP-ADO/WG) and it's Terms of Reference be amended as in Appendix E of the AP-ADO/TF/7 Report.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To change the name of Task Force to Asia/Pacific Aerodrome Design and Operations Working Group (AP-ADO/WG) and function it on a permanent basis, until it is dissolved by the AOP/SG.	Follow-up: <input type="checkbox"/> Required from States
When: 17-Jul-26	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: AP-ADO/WG	

ICAO Implementation Support and Services for States (PPT/01)

8.4 PPT/01 presented the ICAO's implementation support and services for States. It highlighted the multiple products and services available to States and the various aviation stakeholders to enhance their capacity and strengthen their capability to implement efficiently ICAO SARPs. ICAO's support is managed by the Capacity Development and Implementation (CDI) bureau and covers ICAO Projects, Operational Assistance Personnel, Training and Procurement. Interested parties were invited to contact CDI for further details.

Visual Aids Working Group Updates-23 (Papers presented in ADOP-TF/6) (PPT/02)

8.5 Mr. Jyothi Prasad Reddy provided updates on the Twenty-Third Meeting of ADOP Visual Aids Working Group, highlighting action taken by the Working Group on those papers presented at the AP-ADO/TF/6 and forwarded to Air Navigation Bureau.

List of Experts for AP-ADO-TF (IP/02)

8.6 The Meeting updated the list of the AGA Experts and requested the Members of the Task Force to provide details of their AGA Experts for further updating the List.

Agenda Item 9: Provisional Agenda, Date and Venue for the Next MeetingProvisional Agenda, Date and Venue of Next Meeting (WP/21)

9.1 AP-ADO/TF/7 reviewed the draft agenda proposed by the Secretariat and agreed on the following Provisional Agenda for the AP-ADO/WG/8:

AP-ADO/WG/8**PROVISIONAL AGENDA**

- Agenda Item 1: Adoption of Provisional Agenda
- Agenda Item 2: Review Outcome of Relevant Meetings
- Agenda Item 3: Regional Air Navigation Plan, Part II, Tables AOP I-1 & II-1 and Asia/Pacific Seamless ANS Plan
- Agenda Item 4: Planning, Design, Construction and Operation of Aerodromes
- Agenda Item 5: Asia and Pacific Regional Guidance
- Agenda Item 6: Airport Innovation
- Agenda Item 7: AP-ADO/WG Task List
- Agenda Item 8: Any other business
- Agenda Item 9: Provisional Agenda, Date and Venue for the Next Meeting

9.2 The next AP-ADO/WG Meeting would be held in January/February 2027 for four-five days.

9.3 Thailand offered to host the AP-ADO/WG/8 meeting at Sukhothai Airport. The tentative date of the Meeting will be finalized in consultation with the Secretariate and the Chairperson of the Meeting.

Closing of the Meeting

9.4 Sqn. Ldr. Dr. Somchanok Tiamtiabrat, Chairperson of AP-ADO/WG thanked all participants and members of the Task Force attending the AP-ADO/TF/7 Meeting and for their valuable contribution and cooperation to the Meeting.
