



ICAO

International Civil Aviation Organization

The Tenth Meeting of the Aerodromes Operations and
Planning Sub-Group (AOP/SG/10)

Bangkok, Thailand, 10 to 14 August 2026

Agenda Item 2: Review of Outcomes of Relevant Meetings

OUTCOMES OF MET SG/30 RELEVANT TO AOP/SG

(Presented by the SECRETARIAT)

SUMMARY

This paper presents selected outcomes of the Thirtieth Meeting of the APAC Meteorology Sub-group (MET SG/30) that are relevant to the work of the AOP/SG. The paper highlights outcomes related to aerodrome meteorological services, meteorological information exchange, IWXXM implementation, air navigation deficiency management, volcanic activity information, APAC Air Navigation Plan (ANP) development, operational resilience, and environmental initiatives. It also draws attention to matters that may affect aerodrome operations, aerodrome emergency planning, runway operations, and airport operational decision-making.

1. INTRODUCTION

1.1 The Thirtieth Meeting of the APAC Meteorology Sub-group (MET SG/30) was held in Bangkok, Thailand, from 20 to 24 July 2026. The meeting reviewed progress in the implementation of aeronautical meteorological services in the APAC Region, including meteorological information exchange, air navigation deficiencies, regional planning and monitoring activities, guidance material, and initiatives supporting the safety, regularity and efficiency of international air navigation.

1.2 In accordance with its Terms of Reference, MET SG/30 considered matters related to the development, implementation, monitoring and continuous improvement of aeronautical meteorological services, including APAC ANP development, air navigation deficiency management, meteorological information exchange, SWIM-enabled services, regional guidance material, MET–ATM collaboration and environmental initiatives. Several outcomes are relevant to AOP/SG activities, particularly those concerning aerodrome meteorological services, meteorological support to airport operations, operational hazard information, aerodrome-related implementation monitoring, emergency preparedness, APAC ANP development and operational efficiency initiatives.

2. DISCUSSION

Aerodrome Meteorological Services

2.1 MET SG/30 reviewed regional monitoring of aerodrome meteorological services, including the availability and timeliness of METAR and TAF information. The meeting noted that these services continue to be monitored through regional OPMET performance activities and remain important elements supporting aerodrome and airport operations.

2.2 To support implementation monitoring and deficiency management, MET SG/30 adopted **Conclusion MET SG/30-05 – Potential Deficiencies in Provision of METAR and/or TAF**, requesting review of information relating to aerodrome observations and forecasts that did not meet agreed performance thresholds during the monitoring period.

Meteorological Information Supporting Airport Operations

2.3 MET SG/30 reviewed updates to the APAC Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations. The meeting noted that the guidance includes additional information on verification and evaluation of impact-based meteorological information and practical implementation examples.

2.4 Although developed primarily to support ATM decision-making, the guidance also contains concepts relevant to airport operational decision-making, collaborative operational planning, adverse weather management and operational efficiency. MET SG/30 adopted **Decision MET SG/30-08 – Update the Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations**. A summary is contained in **Appendix C**.

Volcanic Activity Information and Aerodrome Operations

2.5 MET SG/30 reviewed progress relating to the provision and dissemination of volcanic activity information. The meeting noted that Volcano Observatory Notice for Aviation (VONA) information is currently disseminated by e-mail rather than through the Aeronautical Fixed Service (AFS), which may limit wider awareness of significant volcanic unrest by aviation stakeholders.

2.6 The meeting discussed the relationship between VONA dissemination, NOTAM issuance and aviation stakeholder awareness, and agreed that the matter should be brought to the attention of the ATM Sub-Group for further consideration (**Action Item MET SG/30-01**). While directed to ATM/SG, the issue may also be relevant to aerodrome operators and airport emergency planning due to the potential operational impacts of volcanic activity on airport operations. Additional information is provided in **Appendix B**.

Air Navigation Deficiency Management

2.7 MET SG/30 reviewed APANPIRG MET deficiencies and the application of the APANPIRG deficiency management process. The meeting noted concerns regarding differing interpretations and application of deficiency identification procedures between APANPIRG Sub-groups and potentially between ICAO regions.

2.8 To support a consistent approach, MET SG/30 agreed **Action Item MET SG/30-02**, requesting clarification on the interpretation and application of APANPIRG deficiency identification procedures and consistency of application across APANPIRG subsidiary bodies. The outcome may be relevant to AOP/SG activities associated with aerodrome-related air navigation deficiencies and their management.

APAC ANP Development and Monitoring

2.9 MET SG/30 reviewed APAC ANP activities, including proposed improvements to MET-related provisions in APAC ANP Volumes I and II and discussion on development of APAC ANP Volume III.

2.10 The meeting formulated **Draft Conclusion MET SG/30-11 – Improvements to APAC ANP MET Information**, proposing amendments intended to improve alignment with current ICAO provisions and improve monitoring of meteorological service implementation. Proposed

amendments include enhanced visibility of aerodrome meteorological services such as wind shear warnings and aerodrome warnings.

2.11 The meeting also provided feedback on the draft APAC ANP Volume III, noting the importance of clearly identifying implementation expectations, targets and indicators. Further review of MET-related provisions will continue under **Action Item MET SG/30-10**. These outcomes are summarized in **Appendix A**.

Operational Resilience, Hazard Information and Meteorological Information Exchange

2.12 MET SG/30 reviewed matters relating to IWXXM implementation, dissemination of meteorological information, SIGMET services, volcanic ash advisories and tropical cyclone advisories. The meeting adopted outcomes relating to IWXXM implementation and identified deficiencies associated with the provision of SIGMET, advisory and OPMET information.

2.13 These activities support the availability of operational weather information used by airport operators, aircraft operators and aerodrome stakeholders during adverse weather events and operational disruptions. Relevant outcomes are summarized in **Appendix A**.

Environmental and Operational Efficiency Initiatives

2.14 MET SG/30 reviewed information describing how meteorological services can support operational efficiency, flight planning, adverse weather management and broader environmental objectives. The meeting also reviewed examples of impact-based meteorological services and operational decision-support tools used to improve operational efficiency.

2.15 The meeting further noted examples of airport-focused meteorological services, including runway surface temperature forecasting, aircraft frost prediction, airport wind forecasting and other decision-support tools relevant to airport operational planning and efficiency.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note the outcomes of MET SG/30 relevant to AOP/SG activities, including aerodrome meteorological services, meteorological information exchange, air navigation deficiency management, operational hazard information, APAC ANP development and environmental initiatives;
- c) encourage continued coordination between aerodrome operators and meteorological service providers to support safe and efficient airport operations, particularly during adverse weather events;
- d) note the outcomes related to the provision, monitoring and exchange of aerodrome meteorological information, including **Conclusion MET SG/30-05**;
- e) note **Decision MET SG/30-08** and encourage the use of relevant guidance and good practices supporting operational decision-making and weather-related airport operations, as appropriate;

- f) consider any implications of Action Item MET SG/30-02 concerning clarification of APANPIRG deficiency identification procedures for AOP-related deficiency management activities; and
- g) note the feedback provided by MET SG/30 on APAC ANP development, including proposed improvements to APAC ANP MET information and continuing review of draft APAC ANP Volume III provisions.

3.2

Supporting information is provided in:

- **Appendix A** – AOP-Relevant MET SG/30 Outcomes;
- **Appendix B** – VONA Dissemination and Aerodrome Operational Considerations; and
- **Appendix C** – Decision MET SG/30-08: Update to the APAC Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations.

APPENDIX A

AOP-RELEVANT MET SG/30 OUTCOMES

Outcome	Title	AOP Relevance
Action Item MET SG/30-02	Clarification of APANPIRG Deficiency Identification Procedures	Aerodrome deficiency management
Action Item MET SG/30-10	Further review of APAC ANP Volume III MET provisions	ANP planning and implementation
Decision MET SG/30-08	Updated Regional Guidance for Tailored MET Information and Services	Operational decision-making
Draft Conclusion MET SG/30-01	IWXXM Version Compatibility	Digital information exchange
Draft Conclusion MET SG/30-02	Dissemination of IWXXM	Operational information availability
Draft Conclusion MET SG/30-11	Improvements to APAC ANP MET Information	Aerodrome meteorological services
Draft Conclusion MET SG/30-12	APAC ANP amendment for IWXXM provision	Digital meteorological information
Conclusion MET SG/30-03	Lack of Provision of IWXXM Format SIGMET	Hazard information
Conclusion MET SG/30-04	Lack of Provision of IWXXM Format Advisories	Hazard information
Conclusion MET SG/30-05	Potential Deficiencies in Provision of METAR and/or TAF	Aerodrome operations

APPENDIX B

VONA DISSEMINATION AND AERODROME OPERATIONAL CONSIDERATIONS

MET SG/30 noted that Volcano Observatory Notice for Aviation (VONA) information is currently disseminated by e-mail rather than through the Aeronautical Fixed Service (AFS). The meeting considered that this may limit awareness of significant volcanic unrest by aviation stakeholders.

The meeting discussed the relationship between VONA dissemination, NOTAM issuance and broader aviation stakeholder awareness. Although Action Item MET SG/30-01 requested that the issue be brought to the attention of ATM/SG, the matter may also be relevant to aerodrome operators, particularly where volcanic activity could affect airport operations, emergency planning, airport closures, runway contamination, and stakeholder coordination.

APPENDIX C

DECISION MET SG/30-08

UPDATE TO THE APAC REGIONAL GUIDANCE FOR TAILORED METEOROLOGICAL INFORMATION AND SERVICES TO SUPPORT ATM OPERATIONS

MET SG/30 approved updates to the *APAC Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations*. The updates include additional guidance on verification, evaluation and continuous improvement of impact-based meteorological information and services.

The updated guidance contains principles and practices that may also assist airport operational decision-making, collaborative operational planning, weather-impact assessments and operational resilience activities involving aerodrome stakeholders.

Action Item MET SG/30-05 requested publication of the updated guidance on the ICAO APAC eDocuments website.

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