

International Civil Aviation Organization

Twenty Ninth Meeting of the Communications/ Navigation and Surveillance Sub-group (CNS SG/29) of APANPIRG

Bangkok, Thailand, 16-20 June 2025

Agenda Item 3:

Review outcomes of APANPIRG, APAC ANSP Committee, ATM Sub-group, MET Sub-group and other meetings and global CNS updates

RELEVANT OUTCOMES FROM MET SG AND OTHER RELEVANT MEETINGS

(Presented by the Secretariat)

SUMMARY

This paper presents outcomes from the MET meetings involving communication-related matters, such as IWXXM and SWIM, which are relevant to the CNS SG

1. INTRODUCTION

- 1.1. The Twenty-eighth Meeting of the Meteorology Sub-group (MET SG/28) and the Twenty-Third Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/23) were held in Bangkok, Thailand, in 2024 and 2025 respectively. MET SG/28 focused on the implementation of ICAO Standards and Recommended Practices (SARPs) for disseminating meteorological information in ICAO Meteorological Information Exchange Model (IWXXM) form, highlighting the need for access to the Air Traffic Service (ATS) Message Handling System (AMHS) with File Transfer Body Part (FTBP). The meeting adopted conclusions to review IWXXM implementation status in the APAC region and emphasized the necessity for full IWXXM data exchange before 2030. MET/IE WG/23, on the other hand, discussed the readiness of AMHS to support IWXXM dissemination and agreed on actions to develop an update and notification process for the Online Register of APAC IWXXM Exchange Status.
- 1.2. The Fourteenth Meeting of the Meteorological Requirements Working Group (MET/R WG/14) was also held in Bangkok. MET/R WG/14 included a seminar on Meteorology and Air Traffic Management and a joint plenary session with the APAC Air Traffic Flow Management Steering Group. The meeting focused on updating regional guidance documents. Key decisions included publishing updated documents on the ICAO APAC eDocument website and proposing updates to business functionalities for APAC Common SWIM Information Services.

2. DISCUSSION

Brief history of recent MET SG and other relevant meetings

- 2.1. MET SG/28 was conducted in Bangkok, Thailand, from 8 to 12 July 2024. The first day of the Meeting included a Seminar on recent developments in meteorological service for international civil aviation.
- 2.2. MET/IE WG/23 was conducted in Bangkok, Thailand, from 25 to 28 March 2025. A conjoint session with the Twelfth Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/12) was conducted on 26 March 2025.
- 2.3. The conjoint session between MET/IE WG/23 and ACSICG/12 discussed issues of interest to both groups jointly, including readiness of the AMHS to support disseminating meteorological information in the IWXXM form, and was conducted taking into consideration the duration and the materials presented and discussed in the joint session. Note: MET/IE WG/22 ACTION 22/16 refers.
- 2.4. MET/R WG/14 was conducted in Bangkok, Thailand, from 28 April to 2 May 2025. MET/R WG/14 included the ICAO APAC Seminar on Meteorology and Air Traffic Management (MET/ATM Seminar) on 28 April 2025, which was conducted in conjunction with the Fifteenth Meeting of the APAC Air Traffic Flow Management Steering Group (ATFM/SG/15). A joint plenary session of MET/R WG/14 and ATFM/SG/15 was conducted on 30 April 2025.
- 2.5. An overview of the outcomes from the above meetings, which are relevant to the CNS/SG, is provided in the following paragraphs.

Review of APAC Region IWXXM Implementation Status/Readiness

- 2.6. MET SG/28 noted that implementing the ICAO SARPs for disseminating MET information in IWXXM form was dependent on access to AMHS with FTBP. Furthermore, given that the ICAO SARPs for disseminating MET information in the traditional alphanumeric code (TAC) form are proposed to be no longer applicable from 2030, full implementation of IWXXM data exchange will be required before 2030.
- 2.7. MET SG/28 adopted Conclusion MET SG/28-03: Review of APAC Region IWXXM Implementation Status/Readiness, to review the IWXXM implementation status in the APAC Region, requiring updates on AMHS capabilities, IWXXM information availability, and operational exchange commencement. Note: Conclusion CNS SG/28/01 also refers.

Automating notification of updates to the APAC IWXXM Exchange Status

- 2.8. MET/IE WG/23 noted that the Online Register of APAC IWXXM Exchange Status can be accessed on the ICAO APAC eDocuments webpage1 (under MET). Currently, States update this online register annually during the MET/IE WG, which is not as frequent as needed.
- 2.9. MET/IE WG/23 agreed to action 23/16, which is to develop an update and notification process for the Online Register of APAC IWXXM Exchange Status, accessible on the ICAO APAC edocs webpage under MET, to enable Regional OPMET Centres (ROCs) and National OPMET Centres (NOCs) to update the register and automatically notify other ROCs and NOCs of enhanced AMHS capability to disseminate IWXXM reports.

IWXXM Guidelines document – availability on ICAO APAC website

¹ https://www.icao.int/APAC/Pages/eDocs.aspx

2.10. MET/IE WG/23 noted that (MET/IE WG/22) action 22/13 was completed, and the regional guidance, "Guidelines for the Implementation of OPMET Data Exchange Using IWXXM", Version 5, has been published on the CNS section of the ICAO APAC Office eDocuments webpage.

IWXXM distribution - guidance when primary AMHS fails

2.11. MET/IE WG/23 noted that (MET/IE WG/22) action 22/14 was completed, and educational material on managing the distribution of IWXXM information in the event of a primary AMHS link failure has been developed. Note: refer to Draft Conclusion ACSICG/12/05 for details.

IWXXM operational exchange - checklist

2.12. MET/IE WG/23 noted that (MET/IE WG/22) action 22/15 was completed, and a checklist of steps required to facilitate operational IWXXM exchange has been developed. Note: refer to Draft Conclusion ACSICG/12/06 for details.

Publishing updates to the IWXXM Implementation FAQs

2.13. MET/IE WG/23 agreed to action 23/14, which is to publish the updated version of the document, IWXXM Implementation in the APAC Region – FAQs, on the ICAO APAC Office website.

IWXXM update notification process

- 2.14. MET/IE WG/23 noted that the WMO (TT-AvData) 2 develops new versions of IWXXM based on Amendments to ICAO Annex 3. ICAO Meteorology Panel (METP) is developing new MET information services for the SWIM environment, including aerodrome observation, forecast, and hazardous weather information services. A new IWXXM design is required to ensure global consistency.
- 2.15. Currently under development, IWXXM version 2025-2RC1 introduces several changes:
 - Quantitative Volcanic Ash Concentration Information (QVACI) package
 - Volcano Observatory Notice for Aviation (VONA) package
 - Updates to METAR/SPECI, Volcanic Ash Advisory, and Space Weather Advisory packages
 - Provision for unlimited RVR and temperature reports in tenths of a degree
 - Improvements to the WAFS Significant Weather Forecast package
- 2.16. MET/IE WG/23 acknowledged the necessity for a notification process for IWXXM updates and requested the Secretariat to inform the WMO of the discussion. In addition, MET/IE WG/23 prepared Draft Conclusion MET/IE WG/23-02, which proposes that ICAO seek support from WMO to provide an IWXXM update notification process for all relevant stakeholders, including IWXXM consumers and system vendors. Note: MET/IE WG/23 action 23/17 also refers.

<u>Publishing the document APAC Use Cases and User Requirements for SWIM-based Meteorological Information Services Supporting ATFM</u>

2.17. MET SG/28 supported updates to the reference document "APAC Use Cases and User Requirements for SWIM-based MET Information Services supporting ATFM," which was developed by the MET/R WG ad hoc group based on feedback from ATFM/SG/14, MET/R WG/13, and SWIM

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² WMO Task Team on Aviation Data (TT-AvData)

TF/9. Consequently, MET SG/28 adopted the Decision MET SG/28-08 to publish the above document on the ICAO APAC eDocument website. Note: MET SG/28 action 28/17 also refers.

Proposing updates to the APAC Common SWIM Information Services list

2.18. MET/IE WG/23 agreed to action 23/15, which proposed updates to the draft list of "business functionalities for APAC Common SWIM Information Services" to reflect outcomes from the recent METP/6 meeting, the information service priorities, and include consistent use of the term "information service" for further review and consideration by the SWIM TF. Note: Refer to SWIM TF/10 WP/11 for details.

Enhancing the APAC Use Cases and User Requirements for SWIM-based Meteorological Information Services Supporting ATFM with an additional use case

2.19. MET/R WG/14 adopted Decision MET/R WG/14-05 for the use case of MET information services for ATFM in SWIM demonstration (as presented by Hong Kong, China in MET/R WG/14, WP/10) to be included in future updates of the APAC Use Cases and User Requirements for SWIM-based Meteorological Information Services Supporting ATFM, and for the ad hoc group to submit the proposed updates to MET SG/29 for approval and publication on the ICAO APAC eDocument website.

Updating the APAC Use Cases and User Requirements for SWIM-based Meteorological Information Services Supporting ATFM

2.20. MET/R WG/14 adopted Decision MET/R WG/14-06 to include the editorial improvements proposed by the ad hoc group (as presented in MET/R WG/14, WP/12) in future updates of the APAC Use Cases and User Requirements for SWIM-based Meteorological Information Services Supporting ATFM, and for the ad hoc group to consolidate the adopted changes and seek endorsement from MET SG.

Management of obsolete planning and implementation guidance documents on the ICAO APAC Office website

- 2.21. MET/IE WG/23 noted that some obsolete OPMET-related documents (e.g., FASID Tables) on the ICAO APAC Office website are not clearly marked as "for historic reference purposes," which can lead to misinterpretation of current operational requirements. Therefore, MET/IE WG/23 requested the Secretariat to ensure these historic documents are clearly identified as obsolete and non-operational.
- 2.22. Additionally, MET/IE WG/23 prepared Draft Conclusion MET/IE WG/23-01, proposing that ICAO take appropriate action to manage the archive of obsolete and historic planning and guidance documents on its website, including those related to MET and other AN fields. Note: MET/IE WG/23 actions 23-07 and 23-06 also refer.

3. ACTION BY THE MEETING

- 3.1. The meeting is invited to:
 - a) Note the information in the paper; and
 - b) Discuss any matters as appropriate
