



ICAO

International Civil Aviation Organization

Thirteenth Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/13)

Bangkok, Thailand, 03 – 07 April 2023

Agenda Item 2: Review Outcomes of Related Meetings

UPDATES FROM MET/R WG

(Presented by the Secretariat and Chair of MET/R WG)

SUMMARY

This paper presents updates related to the Meteorological Requirements Working Group (MET/R WG), including information on the MET/ATM survey, an updated MET/ATM regional guidance document, education on the ICAO space weather advisory service and user requirements for SWIM-based MET information services supporting ATFM.

1. INTRODUCTION

1.1 ATFM/SG/12 previously reviewed outcomes¹ from the Eleventh Meeting of the Meteorological Requirements Working Group (MET/R WG/11), hosted by the ICAO Asia and Pacific (APAC) Office, online from 31 May to 3 June 2022 in conjunction with the ICAO APAC *Webinar on Meteorology/Air Traffic Management* (MET/ATM Webinar) on 30 May 2022.

1.2 All documentation from MET/R WG/11 is available at the following ICAO APAC Office website: <https://www.icao.int/APAC/Meetings/Pages/2022-MET-R-WG11.aspx>.

2. DISCUSSION

MET/ATM Survey

2.1 To help understand the current and future requirements for MET information and services to support ATM, particularly ATFM, and explore opportunities to enhance the integration of MET services in the ATM system, the MET/R WG surveyed the APAC States from October to December 2021.

2.2 A preliminary analysis of the survey was conducted and presented at the 2022 MET/ATM Webinar and MET/R WG/11 Meeting. However, to fully achieve the survey objectives, MET/R WG/11 requested further analysis of the results [Decision MET/R/11/03: *Further analysis of ICAO APAC Regional Survey on the provision of MET services to support ATM and ATFM and Follow-up Actions* refers].

2.3 Therefore, MET/R WG tasked an ad hoc group to undertake further analysis, present the survey results, and propose follow-up actions at the upcoming MET/R WG/12 Meeting.

¹ [https://www.icao.int/APAC/Meetings/2022 ATFMSG12/WP03 Outcomes from MET R WG 11.pdf](https://www.icao.int/APAC/Meetings/2022%20ATFMSG12/WP03%20Outcomes%20from%20MET%20R%20WG%2011.pdf)

MET/ATM Regional Guidance Document

2.4 The updated *Asia/Pacific Regional Guidance for Tailored Meteorological Information and Services to Support Air Traffic Management Operations*, Third Edition, August 2022 (adopted by MET SG/26; Decision MET SG/26/02 refers) is available on the ICAO APAC Office website at: https://www.icao.int/APAC/Documents/edocs/2022-08_APAC-REG-GUIDANCE-FOR-TAILORED-MET-TO-SUPPORT-ATM_3rd-Ed.pdf.

2.5 The updates approved by MET SG/26 include an updated implementation example on ATM-tailored MET information from Hong Kong, China, featuring post-operational analysis and continuous service improvement.

Space Weather Advisory Service

2.6 The proposed ICAO APAC *Webinar on the Space Weather Advisory Information Services* was postponed to a date to be confirmed in 2023.

2.7 In addition, to help increase awareness of the ICAO space weather service and space weather impacts, the Australian Bureau of Meteorology (The Bureau), with support from the Civil Aviation Authority of New Zealand (CAA NZ), conducted a space weather exercise on 19 and 26 October 2022 (via MS Teams). Participants were invited from Australia, Fiji, and New Zealand airlines, civil aviation authorities, meteorological service providers and other interested government organisations.

2.8 As a follow-up, the Bureau, in coordination with CAA NZ, plans to conduct another space weather exercise by the end of 2023. The exercise will focus on GNSS impacts, and proposed invitees will include airlines, air traffic services, ICAO, meteorological service providers and the Australian Space Weather Centre (SWXC). In addition, there may be an opportunity to conduct this exercise in association with the planned ICAO APAC *Webinar on the Space Weather Advisory Information Services*.

APAC User Requirements for SWIM-Based MET Information Services Supporting ATFM

2.9 MET/R WG designated an ad hoc group to identify and document use cases and user requirements for SWIM-based MET information services supporting ATFM in the APAC region.

2.10 The ad hoc group prepared and presented a draft reference document with sample use cases to the MET/R WG to facilitate the development of the use cases and user requirements. MET/R WG proposed to use this draft document to promote discussion with ATFM user groups and relevant stakeholders in the APAC region and for further development of ATFM-specific use cases and user requirements. In addition, the reference document is expected to assist in developing information services and exchange model extensions, if required, to meet operational needs.

2.11 As for the next steps, MET experts in the ad hoc group will consult ATFM experts to understand better the APAC ATFM operations and supplement the use cases with detailed information. Through the consultation with ATFM experts, the ad hoc group will conduct the following activities as outlined in the MET/R WG Workplan:

- a) In coordination with other related sub-groups, working groups, etc., identify:
 - i) SWIM-based MET information affecting ATFM operations;
 - ii) how often the current MET products be provided and the rules for updates to meet the ATFM needs; and

- iii) any other MET information required by ATFM and gaps to meet the needs of ATFM users;
- b) Identify MET and ATFM data to be exchanged using SWIM-based Information Exchange Service; and
- c) Based on the findings (above), develop APAC use cases and a user requirements document for future SWIM-based MET information services supporting ATFM.

Next meeting of the MET/R WG

2.12 ICAO will host the Twelfth Meeting of the Meteorological Requirements Working Group (MET/R WG/12) at the APAC Office in Bangkok, Thailand, from 1 to 5 May 2023, including an ICAO APAC Webinar on Meteorology/Air Traffic Management (MET/ATM Webinar).

2.13 All documentation (including the invitation, agenda and link for online registration) for MET/R WG/12 is available at the following ICAO APAC Office website:

<https://www.icao.int/APAC/Meetings/Pages/2023-MET-R-WG-12.aspx>.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information contained in this paper; and
 - b) discuss any relevant matters as appropriate.

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