



ICAO

International Civil Aviation Organization

The Seventh Meeting of System Wide Information Management Task Force (SWIM TF/7)

Bangkok, Thailand, 09 – 12 May 2023

Agenda Item 2: Outcomes of relevant meetings on SWIM-related matters

OUTCOMES OF THE MET SG AND ITS CONTRIBUTORY WGs ON SWIM-RELATED MATTERS

(Presented by the Secretariat)

SUMMARY

This paper presents SWIM-related discussion and outcomes from the MET SG and its contributory bodies and invites the meeting to further discuss any relevant matters as appropriate.

1. INTRODUCTION

1.1 The ICAO APAC MET SG work plan includes SWIM-related deliverables to develop user requirements for SWIM-based MET Information Services Supporting ATFM and identify meteorological expert/s to contribute to the APAC SWIM/TF to ensure meteorological aspects are fully considered.

1.2 This paper presents recent discussions and outcomes from the MET SG and its contributory working groups related to the MET SG's SWIM-related deliverables.

2. DISCUSSION

MET SG/26 – The use of the Internet for MET Information Services in Regional SWIM architecture

2.1 Noting the critical role of the Internet for the cost-effective and efficient exchange of (data-intensive) meteorological information in SWIM, MET SG/26 (1-5 August 2022) requested the Secretariat to facilitate the CNS SG's adoption of the Draft Decision SWIM TF/06/01, which would ensure the SWIM/TF considers the use of the Internet for meteorological information services when designing the regional SWIM architecture [MET SG/26, ACTION 26/03 refers].

2.2 As a follow-up to the above, the Secretariat informed CNS SG/26 that MET SG/26 considered it essential to adopt the proposal in Draft Decision SWIM TF/06/01 concerning the use of the Internet for MET Information Services in Regional SWIM architecture [CNS SG/26 – WP/34, refers].

MET SG/26 – SWIM workshop

2.3 MET SG/26 recalled that ICAO and States had conducted seminars and workshops in recent years to facilitate States implementing IWXXM. Noting the States' need also for SWIM-related

support, MET SG/26 revised the MET SG work plan to consider organizing and conducting a MET-focused workshop on SWIM.

MET/IE WG/21 – agenda item on SWIM

2.4 MET/IE WG/21 (27-29 March 2023) noted the need to provide States with SWIM-related support and added a new agenda item for the next Meeting (MET/IE WG/22) on SWIM [MET/IE WG/21 ACTION 01, refers].

MET/IE WG/21 – updated terms of reference related to the SWIM/TF

2.5 MET/IE WG/21 proposed updates to the MET/IE WG terms of reference, which, among other things, would include in the functions of the group the following: “coordinate and seek support from other enabling ICAO groups (e.g. SWIM TF, ACSICG, CRV OG, etc.) to support MET information exchange initiatives”.

Conjoint meeting session of MET/IE WG/21 and MET/S WG/13; and MET/R WG/12 – Proposals for the amendment of ICAO Annex 3 related to SWIM

2.6 The conjoint meeting session of MET/IE WG/21 and MET/S WG/13 (27-29 March 2023) reviewed the ICAO State letter, Ref.: AN 2/36-23/6, dated 13 February 2023, which presented background information and details of the proposals for the amendment of Annex 3, as well as Annex 4, Annex 10 (Vol. II and III), Annex 15, PANS-ABC, PANS-AIM, and the first edition of PANS-IM, arising from the Second Meeting of the ICAO Information Management Panel (IMP/2).

2.7 The proposed amendments are envisaged for applicability on 28 November 2024. The State letter requested that States and appropriate international organizations provide ICAO with any comments they wish to make on the amendment proposals by 14 August 2023.

2.8 Furthermore, to facilitate the requested feedback, the State letter includes (in Attachment D) the response form to be completed and returned to ICAO with any comments on the proposed amendments.

2.9 The conjoint meeting session noted that the State letter sets out, among other proposals, details on the proposed amendment to Annex 3 concerning SWIM and a first edition of PANS-IM concerning aeronautical information management, SWIM and information security.

2.10 The proposed amendment to Annex 3 is reproduced from the State letter, Ref.: AN 2/36-23/6, in **Appendix A** (of this paper). The proposed amendment recommends States should ensure that the meteorological information supplied to the users is provided through “information services”.

2.11 The proposed amendment notes that, in the context of SWIM, the notion of “information service” addresses machine-to-machine interaction in a service-oriented architecture. However, the conjoint meeting noted that the guidance for this interaction (namely the Manual on System-wide Information Management Implementation and the Manual on Information Security), remain under development and not yet published.

2.12 Furthermore, according to Annex 3, the recipients of MET information to be supplied through information services cover a broad scope and number of users: i.e., operators, flight crew members, air traffic services units, search and rescue services units, airport management and others concerned with the conduct or development of international air navigation.

2.13 Therefore, the conjoint meeting session noted that, according to the proposed amendment, by November 2024, States, operators and service providers in the aviation system may need to

implement significant changes to ensure the meteorological information is provided to users through information services (SWIM).

2.14 In addition, related to the transition to SWIM, the conjoint meeting session was informed that the ICAO METP was considering removing the (legacy) Annex 3 requirements for the global exchange of MET information in the traditional alpha-numeric code (TAC) form in 2029.

MET/R WG/12 – Development of APAC Use Case and User Requirements for SWIM-based MET Information Services Supporting ATFM

2.15 The MET/R WG work plan includes Deliverable 6: Development of APAC Use Case and User Requirements for SWIM-based MET Information Services Supporting ATFM, which includes the following elements:

- 6.1. In coordination with other related sub-groups, working groups, etc., identify:
 - i) SWIM-based MET information affecting ATFM operations;
 - ii) how often these products be provided and rules for updates to meet the ATFM needs; and
 - iii) identify any other information required by ATFM and gaps to meet the needs of ATFM users; and
- 6.2. Identify MET and ATFM data to be exchanged using the SWIM-based Information Exchange Service; and
- 6.3. Based on the findings (above), develop APAC use cases and a user requirements document for future SWIM-based MET information services supporting ATFM.

2.16 As part of the above work, MET/R WG/12 (1-5 May 2023) will discuss and consider recent updates by the designated ad hoc group to identify and document use cases and user requirements for SWIM-based MET information services supporting ATFM in the APAC region in coordination with other working groups, and an updated draft version of the document [MET/R WG/12 – WP/12, refers].

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.

APPENDIX A

**PROPOSED AMENDMENT TO
INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

**ANNEX 3
TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

METEOROLOGICAL SERVICE FOR INTERNATIONAL AIR NAVIGATION

INITIAL PROPOSAL 24

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CHAPTER 2. GENERAL PROVISIONS

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**2.2 Supply, use, quality management and interpretation
of meteorological information**

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2.2.10 Recommendation.— *States should ensure that the meteorological information supplied to the users listed in 2.1.2 is provided through information services.*

Note 1.— *In the context of system-wide information management, the notion of information service addresses machine-to-machine interaction in a service-oriented architecture.*

Note 2.— *Procedures on information services are contained in the Procedures for Air Navigation Services — Information Management (PANS-IM, Doc xxxxx).*

Note 3.— *Guidance material on information services can be found in the Manual on System-wide Information Management Implementation (Doc xxxxx).*

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<p><i>Origin:</i> IMP/2</p>	<p><i>Rationale:</i> States are encouraged to make sure that meteorological information is made available via information services following the introduction of system-wide information management (SWIM). In a SWIM environment, information services are the means to be used for meteorological information exchange.</p>
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