

International Civil Aviation Organization

ICAO

WORKING PAPER

Asia and Pacific (APAC)
Thirteenth Meeting of the Meteorological Requirements
Working Group (MET/R WG/13)

Bangkok, Thailand, 22 to 26 April 2024

Agenda Item 2: Review outcomes of related meetings**FOLLOW-UP ACTION FROM APANPIRG/34**

(Presented by the Secretariat)

SUMMARY

This paper presents outcomes from the Thirty-fourth Meeting of the Asia and Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/34), which are of direct relevance to the work plan of the Meteorological Requirements Working Group (MET/R WG), and invites the meeting to consider further actions for the MET/R WG, as necessary, to support the follow-up action on the APANPIRG/34 outcomes.

1. INTRODUCTION

1.1 Outcomes from the Thirty-fourth Meeting of the Asia and Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/34), held in Hong Kong, China, from 11 to 13 December 2023, included, in total, fourteen (14) Conclusions, which deal with matters that require the attention of States or actions by ICAO, and one (2) Decisions, which deal with matters of concern only to the APANPIRG and its contributory bodies.

1.2 The meeting will review the APANPIRG/34 outcomes which are of direct relevance to the work plan of the Meteorological Requirements Working Group (MET/R WG), and consider further actions for the MET/R WG, as necessary, to support the follow-up action on the outcomes from APANPIRG/34.

2. DISCUSSIONAPANPIRG/34 – Conclusions and Decision

2.1 The APANPIRG/34 outcomes of direct relevance to the work plan of the MET/R WG, include three (3) Conclusions and one (1) Decision, which are reproduced in **Appendix A** to this paper and listed below:

- Conclusion 34/12 – *IWXXM version compatibility* [Draft Conclusion MET SG/27-01]
- Conclusion 34/13 – *Global Dissemination of IWXXM* [Draft Conclusion MET SG/27-03]

- Conclusion 34/16 – *Update of Information in APANPIRG Air Navigation Deficiencies Reporting Form*
- Decision 34/14 – *Replacement of the VOLCEX Steering Group by the MET Exercise Advisory Group* [Draft Decision MET SG 27-06]

APANPIRG Air Navigation Deficiencies in the MET field

2.2 APANPIRG/34 acknowledged Nepal's significant progress towards rectifying the deficiency AP-MET-14 concerning the requirements for issuance and dissemination of SIGMET information for Kathmandu FIR. APANPIRG/34 considered removing the deficiency from the Open List subject to confirmation of the regular dissemination of the Kathmandu FIR SIGMET information in the IWXXM form (in addition to the TAC form) [Ref: APANPIRG/34, Report on Agenda Item 3.5, para. 3.5.9, and Report on Agenda Item 4, para. 4.11].

2.3 APANPIRG/34 recommended that the MET SG, in collaboration with the ICAO APAC Office, follow the guidance in the APANPIRG Procedural Handbook, Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies, to assess deficiencies in the regional implementation of Annex 3 SARPs and, depending on the outcomes, formulate appropriate recommendations for APANPIRG to consider on additions to the list of air navigation deficiencies, including deficiencies in the implementation of IWXXM [Ref: APANPIRG/34, Report on Agenda Item 3.5, para. 3.5.11, and Report on Agenda Item 4, para. 4.14].

3. ACTION BY THE MEETING

3.1 This paper invites the meeting to:

- a) Review the APANPIRG/34 outcomes in this paper; and
- b) Consider further actions for the MET/R WG, as necessary, to support the follow-up action on the APANPIRG/34 outcomes.

APPENDIX A

APANPIRG/34 Conclusions (extracted from the Final Report of APANPIRG/34)

Conclusion APANPIRG/34/12 (Draft Conclusion MET SG/27-01): IWXXM Version Compatibility		
What:	That, States are requested to ensure that MET service providers, air navigation service providers (ANSPs), airlines and other end users do the following: a) make the necessary system upgrades to support the IWXXM version, which complies with the latest amendment to Annex 3 as stated in the IWXXM compatibility table*; and b) prepare for future system upgrades to support future IWXXM versions driven by further amendments to Annex 3. (*Link to the IWXXM capability table: https://github.com/wmo-im/iwxxm/wiki/Package-Compatibility)	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	Most States generate and exchange IWXXM OPMET data in version 3.0. With the evolution of ICAO Annex 3, IWXXM version 3.0, which complied with Amendments 78 to Annex 3, is no longer compliant with Amendments 80 to ICAO Annex 3. To avoid the potential impact on operations due to IWXXM version compatibility issues, States must upgrade the systems for generating, exchanging and consuming IWXXM reports to support the IWXXM version that complies with the latest amendment to Annex 3.	Follow-up: <input checked="" type="checkbox"/> Required from States
When:	13-Dec-23	Status: Adopted by PIRG
Who:	<input 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:	

Conclusion APANPIRG/34/13 (Draft Conclusion MET SG/27-03): Global Dissemination of IWXXM		
What:	Expedite the implementation of network circuits and communication services necessary to enable the required global dissemination of meteorological information in the ICAO Meteorological Information Exchange Model (IWXXM) form, both intra-regionally and inter-regionally between APAC Inter-regional OPMET Gateways (IROGs) and IROGs in the ICAO AFI, MID, NAM and SAM Regions (through inter-regional consultation), including support for the Air Traffic Services Message Handling System (AMHS) with File Transfer Body Part (FTBP) and Interpersonal Message Heading Extension (IHE), and backup paths for redundancy purposes.	Expected impact: <input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	Following the provisions of ICAO Annex 3 – Meteorological Service for International Air Navigation, States shall ensure that certain meteorological information is disseminated to users in the IWXXM form. However, without suitable communication network connections to support the necessary intra- and inter-regional exchange of IWXXM messages, global dissemination of meteorological information in IWXXM form will not be possible. Consequently, the migration of user and supplier systems from meteorological information in the traditional alphanumeric code (TAC) form to the IWXXM form, as envisaged in the Global Air Navigation Plan (GANP), will remain inhibited.	Follow-up: <input checked="" type="checkbox"/> Required from States
When:	13-Dec-23	Status: Adopted by PIRG
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 checked="" type="checkbox"/> Other: PIRGs in other ICAO Regions	

Conclusion APANPIRG/34/16 – Update of Information in APANPIRG Air Navigation Deficiencies Reporting Form	
<p>That,</p> <p>1) ICAO to update the APANPIRG Air Navigation Database to reflect the information as presented in Appendices A to D to the Report on Agenda Item 4.</p> <p>2) States/Administrations be urged to:</p> <p style="margin-left: 20px;">a) establish action plan with defined target dates for resolution of deficiencies, update the status on the corrective action taken and report progress in the Reporting Form of Air Navigation Deficiencies identified in ATM and Airspace Safety, AOP, CNS and MET fields as detailed in Appendices A to D to the Report on Agenda Item 4; and</p> <p style="margin-left: 20px;">b) update contact details of a Focal Point to coordinate actions to resolve the Deficiencies.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input type="checkbox"/> Inter -Regional</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: The resolution of air navigation deficiencies in the ATM and Airspace Safety, AOP, CNS and MET fields (in the APANPIRG database) have lacked satisfactory progress over the years, due in part to inadequate information in the Reporting Form, e.g., infrequent updates and lack of concise and concrete Corrective Action Plans with defined target dates</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>
<p>When: Official reports providing full details of the corrective actions taken where deficiencies have been resolved be reported to APANPIRG's Sub-groups in 2024.</p>	<p>Status: Adopted by PIRG</p>
<p>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</p>	

Decision APANPIRG/34/14 (Draft Decision MET SG 27-06): Replacement of the VOLCEX Steering Group by the MET Exercise Advisory Group	
<p>What: That, the Volcanic Ash Exercises Steering Group (VOLCEX SG) be disestablished, and instead, MET SG includes in its work plan the establishment of a Meteorological Exercises Advisory Group to provide advice and guidance to States undertaking exercises on volcanic ash, space weather and other aeronautical meteorological hazards, reporting back (as necessary) under a new MET SG agenda item for MET exercises. Further, States are encouraged to report on their aviation-focused MET exercises activities under this agenda item.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input checked="" type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: There is a need for conducting exercises for various meteorological hazards, including space weather (SWX¹), volcanic ash and tropical cyclones. Since the creation of VOLCEX SG in 2014, numerous exercises have been conducted under the remit of the VOLCEX SG. Recently,</p>	<p>Follow-up:</p> <p><input type="checkbox"/> Required from States</p>

¹ The abbreviation SWX is used in ICAO Annex 3, Table A7-3: Template for advisory message for space weather information

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<p>many exercises have been undertaken by States outside of the governance of VOLCEX SG but based on procedures developed by the VOLCEX SG. It is agreed that the VOLCEX SG has served its intended function and is no longer required in its original format. It would still be helpful to utilise the experience of those who have conducted exercises previously, along with experts from agencies hosting VAACs, SWX Centres, and other experts in the Region, to form a new Advisory Group to provide guidance material and advice to assist States in developing their exercises. States are further encouraged to report beneficial exercise outcomes to the MET SG (and any other interested APANPIRG WG) on their results.</p>	
<p>When: 13-Dec-23</p>	<p>Status: Adopted by PIRG</p>
<p>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: ROs</p>	
