

International Civil Aviation Organization

ICAO

**WORKING PAPER (WP/02)****ICAO Asia and Pacific (APAC)**Twenty-Eighth Meeting of the Meteorology Sub-Group  
(MET SG/28)

Bangkok, Thailand, 8 to 12 July 2024

**Agenda Item 2: Review outcomes from previous meetings****REVIEW OUTCOMES FROM MET SG/27 AND APANPIRG/34**

(Presented by the Secretariat)

**SUMMARY**

This paper presents MET SG/27 and APANPIRG/34 outcomes, including conclusions, decisions, and agreed-upon actions, for further review, discussion, and updates by the meeting.

**1. INTRODUCTION**

1.1 Outcomes from the Twenty-seventh Meeting of the Meteorology Sub-group ([MET SG/27](#)), Bangkok, Thailand, 4-8 Sep 2023, and the Thirty-fourth Meeting of the Asia and Pacific Air Navigation Planning and Implementation Regional Group ([APANPIRG/34](#)), Hong Kong, China, 11-13 Dec 2023, are summarised for review by the meeting.

**2. DISCUSSION**MET SG/27 – Draft Conclusions and Draft Decisions

2.1 Outcomes from the MET SG that involve economic, environmental or political aspects or global implications or concern the working arrangements of APANPIRG and its contributory bodies are formulated as Draft Conclusions or Draft Decisions for further consideration by the APANPIRG. Under its terms of reference, MET SG/27 formulated two (2) Draft Conclusions and one (1) Draft Decision, as summarised below:

- Draft Conclusion MET SG/27-01: *IWXXM version compatibility*
  - Highlighted the need for MET service providers and end-users to maintain system compatibility with the IWXXM version that complies with the latest amendment to Annex 3.
- Draft Conclusion MET SG/27-03: *Global dissemination of IWXXM*
  - Highlighted the need to expedite implementation of intra- and inter-regional network circuits and communication services necessary to disseminate MET information in the

IWXXM form globally.

- Draft Decision MET SG/27-06: *Replacement of the VOLCEX Steering Group by the MET Exercises Advisory Group*
  - Replacing the Volcanic Ash Exercises Steering Group (VOLCEX SG) with a new Meteorological Exercises Advisory Group to produce guidance for use by States undertaking exercises on volcanic ash, space weather and other aeronautical meteorological hazards.

2.2 Based on the MET SG/27 Draft Conclusions and Decision above, APANPIRG/34 adopted two (2) Conclusions and one (1) Decision, as discussed in paragraph 2.5 below.

#### MET SG/27 – Conclusions and Decisions

2.3 Additional outcomes from the MET SG, which concern technical matters that do not warrant further consideration by the APANPIRG but require the attention of States or action by the ICAO or concern the internal working arrangements of the MET SG, are adopted as Conclusions or Decisions of the MET SG. Under its terms of reference, MET SG/27 adopted two (2) Conclusions and two (2) Decisions, as summarised below and reproduced in full in **Appendix A**:

- Conclusion MET SG/27-02: *Provision of quality meteorological information*
  - Highlighted the critical need for States to ensure that TAC-formatted meteorological information is fully ICAO Annex 3-compliant, especially when it is the basis for disseminating the meteorological information in IWXXM form (through translation) to users.
- Conclusion MET SG 27-04: *Meteorological seminars*
  - Established the provision of seminars (with the ability for States to participate virtually) as a regular activity to support States implementing ICAO Annex 3 requirements, covering topics related to ICAO changes, new procedures and policies, future services and information exchange.
- Decision MET SG/27-05: *Update the Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations*
  - Approved updates to the Asia/Pacific Regional Guidance for Tailored Meteorological Information and Services to Support Air Traffic Management Operations, including the example from Australia as an Appendix.
- Decision MET SG 27-07: *Dissolution of MET/S WG*
  - Dissolved the MET/S WG as a distinct contributory body.

#### MET SG/27 – List of Actions

2.4 In addition to the MET SG/27 outcomes discussed above, MET SG/27 agreed to thirteen (13) actions, as recorded in the MET SG/27 Report, Appendix A – List of Actions. The MET SG – List of Actions is provided in **Appendix B** (of this paper) and indicates the status of follow-up on the list of actions.

#### APANPIRG/34 – Conclusions and Decisions

2.5 APANPIRG/34 adopted, in total, fourteen (14) Conclusions that require the attention of States or actions by ICAO and two (2) Decisions that concern only the APANPIRG and its contributory bodies. Three (3) Conclusions and one (1) Decision of APANPIRG/34 are of direct relevance to the MET SG and are summarised below and reproduced in full in **Appendix C**:

- Conclusion APANPIRG/34/12: *IWXXM version compatibility*
  - As presented in Draft Conclusion MET SG/27-01 [ref: paragraph 2.1, above]
- Conclusion APANPIRG/34/13: *Global Dissemination of IWXXM*
  - As presented in Draft Conclusion MET SG/27-03 [ref: paragraph 2.1, above]
- Decision APANPIRG/34/14: *Replacement of the VOLCEX Steering Group by the MET Exercise Advisory Group*
  - As presented in Draft Decision MET SG/27-06 [ref: paragraph 2.1, above]
- Conclusion APANPIRG/34/16 – *Update of Information in APANPIRG Air Navigation Deficiencies Reporting Form*
  - Updated the APANPIRG Air Navigation Deficiencies database based on information presented by the Sub-Groups (incl. MET SG/27)
  - Urged the States to establish action plans, define target dates, report progress, and update Focal Point contact details

APANPIRG/34 – additional outcomes concerning Air Navigation Deficiencies

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. However, based on the MET SG's Report, APANPIRG/34 considered removal of the deficiency from the Open List would be subject to confirmation of the regular dissemination of the Kathmandu FIR SIGMET information in the IWXXM form (in addition to the TAC form).

2.6 In addition, in response to the MET SG's request [MET SG/27 Action Item 01 refers] for advice concerning the identification of air navigation deficiencies related to the implementation of IWXXM, APANPIRG/34 confirmed that the guidance in the APANPIRG Procedural Handbook (*Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies*) should be followed to identify, assess and report deficiencies in the implementation of Annex 3 Standards and Recommended Practices (SARPs) – including IWXXM-related deficiencies.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) Note the information in this paper; and
- b) Review and update the follow-up status on the MET SG/27 and APANPIRG/34 outcomes.

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**APPENDIX A**

**MET SG/27 – Conclusions and Decisions**

<b>Conclusion MET SG/27-02: Provision of quality meteorological information</b>	
What: That, States are reminded that the provision of specified meteorological information in IWXXM form has been an ICAO Annex 3 standard requirement since 2020. Where a State provides or arranges the provision of IWXXM information through translation services (from traditional alphanumeric code (TAC)-formatted information), the TAC-formatted information must be ICAO compliant; otherwise, translation errors occur, resulting in higher costs for users and preventing the benefits of IWXXM being obtained.	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 are now producing meteorological information in IWXXM. However, users will only consider transitioning from TAC to IWXXM forms when they can reliably access quality IWXXM information from all the required States.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 8-Sep-23	Status: Adopted by Subgroup
Who: <input type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

<b>Conclusion MET SG 27-04: Meteorological seminars</b>	
What: That, MET SG coordinates the provision of meteorological seminars, covering topics related to ICAO changes, new procedures and policies, future services and information exchange to support States implementing ICAO Annex 3 requirements and education.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input checked="" type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: Only a subset of APAC States currently attend ICAO meteorological-related meetings. Attendance (virtually) at ICAO meetings during COVID-19 demonstrated significant demand from States for further information. Attendance at ICAO meetings comes at an environmental and financial cost. The Meteorological Seminars will enable a wider group of stakeholders from more States to receive advice and stay informed of the latest ICAO developments, offering financial and environmental benefits.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 8-Sep-23	Status: Adopted by Subgroup
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:	

<b>Decision MET SG/27-05: Update the Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations</b>	
What: That, the MET SG approves the proposed updates to the <i>Asia/Pacific Regional Guidance for Tailored Meteorological Information and Services to Support Air Traffic Management Operations, including the example from Australia as an Appendix.</i>	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To provide States with up-to-date guidance material and make the updated version available on the ICAO APAC eDocuments website	Follow-up: <input type="checkbox"/> Required from States
When: As soon as practicable	Status: Adopted by Subgroup
Who: <input type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

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<b>Decision MET SG 27-07: Dissolution of MET/S WG</b>	
<p>What: That the MET SG:</p> <ul style="list-style-type: none"> <li>a) Dissolves the MET/S WG as a distinct contributory body;</li> <li>b) Realigns reporting of the VOLCEX SG (or its proposed replacement group, the MET Exercises Advisory Group);</li> <li>c) Retains the two expert ad hoc groups that will report to MET SG on:               <ul style="list-style-type: none"> <li>i. Rectification and Identification of Deficiencies; and</li> <li>ii. Regional SIGMET Guide updates.</li> </ul> </li> <li>d) Retains the expert ad hoc group on SIGMET coordination, which will report to MET/R WG; and</li> <li>e) Task the ad hoc group leads to report progress, as necessary, to the MET SG and WG Chairs Quarterly Meetings.</li> </ul>	<p>Expected impact:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Political / Global</li> <li><input type="checkbox"/> Inter-regional</li> <li><input checked="" type="checkbox"/> Economic</li> <li><input checked="" type="checkbox"/> Environmental</li> <li><input checked="" type="checkbox"/> Ops/Technical</li> </ul>
<p>Why:</p> <ul style="list-style-type: none"> <li>1. To avoid duplication of effort at MET SG and WGs and unnecessary travel for participants;</li> <li>2. To make more effective use of participants' and ICAO's resources; and</li> <li>3. To improve the coordination and outreach with States, especially in the context of ICAO's No Country Left Behind initiative.</li> </ul>	<p>Follow-up:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Required from States</li> </ul>
<p>When: 8-Sep-23</p>	<p>Status: Adopted by Subgroup</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>	

— END OF SECTION —

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**APPENDIX B**

**MET SG – LIST OF ACTIONS**

(Note: Proposed updates are indicated with ~~strikethrough~~ and highlighted text)

**New action items recorded by MET SG/27**

MET SG – LIST OF ACTIONS				
Action No.	Detailed description of actions	Responsibility	Target date	Status
27/01	<p><b>MET Deficiencies related to IWXXM implementation:</b> Seek further advice from APANPIRG concerning identifying air navigation deficiencies in other States due to the lack of implementation of the Annex 3 standards for disseminating meteorological information in the IWXXM form. [Ref: Report of MET SG/27, para. 3.9.]</p> <p>Ref: APANPIRG/34, Report on Agenda Item 3.5, para. 3.5.11</p>	Secretariat	Dec 2023	<b>COMPLETED TO COMMENCE</b>
27/02	<p><b>Updates to the ICAO APAC ROBEX Handbook:</b> Coordinate with all the States concerned (ref: MET SG/27, WP/09 and WP/14) to incorporate the proposed updates in the ROBEX Handbook, Sixteenth Edition [ACTION MET SG/27-02] [Ref: Report of MET SG/27, para. 4.4.]</p> <p>Ref: MET/IE WG22, WP/19 Ref: MET/R WG/13 Report, para. 2.09., and MET/R WG/13 action item 03.</p>	Secretariat	Dec 2023	<b>IN PROGRESS TO COMMENCE</b>
27/03	<p><b>Update to Regional SIGMET Guide:</b> Include the proposed example on guidance on SIGMET for volcanic ash crossing FIR boundaries, Appendix A of WP/10, in the next update of the APAC Regional SIGMET Guide. [Ref: Report of MET SG/27, para. 4.7.]</p>	Secretariat	Dec 2023	<b>TO COMMENCE</b>
27/04	<p><b>Volcanic ash advisory and SIGMET examples:</b> Review and revise the volcanic ash advisory and SIGMET examples in WP/10, Appendix B, when the OBS (or EST) VA CLD on the Volcanic Ash Advisory (VAA) indicates "VA NOT IDENTIFIABLE FM SATELLITE DATA", to ensure consistency between the SIGMET and advisory information. [Ref: Report of MET SG/27, para. 4.8.]</p>	Ad hoc group in collaboration with the VAACs	Jul 2024 (MET SG/28)	<b>TO COMMENCE</b>
27/05	<p><b>Document of cases of SIGMET coordination:</b> Identify common SIGMET coordination practices from the document of cases of SIGMET coordination in WP/11 and develop further the document to separate the procedural information, which could potentially be used to supplement to the Asia/Pacific Regional SIGMET Guide. [Ref: Report of MET SG/27, para. 4.16.]</p> <p>Ref: MET/R WG/13 Report, para. 2.10., and MET/R WG/13 WP/09 – SIGMET coordination common practices and guidelines</p>	Ad hoc group	Jul 2024 (MET SG/28)	<b>IN PROGRESS TO COMMENCE</b>
27/06	<p><b>Document on use cases and user requirements for SWIM-based MET information services supporting ATFM in the APAC region:</b> Present the document on use cases and user requirements for SWIM-based MET information services supporting ATFM in the APAC region to the ATM/SG/11 for review and feedback. [Ref: Report of MET SG/27, para. 4.17.]</p>	Ad hoc group	Oct 2023 (ATM/SG/11)	<b>COMPLETED</b>
27/07	<p><b>Update of VAAC backup procedures in APAC Regional SIGMET Guide:</b> Include the proposed updates for the example in Appendix A of WP/10 and the proposal in WP/13 in the eleventh edition of the Asia/Pacific Regional SIGMET guide. [Ref: Report of MET SG/27, para. 4.22.]</p> <p>Ref: MET/R WG/13 Report, para. 2.09., and MET/R WG/13 action item 03.</p>	Secretariat	Dec 2023	<b>IN PROGRESS TO COMMENCE</b>

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MET SG – LIST OF ACTIONS				
Action No.	Detailed description of actions	Responsibility	Target date	Status
27/08	<b>Siem Reap Angkor International Airport (VDSA) – ROBEX Handbook update:</b> Coordinate the necessary updates to incorporate VDSA in the ROBEX Handbook. [Ref: Report of MET SG/27, para. 5.2.]  Ref: MET/IE WG22, WP/19	Secretariat and Cambodia	Dec 2023	<b>IN PROGRESS TO COMMENCE</b>
27/09	<b>Siem Reap Angkor International Airport (VDSA) – METNO process:</b> Notify the update to the ROBEX system by following the METNO process. [Ref: Report of MET SG/27, para. 5.3.]	Responsible NOC	Dec 2023	<b>TO COMMENCE</b>
27/10	<b>Proposal for amendment of the APAC Air Navigation Plan:</b> Compile a proposal for amendment and to the ANP incorporating amendments in WP/14 and paragraph 5.5. of the Report of MET SG/27 and seek confirmation from the States concerned before circulating the proposal for amendment to States and Organizations for comments and Regional agreement. [Ref: Report of MET SG/27, para. 5.6.]	Secretariat	Dec 2023	<b>TO COMMENCE</b>
27/11	<b>MET deficiencies review of 2022 SIGMET test:</b> Utilise the proposed actions in WP/17, Appendix A, when advising States of SIGMET corrective actions. [Ref: Report of MET SG/27, para. 5.9.]	Secretariat	Dec 2023	<b>TO COMMENCE</b>
27/12	<b>Proposed amendment to ICAO Annex 3:</b> Survey States on their needs for implementation support for the proposed amendment to ICAO Annex 3. [Ref: Report of MET SG/27, para. 5.17.]	Secretariat	Dec 2023	<b>TO COMMENCE</b>
27/13	<b>APAC SIGMET coordination activities Proposed amendment to ICAO Annex 3:</b> Update the online repository with the new SIGMET coordination activities between China and adjacent countries. [Ref: Report of MET SG/27, para. 6.6.]  Ref: MET/R WG/13 Report, para. 2.11.	Ad hoc group	Dec 2023	<b>COMPLETED TO COMMENCE</b>

**Unresolved action items recorded by MET SG/26**

MET SG – LIST OF ACTIONS				
Action No.	Detailed description of actions	Responsibility	Target date	Status
26/04	<b>APANPIRG AN Deficiencies – requirements for WAFS forecasts:</b> Provide technical assistance to help the States concerned understand and determine the requirements for WAFS forecasts. [Ref: Report of MET SG/26, para. 3.2.]  Ref: MET SG/27, WP/07 – Review APANPIRG Air Navigation Deficiencies	Secretariat	Nov 2022	<b>IN PROGRESS</b>
26/07	<b>APAC ANP, Volume III amendment – examples from other ICAO Regions:</b> Consider examples of Volume III adopted by other ICAO Regions in the MET work plan on a proposal for amendment of MET-specific material in the APAC ANP, Volume III. [Ref: Report of MET SG/26, para. 5.8.]  Ref: MET SG/27, WP/14 – Review of the Asia/Pacific Air Navigation Plan	Secretariat and MET/R WG	Nov 2022	<b>IN PROGRESS</b>
26/08	<b>APAC ANP, Volume II amendment – Nepal:</b> Initiate an appropriate proposal for amendment of the ANP Volume II, to reflect the requirements for aerodrome meteorological offices in Nepal.	Secretariat and Nepal	Nov 2022	<b>IN PROGRESS</b>

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MET SG – LIST OF ACTIONS				
Action No.	Detailed description of actions	Responsibility	Target date	Status
	[Ref: Report of MET SG/26, para. 5.9.]  Ref: MET SG/27, WP/14 – Review of the Asia/Pacific Air Navigation Plan			

**Unresolved action items recorded by MET SG/25**

MET SG – LIST OF ACTIONS				
Action No.	Detailed description of actions	Responsibility	Target date	Status
25/06	<b>Finalise the proposals for amendment of the APAC ANP (Vol I and II) and ROBEX Handbook</b> as agreed in previous meetings to ensure accuracy of the requirements specifications against which the OPMET monitoring is analysed [Ref: para. 4.6.-4.7.]  Ref: MET SG/27, WP/14 – Review of the Asia/Pacific Air Navigation Plan, and WP/09 – Updates to the ICAO APAC ROBEX Handbook	Secretariat	Nov 2021	<b>IN PROGRESS</b>
25/07	<b>Finalise a proposal for amendment of the APAC ANP (Table MET II-1) and consequential amendment to the APAC Regional SIGMET Guide</b> as necessary to ensure the correct use of FIR indicator for Port Moresby [Ref: para. 4.12.-4.14.]  Ref: MET SG/27, WP/14 – Review of the Asia/Pacific Air Navigation Plan, and APAC Regional SIGMET Guide, Tenth Edition, uploaded to the ICAO APAC website: <a href="https://www.icao.int/APAC/Pages/eDocs.aspx">https://www.icao.int/APAC/Pages/eDocs.aspx</a>	Secretariat	Nov 2021	<b>IN PROGRESS</b> ANP amendment pending; SIGMET Guide amended, 9 <sup>th</sup> Ed.
25/09	<b>Review SIGMET Guide</b> as necessary to guide MWOs to handle cases when VAAC would not hand over to the neighbouring VAAC even if the ash cloud is expected to cross the AoR [Ref: para. 4.12.-4.14.]	MET/S Ad hoc group	Mar 2023	<b>TO COMMENCE</b>
25/12	<b>Provide updates to the contact lists in the ICAO Doc 9766-AN/968 (Handbook on the International Airways Volcano Watch (IAVW))</b> to the ICAO METP [Ref: para. 5.15.]	MET SG, Secretariat MET/S-WG, MET/IE-WG	Mar 2022	<b>TO COMMENCE</b>
25/13	<b>Coordinate possible SWX advisory exercise/s and training workshop/s</b> with the appropriate body under METP for [Ref: para. 5.28.]  Ref: ICAO APAC webinar on space weather information service (TBD) Ref: Secretariat to coordinate with Australia [MET/IE WG/20 - ACTION 01] Ref: MET/R WG new deliverable #7 to promote user education on SWX service.	Secretariat MET/S-WG, MET/IE-WG	Nov 2021	<b>IN PROGRESS</b>

— END OF SECTION —



**APPENDIX C**

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

<b>Conclusion APANPIRG/34/12 (Draft Conclusion MET SG/27-01): IWXXM Version Compatibility</b>	
<p><b>What:</b> 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: <a href="https://github.com/wmo-im/iwxxm/wiki/Package-Compatibility">https://github.com/wmo-im/iwxxm/wiki/Package-Compatibility</a>)</p>	<p><b>Expected impact:</b>  <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</p>
<p><b>Why:</b> 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.</p>	<p><b>Follow-up:</b>  <input checked="" type="checkbox"/> Required from States</p>
<p><b>When:</b> 13-Dec-23</p>	<p><b>Status:</b> Adopted by PIRG</p>
<p><b>Who:</b> <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:</p>	

<b>Conclusion APANPIRG/34/13 (Draft Conclusion MET SG/27-03): Global Dissemination of IWXXM</b>	
<p><b>What:</b> 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.</p>	<p><b>Expected impact:</b>  <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</p>
<p><b>Why:</b> 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.</p>	<p><b>Follow-up:</b>  <input checked="" type="checkbox"/> Required from States</p>
<p><b>When:</b> 13-Dec-23</p>	<p><b>Status:</b> Adopted by PIRG</p>
<p><b>Who:</b> <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</p>	

<b>Decision APANPIRG/34/14 (Draft Decision MET SG 27-06): Replacement of the VOLCEX Steering Group by the MET Exercise Advisory Group</b>

MET SG/28  
Appendix C to WP/02

<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:  <input type="checkbox"/> Political / Global  <input type="checkbox"/> Inter-regional  <input checked="" type="checkbox"/> Economic  <input checked="" type="checkbox"/> Environmental  <input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: There is a need for conducting exercises for various meteorological hazards, including space weather (SWX<sup>1</sup>), 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, 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>Follow-up:  <input type="checkbox"/> Required from States</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>	

<p><b>Conclusion APANPIRG/34/16 – Update of Information in APANPIRG Air Navigation Deficiencies Reporting Form</b></p>	
<p>That,  1) ICAO to update the APANPIRG Air Navigation Database to reflect the information as presented in <b>Appendices A to D to the Report on Agenda Item 4.</b>  2) States/Administrations be urged to:  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 <b>Appendices A to D to the Report on Agenda Item 4;</b> and  b) update contact details of a Focal Point to coordinate actions to resolve the Deficiencies.</p>	<p><b>Expected impact:</b>  <input type="checkbox"/> Political / Global  <input checked="" type="checkbox"/> Economic  <input type="checkbox"/> Environmental  <input type="checkbox"/> Inter -Regional  <input checked="" type="checkbox"/> Ops/Technical</p>
<p><b>Why:</b> 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><b>Follow-up:</b> <input checked="" type="checkbox"/> Required from States</p>
<p><b>When:</b> 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><b>Status:</b> Adopted by PIRG</p>
<p><b>Who:</b> <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>	

— END OF DOCUMENT —

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