



ICAO

*International Civil Aviation Organization***WORKING PAPER****Twenty-fourth Meeting of the Meteorology Sub-group (MET SG/24) of the Asia and Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG)**

Web-conference, 16 – 20 November 2020

Agenda Item 2: Review outcomes from previous meetings**REVIEW OUTCOMES FROM APANPIRG/30**

(Presented by the Secretariat)

SUMMARY

This paper invites the meeting to review the outcomes from the Thirtieth Meeting of the APAC Air Navigation Planning and Implementation Regional Group (APANPIRG/30) and consider further actions, as necessary, to complete the follow-up work from APANPIRG/30.

1. INTRODUCTION

1.1 The ICAO Asia and Pacific (APAC) Office hosted the Thirtieth Meeting of the APAC Air Navigation Planning and Implementation Regional Group (APANPIRG/30) in Bangkok, Thailand from 4 to 6 November 2019.

1.2 This paper invites the meeting to review the outcomes from APANPIRG/30 and consider further actions, as necessary, to complete the follow-up work from APANPIRG/30.

2. DISCUSSION

2.1 The report from APANPIRG/30, and all related documentation, is available at the ICAO APAC Office website (www.icao.int/apac > APANPIRG > APANPIRG/30).

2.2 For easy reference, the main outcomes from APANPIRG/30 relevant to the MET SG, i.e., the APANPIRG/30 Conclusions and Decisions relevant to the MET SG, are reproduced at the **Attachment** to this paper and discussed further below.

APANPIRG/30 – Conclusions

2.3 APANPIRG/30 adopted nineteen (19) Conclusions requiring the attention of States or actions by ICAO, two (2) of which were drafted by MET SG/23 and have direct relevance to the MET SG:

- **Conclusion** APANPIRG/30/17: *Implementation of IWXXM*
- **Conclusion** APANPIRG/30/18: *Discontinuation of meteorological information in TAC form*

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2.4 In adopting the above Conclusions, APANPIRG/30 highlighted aspects that States should consider when implementing ICAO SARPs concerning the dissemination of meteorological information in IWXXM form and when planning ahead for the future discontinuation of existing ICAO SARPs concerning the dissemination of meteorological information in the traditional alpha-numeric code (TAC) form.

2.5 As follow-up to the above APANPIRG/30 Conclusions, ICAO disseminated a State letter, Ref.: AN 3/3 – AP095/20 (MET), dated 28 April 2020, on the subject: *Implementation of ICAO SARPs for the dissemination of meteorological information in IWXXM form*, to remind States of the need for urgent action to ensure compliance with existing SARPs and the need to prepare for further, expected air navigation developments related to IWXXM.

2.6 APANPIRG/30 also adopted one (1) Conclusion, requiring the attention of States and of direct relevance to the MET SG, concerning updates to, and the resolution of, air navigation deficiencies:

- **Conclusion** APANPIRG/30/19: *Update of information in APANPIRG Air Navigation Deficiencies Reporting Form*

2.7 In adopting the above Conclusion, APANPIRG/30 noted that it was the responsibility of States with deficiencies to provide updates to the ICAO APAC Office so that the information in the deficiency database can be updated in a timely manner. ICAO will update the deficiencies database based on written confirmation provided by the respective States.

2.8 In relation to the above Conclusion, APANPIRG/30 endorsed updates to the APANPIRG air navigation deficiencies list, including the removal of the deficiency Index no.: AP-MET-07, concerning provision of SIGMET for volcanic ash in Philippines, as recommended by MET SG/23.

APANPIRG/30 – Decisions

2.9 APANPIRG/30 adopted four (4) Decisions concerning the APANPIRG and its contributory bodies, one (1) of which was drafted by MET SG/23 and has direct relevance to the MET SG:

- **Decision** APANPIRG/30/16: *Updated terms of reference and work plan of MET SG*

2.10 In adopting the above Decision, APANPIRG/30 supported the MET SG/23's proposal to update the terms of reference for MET SG to include specific timeframes concerning the availability of MET SG's meeting documentation, which would facilitate the various stakeholders' timelier consideration of the (meeting) reports and papers.

3. ACTION BY THE MEETING

3.1 This paper invites the meeting to review the outcomes from APANPIRG/30, as discussed above and presented in the **Attachment** to this paper, and consider further actions, as necessary, to complete the follow-up work from APANPIRG/30.

APANPIRG/30 Conclusions

Conclusion APANPIRG/30/17: Implementation of IWXXM	
What: That, all Member States/Administrations: <ul style="list-style-type: none"> a) Arrange for the dissemination of the required meteorological information in IWXXM GML form, in accordance with Amendment 78 to Annex 3; b) Implement only Version 3 of IWXXM for the exchange of the required meteorological information on operational networks from 5 November 2020; c) Implement Air Traffic Services (ATS) Message Handling System (AMHS), with File Transfer Body Part (FTBP) the Interpersonal Message (IPM) Heading Extension (IHE) to support the exchange of IWXXM, including support for IWXXM reports of a maximum size of 4MB and FTBP of maximum 2MB; d) Ensure there is adequate capacity in the operational AFS links to support the exchange of the required meteorological information in both IWXXM GML form and TAC form; e) Consider putting in necessary protection against cyber security, and f) Implement the necessary changes (above) as a priority at the APAC ROCs and RODBs. 	
Why: <ul style="list-style-type: none"> a) From November 2018, Amendment 78 to Annex 3 specifies that States should disseminate specific meteorological information (i.e., METAR/SPECI, TAF, SIGMET, AIRMET and volcanic ash and tropical cyclone advisory information) in IWXXM GML form (with the addition of space weather information from November 2019). From November 2020, Amendment 78 to Annex 3 also specifies that States shall disseminate all the above specific meteorological information in IWXXM GML form; b) ICAO Doc 10003 – <i>Manual on the Digital Exchange of Aeronautical Meteorological Information</i>, stipulates that, to meet the requirements of Amendment 79 to Annex 3, only Version 3 of IWXXM, or later, shall be exchanged on operational networks from 5 November 2020; c) IWXXM GML form is far more verbose than the existing TAC format and, as a result, compression is required. However, to support the exchange of compressed IWXXM files, AMHS links with FTBP and IHE are required; d) In accordance with Annex 3, States/Administrations will disseminate both IWXXM and TAC data over the AFS in parallel, and given the significant increase in data volumes, operational links will require adequate capacity to support both data sets; and e) The Regional and Global exchange of the required meteorological information in IWXXM GML form depends on the ROCs and RODBs being IWXXM-exchange capable. 	
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	
Follow-up: <input checked="" type="checkbox"/> Required from States	
When: Now	Status: Adopted by PIRG
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:	

Conclusion APANPIRG/30/18: Discontinuation of meteorological information in TAC form	
What: That, ICAO urges States to consider necessary changes to migrate systems to enable the use of meteorological information in XML/GML (IWXXM) form, as an alternate to meteorological information in traditional alpha-numeric code (TAC) form, and prepare for consequential impacts to aviation meteorological services such as VOLMET broadcast, weather briefing system and flight documentation preparation system.	
Why: <ul style="list-style-type: none"> a) ICAO Annex 3 specifies that from November 2020, States shall disseminate specific meteorological information (i.e., METAR/SPECI, TAF, SIGMET, AIRMET and space weather, volcanic ash and tropical cyclone advisory information) in IWXXM GML form; and 	

b) Air Navigation Conference: Recommendation 2.3/2: <i>Further Development of IWXXM for the Exchange of Aeronautical Meteorological Information</i> , ensure that the IWXXM format is the only standard exchange format by 2026.	
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	
Follow-up: <input checked="" type="checkbox"/> Required from States	
When: By 2026	Status: Adopted by PIRG
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:	

Conclusion APANPIRG/30/19 – Update of information in APANPIRG Air Navigation Deficiencies Reporting Form	
What: That, 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/AIM/SAR, AOP, CNS and MET fields as detailed in Appendices A to D to the Report on Agenda Item 4; and b) update contact details of a Focal Point to coordinate actions to resolve the Deficiencies.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input type="checkbox"/> Inter -Regional <input checked="" type="checkbox"/> Ops/Technical
Why: The resolution of air navigation deficiencies in the ATM/AIM/SAR, AOP, CNS and MET fields (in the APANPIRG database) have lacked satisfactory progress over several 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	Follow-up: <input checked="" type="checkbox"/> Required from States
When: official reports providing full details of the corrective actions taken where deficiencies have been resolved be reported to sub-groups in 2020.	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	

APANPIRG/30 Decision

Decision APANPIRG/30/16: Updated terms of reference and work plan of MET SG	
What: That, APANPIRG approves the updated terms of reference and work plan of MET SG at Appendix A to the APANPIRG/30 Report on Agenda Item 3.5.	
Why: To help ensure meeting documentation is available in a timely manner to meet participants' requirements and to reflect the current deliverables and timeframes of the MET SG work plan.	
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	
Follow-up: <input type="checkbox"/> Required from States	
When: On approval	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	
