

International Civil Aviation Organization



ICAO

WORKING PAPER

**Asia and Pacific (APAC)
Eleventh Meeting of the Meteorological Requirements
Working Group (MET/R WG/11)**

Online, 31 May to 03 June 2022

Agenda Item 4: Collaboration between MET services and ATM stakeholders

**PREPARATION FOR UPDATING ASIA/PACIFIC REGIONAL GUIDANCE FOR
TAILORED METEOROLOGICAL INFORMATION AND SERVICES TO SUPPORT AIR
TRAFFIC MANAGEMENT OPERATIONS**

(Presented by MET/R WG Ad Hoc Group –Australia, China, Hong Kong, China, Japan (rapporteur),
Republic of Korea, Singapore, Thailand, Vietnam and IATA)

SUMMARY

This paper presents proposal of preparation for updating Asia/Pacific Regional Guidance for Tailored Meteorological Information and Services to Support Air Traffic Management Operations to enhance the contents related to improvement process of the MET information and services including post operational analysis on the effect of tailored MET information on ATM decisions.

1. INTRODUCTION

1.1 The Asia/Pacific regional guidance for tailored meteorological information and services to support Air Traffic Management (ATM) operations is aimed at fostering States' implementation and enhancement of MET information and services for ATM in the Region. It captures necessary processes from preparatory to operational phases. The stepwise (process-wise) structure of the guidance is expected to allow each State to refer to suitable chapters, sections or subsections depending on its status of implementation of MET information and services to support ATM, including commencement, implementation or improvement. Furthermore, it provides details of operational service practices with specific examples and operational scenarios in the Appendices.

1.2 This regional guidance is maintained by the Ad-hoc group of the MET/R WG consisting of Australia, China, Hong Kong, China, Japan (rapporteur), Republic of Korea, Singapore, Thailand, Vietnam and IATA, and available on the ICAO APAC eDocuments website (<https://www.icao.int/APAC/Pages/eDocs.aspx>). States are encouraged to provide their activities on MET services in support of ATM and also share specific examples and operational scenarios to capture more examples within the appendices of the guidance. The maintenance procedures and means of publication of the guidance are provided in "Note for Appendix 1 and 2" in the main part of the Guidance.

2. DISCUSSION

2.1 At the MET/ATM Webinar held in July 2021, the mechanism to analyse the effect of ATM-tailored MET service on ATM decisions and flight operations was discussed. In consideration of the discussion, at the Tenth meeting of MET/R WG, the ad-hoc group was tasked as follows:

MILESTONES	By date	Responsibility	Status
Deliverable 4: Draft regional guidance material for tailored MET information supporting ATM operations			
4.9 Consider expanding the Guidance document to define a framework to capture post operational analysis on the impact of tailored met information on ATM decisions	Next MET/R WG meeting	Ad hoc group	To begin

2.2 In the main part of the Guidance, there are some descriptions relevant to the post operational analysis, under Section 2.2 of the Guidance. However, in view of the experiences in supporting ATM operations by providing MET information and services in the Region, the ad-hoc group considered that it would be more beneficial to focus on the post operational analysis as an improvement process of MET information and services in supporting ATM operations, and it may be useful to include more detailed description on its framework, process or method in the Guidance document.

2.3 Considering that there may be various ways of post operational analysis and its framework may depend on States, defining one common framework could be difficult. However, the document could capture common procedures based on the analysis of various States experience.

2.4 Therefore, the ad-hoc group planned to collect information on experiences of States to explore common procedures to be included in the Guidance. The ad-hoc group is also considering to expand Appendix 1, which currently provides examples of MET services in support of ATM in member States, to include each member States’ experience on the post operational analysis. For example, it would be considered to expand the number of pages for each State’s example in Appendix 1 from four to five pages allowing States to include more information.

2.5 In addition to the above, the ad-hoc group considered modification in the Section 2.2 of the Guidance as below, to avoid duplicated description, to be included in the next updates of the Guidance. Proposed modification shows deleted text using strikethrough (~~text to be deleted~~), and added text with grey shading (*text to be inserted*):

2.2.3 Verification and evaluation

After the implementation of ATM-tailored MET information and services, it is required ~~(i) to regularly verify and evaluate its quality to ensure that it practically supports ATM and (ii) to improve MET information and services.~~ Also, when a meteorological condition has a significant impact on ATM, it is also recommended that stakeholders conduct a post-event analysis to identify lessons learnt.

2.2.4 Continuous improvement

Regular evaluation meetings between relevant parties such as airspace users, ATM and MET organizations are one of the basic approaches to continuously improve the implemented information and services. ~~When a meteorological condition has a significant impact on ATM, it is also recommended that stakeholders conduct a post-event analysis to identify lessons learnt and subsequent improvements.~~ These meetings should draw from the results of verification and

evaluation as well as lessons learnt from significant events, to identify changes and innovations to continually improve MET information and services.

2.6 In view of the discussion above, the meeting is invited to consider formulating following Decision regarding preparation of updating the regional guidance;

Decision MET/R WG/11/x: *Update to the Regional Guidance for Tailored Meteorological Information and Services to Support ATM Operations*

- a) The MET/R WG members are requested to provide information on State’s own framework or method of post operational analysis on the effect of ATM-tailored MET service on ATM decisions and operations to the ICAO RO MET by 30 November 2022; and
- b) MET/R WG members are invited to provide their comments on suggestions for the amendment to the Guidance to include the post operational analysis framework in the Guidance, including the modification described in paragraph 2.5, above, to the ICAO RO MET by 30 November 2022.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) Consider formulating the Decision in paragraph 2.6.
