



STUDY NOTE

**MEETING OF THE METEOROLOGY PANEL (METP)
METEOROLOGICAL INFORMATION AND SERVICE
DEVELOPMENT WORKING GROUP (WG-MISD)**

SECOND MEETING

Montreal, Canada, 11 to 13 July 2016

**Agenda Item 4: Matters Relating to WG-MISD RHWAC Work Stream
4.1: Review and Discuss RHWAC Work Stream Deliverables**

**Progress Regarding the Regional Hazardous Weather Advisory Center (RHWAC)
Work Stream Deliverables**

(Presented by Sharon Lau)

SUMMARY

This study note review the progress of the RHWAC work stream and take stock of the draft deliverables prepared so far.

Action by the METP-WG/MISD RHWAC work stream is in paragraph 3.

1. INTRODUCTION

1.1 Long-standing deficiencies in the reporting and forecasting of en-route hazardous meteorological conditions have persisted for many years in some Regions. In addition to this the aviation industry has identified a need for a phenomenon-based system to provide advice on hazardous weather.

1.2 To address these issues the Meteorology Divisional Meeting in 2014 (MET14) formulated Recommendation 2/9 (see Annex A). It called for a phenomenon-based regional advisory system for select en-route hazardous meteorological conditions consistent with the Global Air Navigation Plan (Doc. 9750) to be developed expeditiously.

1.3 In response the MET14 Recommendation 2/9, the MET Information and Services Development working group (WG-MISD) of Meteorology Panel (METP) has established a RHWAC workstream to take forward the work.

1.4 This study note reviews the progress of development of the RHWAC work stream deliverables.

(3 pages)

MISD2-SN14_RHWAC (RHWAC Deliverables Progress)

2. **DISCUSSION**

2.1 According to the work plan, the RHWAC work stream has three deliverables, namely (i) the Concept of Operations (ConOps) for Advisory Service for Hazardous Meteorological Information in support of International Air Navigation; (ii) guidance material to support the selection criteria of regional hazardous weather advisory centres; and (iii) proposed changes to Annex 3 provisions.

2.2 An initial draft of the ConOps, guidance for selection of advisory centres and proposed changes to Annex 3, Part I, Core SARPs has since been prepared and circulated to members of the work stream for comments. Initial adjudication of the comments have also been made. The ConOps has subsequently been further revised to better align with the agreed ConOps outline. The latest version of the ConOps, guidance for selection of advisory centres and proposed changes to Annex 3, Part I, Core SARPs together with the comments received are given as appendices to the SN.

2.3 While most of the comments received on draft deliverables discussed above were relatively minor, during the development of the ConOps and on reviewing the comments, it was revealed that to future-proof the advisory system and ensure that it would meet users' expectation, it is important to obtain a better understanding of users' needs for weather information for operational decision making in the tactical, pre-tactical and strategic flight planning timeframe. To accommodate a more thorough understanding of users' needs, a Service Definition Team – MET Information was formed with IATA, IFALPA, IFATCA, CANSO, WMO, MISD rapporteur and RHWAC work stream coordinator as members.

2.4 As a more in-depth analysis based on the evolving science and technology and the users' requirements have to be conducted before finalizing the three deliverables, further revision of the draft deliverables have been put on hold pending further analysis.

3. **ACTION BY THE METP-WG/MISD RHWAC WORK STREAM**

3.1 The METP-WG/MISD RHWAC work stream is invited to:

- a) note the information contained in this paper; and
- b) discuss the adjudication and next step to refine the draft documents.

Annex A – MET14 RECOMMENDATION 2/9

Recommendation 2/9 - Implementation of a regional advisory system for select en-route hazardous meteorological conditions

That an appropriate ICAO expert group, in close coordination with WMO, be tasked to:

- a) expeditiously develop provisions supporting the implementation of a phenomenon-based regional advisory system for select en-route hazardous meteorological conditions consistent with the *Global Air Navigation Plan* (Doc 9750), in considering users' long-standing requirements, especially in those States where notable SIGMET-related deficiencies persist using, as appropriate, the strategic, governance and cost recovery assessments provided in Appendices D and E;
- b) integrate the information produced by the referred system into the future system-wide information management environment underpinning the future globally interoperable air traffic management system; and
- c) develop appropriate guidance material to support the selection criteria of regional hazardous weather advisory centres taking account of cost-effectiveness, the processes for the preparation and dissemination of the advisory information, mutual cooperation, sustainability of the existing meteorological infrastructure and use of local expertise.

Note:- Select hazardous meteorological conditions in this context included: as a minimum, thunderstorms, icing, turbulence and mountain waves, but excludes volcanic ash and tropical cyclones.