



International Civil Aviation Organization

**EIGHTEENTH MEETING OF THE METEOROLOGY
SUB-GROUP (MET SG/18) OF APANPIRG**

ICAO Regional Sub-Office, Beijing, China
18 – 21 August 2014

Agenda Item 7: Research, development and implementation issues in the MET field

7.5 Data exchange

CAPACITY BUILDING TO FOSTER THE IMPLEMENTATION OF DIGITAL EXCHANGE

(Presented by the Secretariat)

SUMMARY

This paper presents the proposal for capacity building activities to foster the implementation of digital exchange in the APAC region.

1. INTRODUCTION

1.1 As a precursor to supporting the future digital information exchange environment of the global air traffic system, the amendment 76 to ICAO Annex 3 – *Meteorological Service for International Air Navigation*, introduced enabling clauses to allow the exchange of METAR, SPECI, TAF and SIGMET in extensible mark-up language (XML) or geography mark-up language (GML) on a bilateral basis from the end of 2013. This represented the first step of a three-phased approach that is envisaged to elevate the exchange of this information in XML/GML as an Annex 3 recommended practice by the end of 2016 and the exchange of this information in XML/GML as an Annex 3 standard by the end of 2019.

1.2 This transition, together with others envisaged for other MET information, will enable meteorology to move away from proprietary code forms (such as GRIB and BUFR) to non-proprietary code forms (such as XML and GML), thus allowing service provision to be flexible, adaptable and ultimately interoperable within system-wide information management. In order to support the transition of MET information to the digital environment, the ICAO is working closely with the World Meteorological Organization (WMO).

2. DISCUSSION

2.1 The meeting is apprised that at the Twelfth Meeting of the ROBEX Working Group (ROBEX WG/12), held in Beijing, China from 17 to 19 March 2014, progress was reported by Singapore on the implementation of XML-based OPMET using the AvXML Version 1 developed by the WMO Task Team on Aviation XML (TT-AvXML) and the ICAO Meteorological Aeronautical Requirements and Information Exchange Project Team (MARIE-PT), which included XML

validation, message switching, the setup of an air traffic services message handling system (AMHS) interface and the planned and/or on-going activities up until October 2014.

4.5 ROBEX WG/12 also noted plans by Australia to develop the IWXXM data model to meet Australia's unique requirements for specific meteorological products.

4.6 In view of the discussions, ROBEX WG/12 agreed that in order to facilitate the implementation of digital exchange in the APAC Region, the Secretariat should coordinate with States to present a comprehensive report of the activities, plans and identified implementation issues with respect to the exchange of OPMET in a digital form to the next meeting of the MET SG for further consideration (ROBEX WG/12 Agreed action 12/2 refers).

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review the information in this paper; and
 - b) discuss any relevant matters as appropriate.
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