INTERNATIONAL CIVIL AVIATION ORGANIZATION

TWENTY SEVENTH MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/27)

Bangkok, Thailand, 5 to 8 September 2016

Agenda Item 3: **Performance Framework for Regional Air Navigation Planning and Implementation**

3.5 **MET**

ICAO/WMO ASIA/PACIFIC SIGMET WORKSHOP TOKYO 2016

(Presented by the Secretariat)

SUMMARY

This paper provides an overview of the Asia/Pacific SIGMET Workshop Tokyo 2016, hosted by the Japan Meteorological Agency (JMA) in collaboration with the ICAO and World Meteorological Organization (WMO). The workshop supported follow-up action to APANPIRG Conclusion 26/51 – *SIGMET training*; to improve the quality, reliability and availability of SIGMET information in the Asia/Pacific Region, particularly in States with identified SIGMET deficiencies. A number of key issues and actions were identified for further consideration in support of the continued improvement of SIGMET service provided in the Asia/Pacific Region.

Strategic Objectives:

A: ***Safety*** *– Enhance global civil aviation safety*

B: ***Air Navigation Capacity and Efficiency****—Increase the capacity and improve the efficiency of the global aviation system*

1. INTRODUCTION

1.1 The key objective of the workshop was to assist States to improve the SIGMET service provided in the Asia/Pacific Region and to address SIGMET-related deficiencies as required by APANPIRG Conclusion 26/51 – *SIGMET training*.

1.2 The workshop was hosted by the Japan Meteorological Agency (JMA) in close collaboration with the ICAO and World Meteorological Organization (WMO) over 4 days from 27 to 30 June 2016 at the Mita Kaigisho Conference Centre, Tokyo, Japan. The workshop delivered a series of targeted presentations and practical exercises aimed specifically at the participating States' designated meteorological service providers.

1.3 In total, 31 people participated in the workshop from 15 States/special Administrative Regions and 2 International Organizations including: Australia, Bangladesh, Cambodia, Hong Kong, China, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, New Zealand, Philippines, Solomon Islands, Sri Lanka, Thailand, the International Air Transport Association (IATA) and ICAO. The full report, including the workshop presentations is available at the following website: http://www.icao.int/APAC/Meetings/Pages/default.aspx.

2. DISCUSSION

Workshop programme

2.1 ICAO provided information on the foundations of SIGMET information in presentations including: ICAO Annex 3 Standards and Recommended Practices (SARPs) related to SIGMET information; the Regional SIGMET Guide and SIGMET pamphlets; ICAO regional SIGMET tests; and ICAO future plans for the provision of meteorological information on hazardous phenomena in the atmosphere and other initiatives supporting coordinated and seamless SIGMET service across international boundaries.

2.2 The above presentations were complemented by IATA's presentation on the importance of SIGMET information from the user's perspective, which highlighted the importance of accuracy, precision and quality assurance of the SIGMET information in the decision making processes.

2.3 Experts from the JMA provided a number of technical presentations and practical exercises covering the range of SIGMET information that is required to be provided as well as some technological solutions for improved SIGMET information.

2.4 The JMA presentations included information on: the tropical cyclone and volcanic ash advisory systems; SIGMET service for tropical cyclones, volcanic ash and phenomena other than tropical cyclone and volcanic ash; the (meteorological) data visualization system known as Satellite Animation and Interactive Diagnosis (SATAID); the use of (Himawari-8) meteorological satellite imagery to support SIGMET service; the use of Numerical Weather Prediction (NWP) data to support SIGMET service (especially for turbulence and thunderstorms); the importance of special air-reports supporting SIGMET service; methods for verification of SIGMET information (especially for turbulence and thunderstorms); and the challenges associated with the provision of coordinated SIGMET information across international boundaries and some of the collaborative initiatives underway by Asia/Pacific States to address those issues.

2.5 The JMA experts also presented practical exercises where workshop participants gained hands-on experience in the preparation of SIGMET information for tropical cyclone and volcanic ash, based on the advisory information provided by the designated advisory centres, and phenomena other than tropical cyclone and volcanic ash, using the SATAID system and (Himawari-8) meteorological satellite imagery and NWP data for the identification of SIGMET phenomena.

2.6 The workshop also benefited from presentations by the representatives from Australia and New Zealand, which included information on SIGMET information for aircraft icing, and the coordination of SIGMET information across the boundaries of the areas of responsibility of adjacent SIGMET service providers.

2.7 In addition to the workshop discussions, presentations and exercises, participants visited the JMA operational facilities including the Tokyo Meteorological Watch Office (MWO) and the Tokyo Volcanic Ash and Tropical Cyclone Advisory Centres (VAAC and TCAC).

Workshop outcomes

2.8 Issues and actions identified during the workshop for the participating States and Meteorological Watch Offices (MWOs) to consider as the 'next steps' in supporting improved SIGMET service in the Asia/Pacific Region included:

- Promoting a better understanding of the ICAO SARPs and guidance material related to SIGMET;

- Utilizing effectively the tropical cyclone and volcanic ash advisory information system;

- Utilizing the SATAID system for detailed analysis of (Himawari-8) meteorological satellite imagery;

- Promoting the exchange of special air-reports;

- Progressing the international SIGMET coordination initiatives in the APAC Region; and

- Promoting further targeted training opportunities as necessary.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to note the information in this paper.

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