International Civil Aviation Organization

INFORMATION PAPER

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Agenda Item 6: Research, development and other initiatives

UPDATES ON SIGMET COORDINATION ACTIVITIES SUPPORTED BY HKO

(Presented by Hong Kong, China)

SUMMARY

This paper presents the latest updates on various SIGMET Coordination projects supported by HKO.

1. INTRODUCTION

1.1 The Hong Kong Observatory (HKO), Hong Kong, China has been actively involved in regional collaboration on aviation weather service. In particular, HKO developed and provided a web-based Regional SIGMET Coordination Platform ("Platform") to support the trial and operation of regional SIGMET coordination since 2017.

1.2 The previous update of the projects were presented in the MET/SG 26 IP/06. This paper presents the latest updates on various SIGMET Coordination projects supported by HKO.

2. DISCUSSION

Updates on SIGMET Coordination Projects supported by HKO

2.1 The GHKPSV SIGMET Coordination Project (MET/S WG/11 IP/03), commenced in 2017 involving a number of MWOs over the north and north-western part of the South China Sea, namely Guangzhou (ZGZU), Hong Kong (VHHK), Kunming (ZPKM), Phnom-Penh (VDPP), Sanya (ZJSA), Hanoi (VVNB) and Ho Chi Minh (VVGL), has been running smoothly. A total of 397 SIGMET Coordination cases were performed in 2022 with more than 90% of the cases having achieved consensus. There was a record high of 44% of cases that were performed among three FIRs. More efficient and responsive coordination were observed during review meetings. To enhance common situational awareness on high impact weather events related to Tropical Cyclones (TCs) affecting multiple Flight Information Regions (FIRs), online ad hoc briefing for TC would be arranged when a TC is expected to affect multiple FIRs in the coordination group. Topics discussed in the meeting include the synoptic pattern, forecast track and intensity, uncertainties, operational consideration in the issuance of WS and WC SIGMETs crossing FIR boundaries, etc. The participants praised the TC briefings being very useful for their operations, allowing them to provide early alerts on upcoming high

impact weather. In 2022, a total of five ad hoc TC briefings were arranged and there were constructive discussions in the group.

2.2 The HMSU SIGMET Coordination consisted of Hong Kong (VHHK), Manila (RPHI) and Sanya (ZJSA) and Ujung Pandang (WAAF). Coordination between VHHK-RPHI-ZJSA commenced its operational coordination in May 2022 (para 2.7 MET/SG 26 IP/06). In 2022, a total of 304 SIGMET Coordination cases were performed and around 90% of the cases were with consensus. Smooth and efficient coordination of WS and WC SIGMETs was observed, especially when there were TCs moving across the three FIRs.

2.3 The South and South-eastern Asia (SSEA) SIGMET Coordination Project (MET/S WG/13 IP/04) involves seven FIRs, namely Chennai (VOMF), Colombo (VCCF), Delhi (VIDF), Jakarta (WIIF), Kathmandu (VNSM), Kolkata (VECF) and Mumbai (VABF). A dedicated training to Kathmandu, Nepal was arranged in November 2022 before they joined the SSEA group. It also served as part of the corrective action plan for the removal of SIGMET deficiency as the training assisted Kathmandu MWO to build capacity in SIGMET preparation and coordination.

2.4 The Oceanic SIGMET Coordination (MET SG/25 IP/03) commenced between Fiji and Solomon Islands since December 2020. In September 2022, following a training session for Papua New Guinea (PNG) National Weather Service, PNG joined the Oceanic group as a trial member. Since then, the group includes three FIRs, namely Honiara (AGGG), Nadi (NFFF) and Port Moresby (AYPM). In 2022, there were 39 SIGMET Coordination cases between the operational members (Fiji and Solomon Islands) with close to a 10% increase when compared to 36 cases in 2021. Another online training for PNG was arranged in May 2023 and support was given for PNG to issue SIGMETs on behalf of Nauru (ANAU). Quarterly review meetings raised common situational awareness and increased mutual understanding between MWOs through their sharing of coordination cases. The progress in this coordination group also helped MWOs to build capacity in SIGMET preparation and SIGMET harmonization in working towards the removal of SIGMET deficiencies. At APANPIRG/33, the air navigation deficiency AP-MET-23 (concerning the lack of SIGMET issued for Honiara FIR) of Solomon Islands was successfully rectified.

2.5 HKO will continue to support the above coordination projects and collaborate with regional and global counterparts to contribute towards enhancing the aviation weather services.

3. ACTION BY THE MEETING

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

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