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INFORMATION PAPER

**Asia and Pacific (APAC)
Twelfth Meeting of the Meteorological Services
Working Group (MET/S WG/12)**

Online, 30 March to 01 April 2022

Agenda Item 3: Planning and implementation of meteorological services

**UPDATE ON THE SOUTH AND SOUTH-EASTERN ASIA SIGMET COORDINATION
PROJECT**

(Presented by Hong Kong China, India, Indonesia and Sri Lanka)

SUMMARY

This paper presents the progress and updates of the South and South-eastern Asia SIGMET Coordination project.

1. INTRODUCTION

- 1.1 The South and South-eastern Asia (SSEA) SIGMET Coordination project was kick-started in December 2019 between Indonesia and Sri Lanka under the coordination of the Hong Kong Observatory (HKO). The objectives of the SSEA SIGMET Coordination project are to promote SIGMET coordination by setting coordination procedures, enhance common situational awareness among the participating MWOs and improve the quality of SIGMETs issued, especially those across the flight information region (FIR) boundaries. The coordination project became operational on 1 February 2021. [MET/IE WG/18 & MET/S WG/10 – WP/20](#) and [MET/S WG/11 – IP/04](#) reported the set up and subsequent updates of the project.
- 1.2 This paper presents the progress, updates and outcomes of the SSEA SIGMET Coordination project.

2. DISCUSSION

- 2.1 In view of the positive outcomes from the project at earlier stage, Sri Lanka invited Indian counterparts to join the SSEA SIGMET Coordination project in April 2021. Chennai FIR and Mumbai FIR joined the project in June 2021 and October 2021 respectively with coordination in operational trial status. Subsequently, Delhi FIR and Kolkata FIR also joined as trial members of the project in February 2022. With the support of the India Meteorological Department (IMD), Meteorology, Climatology, and Geophysical Agency (BMKG) and the Department of Meteorology, Sri Lanka (DoMSL), the SSEA SIGMET

Coordination project has expanded to 6 FIRs over the South and South-eastern Asia region (Figure 1).

- 2.2 The primary medium of communication and SIGMET preparation under the SSEA SIGMET Coordination project is the HKO Regional SIGMET Coordination Web Platform. The participants commended the platform, a Geographic Information System (GIS)-powered platform with a handy chatroom, on its usefulness. The display of relevant products on the web platform (e.g. satellite imageries, cloud top heights, nowcasts, etc.) helped raise the common situational awareness of the forecasters among the participating FIRs. To further enhance the product suite on the web platform, IMD provided in early 2022 a real-time feed of the INSAT satellite imageries for display on the web platform. This facilitates the effective communication among the Meteorological Watch Offices (MWOs), which in turn enhances the harmonization of SIGMETs across the FIR boundaries.
- 2.3 The SSEA SIGMET Coordination project is currently conducted under the Guiding Principles of Cooperation and SIGMET Coordination Procedures jointly developed by the four participating agencies, namely BMKG, DoMSL, HKO and IMD. Noting the user requirements collected during the online SIGMET Coordination cum User Requirements workshop organized by HKO in June 2021 ([MET SG/25 – WP/15](#)), the group further discussed and agreed to make reference to the user preference on maximum acceptable differences for SIGMETs across FIRs and SIGMET issuance criteria when conducting SIGMET Coordination. The reference summary has been added to the Guiding Principles document and displayed on the web platform for easy access by forecasters. Review meetings among the project participants are being conducted on a quarterly basis to review cases of the SIGMET Coordination, discuss any operational issues encountered during the process and ways to further improve the SIGMET Coordination Web Platform. The above activities helped the forecasters gain better understanding of the reasoning and usual practices followed by the forecasters in their neighbouring MWOs.
- 2.4 In 2021, there were a total of 122 SIGMET coordination cases conducted under the project (Figure 2), an increase of 280% when compared with only 32 coordination cases in 2020. Apart from seasonal weather variability, the increase could also be attributed to (1) the progressive extension of coordination hours to 24/7 operation; (2) the transition of the project to operational status in February 2021; and (3) the participation of Chennai FIR and Mumbai FIR in June and October 2021 respectively.
- 2.5 Noting the fruitful results from the SSEA SIGMET Coordination project, the project is open to other MWOs for participation, with an aim to provide more harmonized SIGMET services for the aviation users in the region.

3. ACTION BY THE MEETING

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

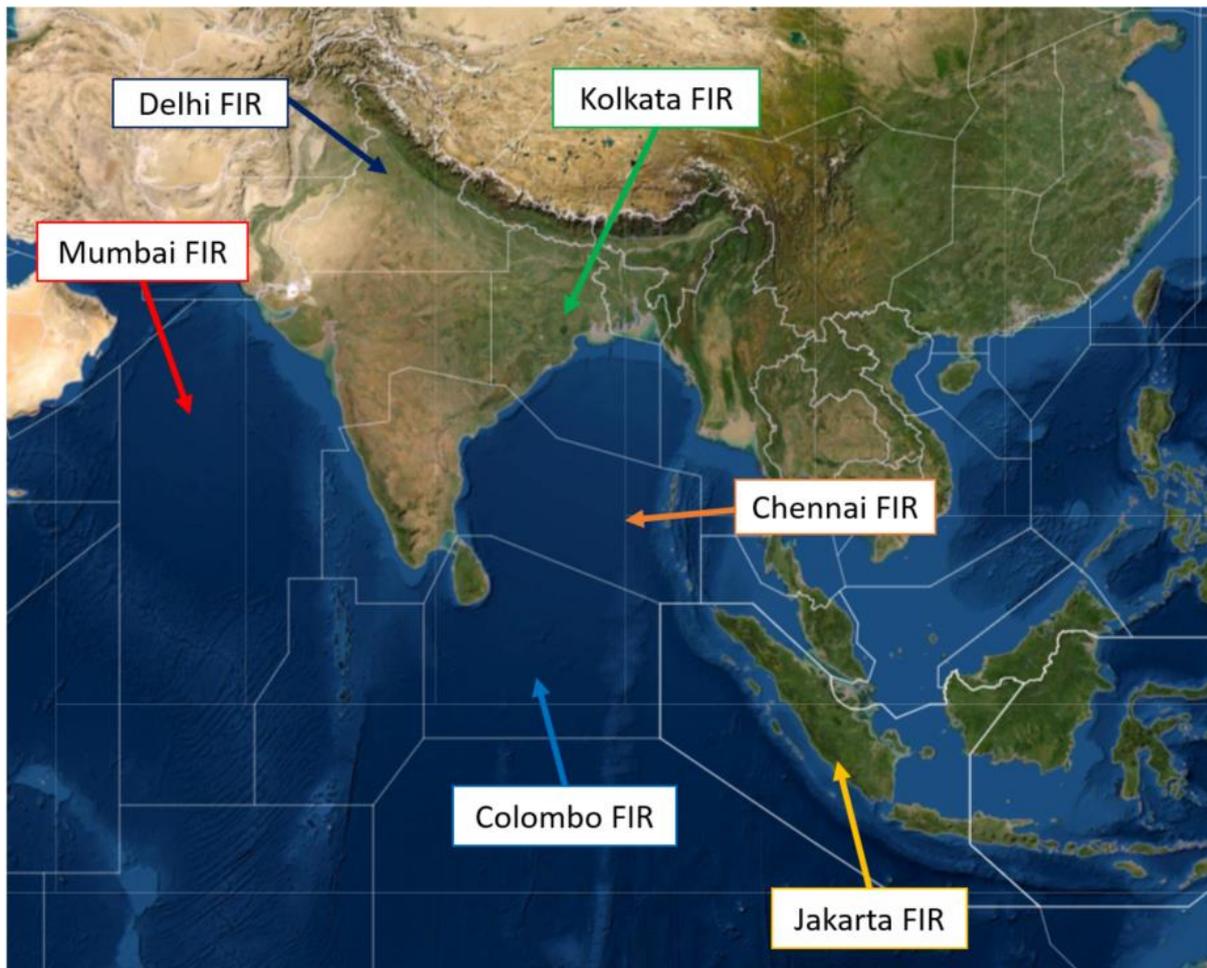


Figure 1 A map showing the FIRs participating in the SSEA SIGMET coordination project

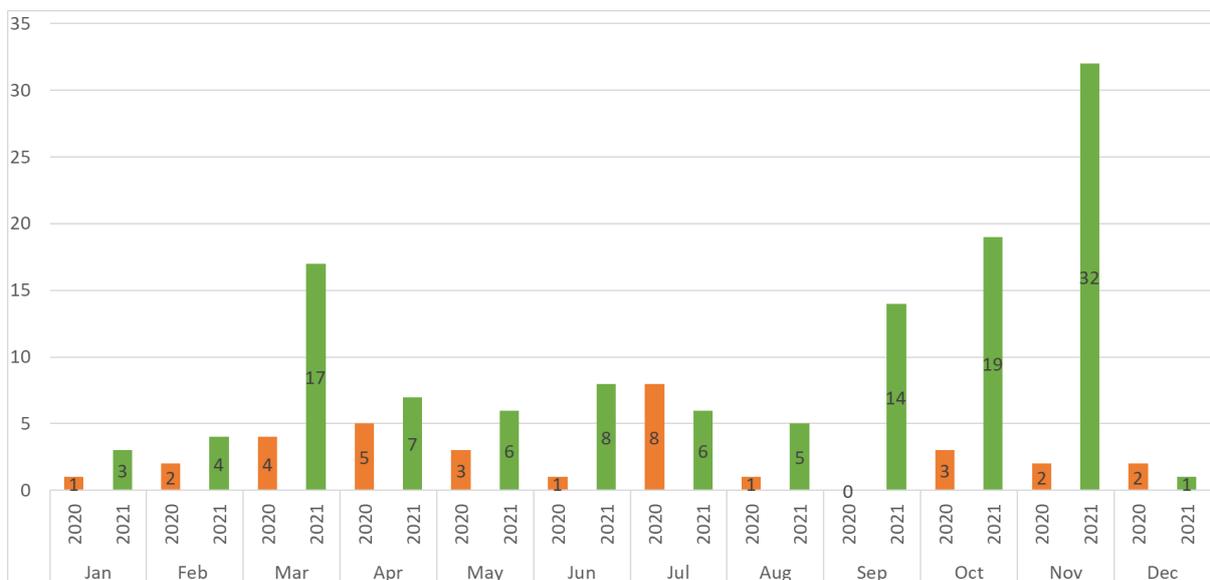


Figure 2 The monthly number of SIGMET coordination cases carried out under the SSEA SIGMET Coordination project in 2020 (orange) and 2021 (green)