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AGENDA ITEM 4: AIR NAVIGATION

SIGMET COORDINATION WORK BY CHINA IN THE ASIAN REGION

Presented by the People's Republic of China

INFORMATION PAPER

SUMMARY

This paper presents the following work by China in the Asian region on SIGMET coordination to help improve the capabilities of SIGMET issuance in the region: operating the SIGMET advisory coordination platform, preparing and issuing SIGMET advisories, and hosting technical workshops.

SIGMET COORDINATION WORK BY CHINA IN THE ASIAN REGION

1. INTRODUCTION

Since 2018, the Civil Aviation Administration of China (CAAC), in conjunction with the China Meteorological Administration (CMA) and the Hong Kong Observatory (HKO), has been providing the Asian regional SIGMET advisory coordination platform in support of issuing SIGMET advisories as well as organizing coordination with meteorological watch offices(MWOs) in the region on hazardous weather conditions, and has been conducting technical exchanges and user trainings, with a view to helping improve the capabilities of SIGMET issuance in the region.

2. DISCUSSION

2.1 China has been issuing SIGMET advisories on daily basis at 00, 03, 06, 09and 12 UTC with forecast validity period of 6 hours on the SIGMET advisory coordination platform, and as of March 2022, has issued a total of 6,845 advisories.

2.2 Within 1 hour prior to the issuance of SIGMET advisories, MWOs in the region would participate in the coordinated preparation of advisories through the Asian regional SIGMET advisory coordination platform. As of March 2022, MWOs in the region have participated in coordination for 14374 times.



Figure 1 Statistics on the Participation of MWOs in SIGMET Advisory Coordination

2.3 China has evaluated and verified the SIGMET advisories issued and compared them with the SIGMET messages issued by MWOs. Results show that the SIGMET advisories are highly consistent with the SIGMET messages.



Figure 2 Statistics on the Consistency between SIGMET Advisories and SIGMET messages

2.4 Since 2019, the SIGMET advisory coordination platform has been capable of generating SIGMET messages based on advisories, and MWOs including that in Maldives have been making direct use of the platform to generate SIGMET messages.

2.5 From March 2019, the MWOs responsible for the flight information regions along the Russian and Chinese border have been using the advisory coordination platform for SIGMET coordination.

2.6 To improve the capabilities of providing aviation hazardous weather forecast and enhance exchanges and coordination among Asian countries, international workshops on hazardous weather forecasts and services in Asia were held in Beijing in July 2018 and July 2019. In December 2019, an on-the-job training opportunity at the Asian SIGMET advisory coordination platform was offered and a workshop was held in Beijing for forecasters from some countries. In June 2021, an online SIGMET coordination cum user requirement workshop was held in Hong Kong, and user requirements were collected by means of online survey questionnaires.

2.7 In 2022, the SIGMET advisory coordination platform started to be upgraded, and the latest platform will be based on the FY-4 satellite observations and the newly upgraded high-resolution global and regional meso-scale model outputs.

2.8 In addition, the works to improve and upgrade the SIGMET advisory coordination platform will be conducted in the near future. The upgraded platform will be a more open one, which will exempt users from registration before viewing the products, and will no longer limit the participation in discussions and the coordination of hazardous weather conditions to forecasters from MWOs, and it will also be open to forecasters from airlines, aerodrome meteorological offices and other organizations to participate in such discussions.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to note the information contained in this Paper.