

# **Recent Progress of International Cooperation Scheme on Collaborative SIGMET Issuance (CSI)**



**MET/S WG/11**

**24 – 26 March 2021**

**Japan, Lao PDR, Myanmar, Philippines,  
Thailand and Vietnam**

# **Overview of CSI**





# Collaborative SIGMET Issuance Demonstration Project —Since 2015

**Multi-lateral collaborative efforts for better harmonized en-route hazardous weather information**

➤ **Project members :**

- **Japan (JMA)**
- **Lao PDR (LDMH)**
- **Myanmar (MDMH)**
- **Philippines (PAGASA)**
- **Thailand (TMD)**
- **Vietnam (VATM)**
- **Malaysia (MMD) (as an observer)**

➤ **Air navigation service providers (ANSPs) and airlines have been invited to participate in the project and evaluate the demonstrations**





# Joint Efforts among Demonstration Project Members

- **Development of SIGMET coordination procedures and common web platform**
  - Four demonstrations were conducted from 2016 to 2018.
  - Through both face-to-face and web-based meetings, the members had collaboratively discussed the details of the demonstration, including support information and tools developed by JMA.
- **Improvement of forecasters' capability**
  - Through demonstrations and technical trainings provided by JMA





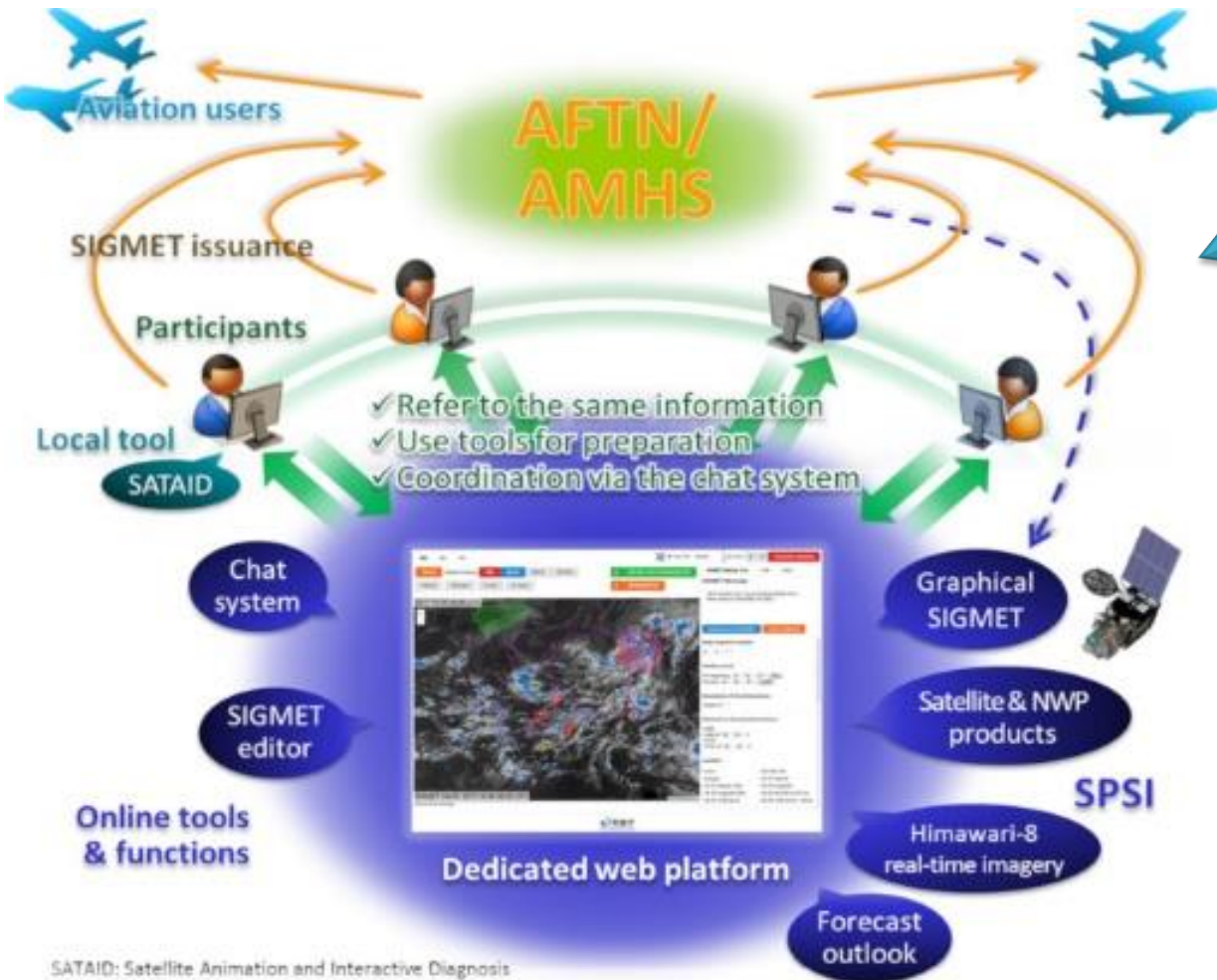
# **Establishment of Collaborative SIGMET Issuance (CSI)**

- **Transition to operational phase**
  - In view of the success of demonstrations, the members agreed to transition from the demonstration project to the operational phase from 9 April 2018.
- **DG-level meeting on CSI (Tokyo, 6 March 2018)**
  - The meeting agreed on a joint statement for the establishment of an international cooperation scheme on CSI with the exchange of Memorandum of Cooperation witnessed by ICAO APAC Regional Office.





# Cooperation Scheme



SATAID: Satellite Animation and Interactive Diagnosis

**SIGMET coordination**

- ✓ Better-harmonized and more precise SIGMET
- ✓ Supporting information and tools provided by JMA
- ✓ Each MWO's expertise on local weather conditions and climatology



**Continuous improvement**

- ✓ Coordination procedures regularly reviewed & updated
- ✓ Technical cooperation provided including trainings

# **Discussion at CSI Workshop**

**(18 – 19 January 2021 via WebEx)**



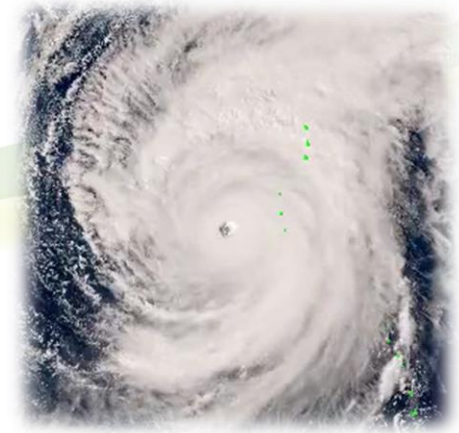


# **CSI Workshop ~CSI session~**

- **The members of the CSI scheme reviewed progress and discussed further development of the scheme.**
  
- **Participants**
  - **LDMH, MDMH, PAGASA, TMD, VATM, JMA and MMD**
  - **Secretariat of ICAO**



# **Summary of discussion among CSI members**



## **➤ WC SIGMET handover**

- Importance of smooth transferring the responsibility of WC SIGMET issuance has been pointed out**
- The CSI members had discussed a plausible and logical way (consistent with ICAO requirements)**
- Agreed the WC SIGMET handover procedure in CSI**
- Some participants mentioned that more frequent TCA issuance (e.g. three-hourly) would be useful for WC SIGMET handover**



# Summary of discussion among CSI members

## ➤ **WC SIGMET handover (cont'd)**

- **WC SIGMET should be based on advisory information provided by TCACs**
- **Chat function**  
MWOs should liaise via the chat system of the web platform and ensure mutual understanding for continuous WC SIGMET
- **WC SIGMET-issuing MWO**  
MWO responsibility for WC SIGMET issuance depends on which FIR the TC center is observed in

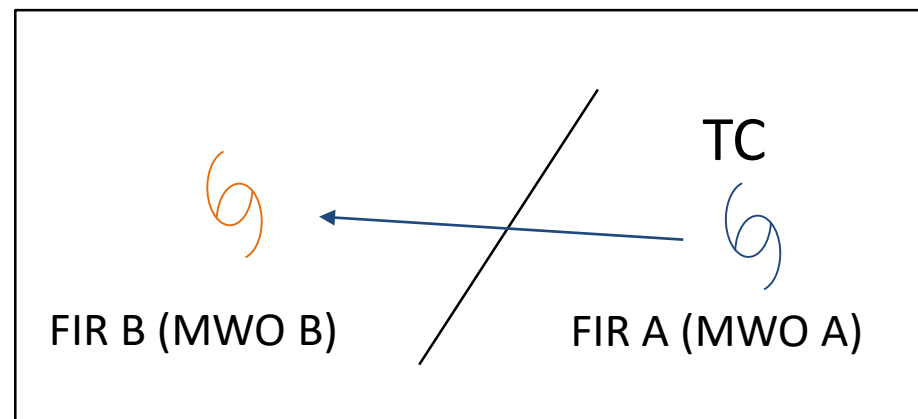




# Summary of discussion among CSI members

## ➤ **WC SIGMET handover (cont'd)**

- **WC SIGMET handling once a TC center leaves a FIR**  
When a TC center leaves a FIR, MWO A should cancel the WC SIGMET after MWO A confirms that MWO B issues a related WC SIGMET.
- **Preliminary issuance of WC SIGMET based on forecasts**  
MWOs can issue WC SIGMET in advance with lead times based on six-hour forecasts of the TC center in the FIR.





# Summary of discussion among CSI members

## ➤ **Acceptable range of difference**

- The result of a survey for an airline was shared.
- A draft guideline of acceptable difference was proposed.
  - ✓ 5,000 ft and below at all altitude in CB TOP height (2,000 ft and below especially at cruising altitude (FL300 – FL400), if possible)
  - ✓ The difference of movement is within 90 degrees (45 degrees, if possible)
- The participants agreed to conduct further survey and continue the discussion

**Very Good!**



**Good!**



**Poor**





# **CSI Workshop ~Joint session~**

- **CSI members, OSC project members and BoM discussed further coordination between the two projects Participants**
  
- **Participants**
  - **CSI members  
(LDMH, MDMH, PAGASA, TMD, VATM, JMA and MMD)**
  - **OSC project members  
(MSS and BMKG)**
  - **BoM**
  - **Secretariat of ICAO**



# **Discussion at the Joint session**

- **The status of three SIGMET coordination trials was reviewed.**
  - **TMD-MMD (operational)**  
**Conducted smoothly**
  - **PAGASA-NWS**  
**Moved to the operational level of SIGMET coordination from 1 February 2021**
  - **BMKG-BoM**  
**Agreed to start the trial using JMA web tool from 10 March.**



# Discussion at the Joint session

## ➤ **Next SIGMET coordination trials**

- **MDMH - MMD (Kuala Lumpur MWO)**
- **PAGASA - MMD (Kota Kinabalu MWO) – MSS**

**Planned to start from 15 February using JMA web tool.**



# Summary





# Summary

- **Since the beginning of the scheme, the CSI has shared its experience and outcomes and contributed to enhancement of SIGMET coordination.**
- **The outcomes such as WC SIGMET handover procedure would be helpful for further progress of the SIGMET coordination.**
- **CSI will continue to contribute to the future discussion regarding SIGMET coordination for further expansion of the activity in the region for the sake of flight safety.**

**Thank you!**

