

**ESCAP/WMO Typhoon Committee  
Fifty-fifth Session of Typhoon Committee  
7 to 9 March 2023  
Video Conference  
Macao, China**

**FOR PARTICIPANTS ONLY  
WRD/TC.55/6.1  
7 February 2023  
ENGLISH ONLY**

## **Report on TC's Key Activities and Main Events in the Region, 2022**

*(Submitted by TC Chair Ms. Outhone PHETLUANGSY)*

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### **ACTION REQUIRED:**

The Committee is invited:

- a) To take note of the key events in 2022
- b) To consider the ideas and proposals of the TC Chair in formulating the future AOPs, initiatives and recommendations

### **APPENDICES:**

- 1) DRAFT TEXT FOR INCLUSION AT SESSION REPORT
- 2) TC's Key Activities and Main Events in the Region, 2022

**APPENDIX A:**  
**DRAFT TEXT FOR INCLUSION IN THE SESSION REPORT**

6.1 Report on TC's Key Activities and Main Events in the Region, 2022

6.1.1 The Committee took note of the report of the Typhoon Committee Chairperson on the TC's Key Activities and Main Events in the Region, 2022.

6.1.2 The Committee expressed appreciation to the contributions of Ms. Outhone PHETLUANGSY and Mr. LEONG Weng Kun, as the chairperson and Vice Chairperson of the Committee.

6.1.3 The Committee dealt with related issues under the relevant agenda items.

*(Additional text to be added in the light of discussion on this item)*

## **APPENDIX B:**

### **Report on TC's Key Activities and Main Events in the Region, 2022**

In 2022, the Typhoon Committee was successfully in achieving our mission to integrate and enhance regional activities of Members within international frameworks to reduce the loss of lives and minimize social, economic, and environmental impacts by typhoon-related disasters. Under the contribution, cooperation and support of all TC Members, AWG, working groups, and TCS, the Committee has implemented of the decisions of 54<sup>th</sup> Session of the Committee smoothly. The related issues will be dealt with under the relevant agenda items. Some key activities and events are as follows.

#### **1. Typhoons in the Region**

- 1.1. In 2022, 25 named tropical cyclones of tropical storm intensity or above formed over the western North Pacific and the South China Sea. This number was about the same as the climatological average of 25.1 (1991-2020) by RSMC Tokyo.
- 1.2. There were 4 tropical cyclones which made landfall in China in the year, namely Chaba (2203), Mulan (2207), Ma-on (2209) and Muifa (2212). The number was 3.1 less than the average number (7.1) from previous years.
- 1.3. DPRK was affected by 5 tropical cyclones in the year, namely Songda (2205), Trases (2206), Hinnamnor (2211), Muifa (2212) and Nanmadol (2214). Some of the tropical cyclones brought heavy rain and gales to the country, but there was no serious damages.
- 1.4. There were 6 tropical cyclone which affected Hong Kong, China in the year, namely Chaba (2203), Mulan (2207), Ma-on (2209), Nesat (2220), Nalgae (2222) and a tropical depression in August. Nalgae (2222) moved very close to Hong Kong in early November which necessitated the issuance of Gale or Storm Signal No. 8 in November since 1972.
- 1.5. A total of 11 tropical cyclones came within 300 kilometres of the Japanese archipelago in the year, namely Malakas (2201), Aere (2204), Songda (2205), Trases (2206), Meari (2208), Hinnamnor (2211), Muifa (2212), Nanmadol (2214), Talas (2215), Kulap (2217) and Roke (2018). Three of them made landfall over the country.
- 1.6. Lao PDR was affected by 4 tropical cyclones in the year, namely Mulan (2207), Ma-on (2209), Noru (2216) and Sonca (2219). Heavy rain and strong winds affected the country and caused flooding in some areas.
- 1.7. There were 6 tropical cyclones which affected Macao, China in the year, namely Chaba (2203), Mulan (2207), Ma-on (2209), Nesat (2220), Nalgae (2222) and a tropical depression in August. The Gale or Storm Signal No. 8 was hoisted for four of the tropical cyclones.
- 1.8. Malaysia was affected by 6 tropical cyclones between November 2021 to October 2022, namely Nyatoh (2121), Rai (2122), Malakas (2201), Megi (2202), Noru (2216) and Kulap (2217). Rai (2122) was the strongest tropical cyclone and affected 16 areas in the country.

- 1.9. There were 5 tropical cyclones which made landfall over the Philippines in the year, namely Megi (2202), Ma-on (2209), Noru (2216), Nesat (2220) and Nalgae (2222). Megi caused 354 casualties (214 dead, 8 injured and 132 missing) and a total of PHP 58.7M damage.
- 1.10. The Republic of Korea was affected by 5 tropical cyclones in the year, namely Aere (2204), Songda (2205), Trases (2206), Hinnamnor (2211) and Nanmadol (2214). Among them, Hinnamnor (2211) made landfall over the Korean Peninsula and brought over 900 millimetres of rainfall.
- 1.11. Singapore was affected by two tropical cyclones in the year, namely Malakas (2201) and Noru (2216). Strong winds and heavy rain were recorded during the passage of these tropical cyclones.
- 1.12. There were 6 tropical cyclones which affected Thailand in the year, namely Chaba (2203), Mulan (2207), Ma-on (2209), Noru (2216), Sonca (2219) and Nesat (2220). Among them, Noru (2216) entered Thailand and brought heavy rain in upper Thailand with over 200 millimetres of rainfall, and caused flooding in some areas.
- 1.13. Viet Nam was affected by 7 tropical cyclones in the year and 4 of them directly affected the country. The strongest tropical cyclone was Noru (2216) which caused extreme heavy rain with over 600 millimetres of rainfall recorded. The hazards related to tropical cyclones in the year caused 141 people died or missing, and 263 people injured.
- 1.14. Only 2 tropical cyclones had significant socio-economic impacts to the WFO Guam of the United States, namely Malakas (2201) and Banyan (2223). Gale force winds affected Yap and Chuuk during the passage of Malakas (2201), and Palau experienced near tropical-storm force winds with flooding and landslides with Banyan (2223).

## **2. Improvement of TC Activities**

### **2.1. WGM&TRCG**

- Implementing WGM's Annual Operating Plans in 2022  
WGM has successfully completed the action plans in 2022 endorsed at TC54 (4 POPs, 9 AOPs and 2 PPs) with the assistance of TCP/WMO and TCS as well as the strong support from all Members.
- Conducted the 5<sup>th</sup> Annual Meeting of WGM  
The 5<sup>th</sup> Annual Meeting of WGM was hosted by Malaysian Meteorological Department (MET Malaysia) on 28 October 2022. The Meeting successfully reviewed the progress of the WGM Annual Operating Plans in 2022 and proposed new plans for 2023.
- RSMC Forecaster's Training Attachment  
Under the COVID-19 pandemic, the RSMC Forecaster's Training Attachment was held online from 11 to 13 January 2023.

### **2.2. WGH**

- Implementing WGH AOPs activities in 2022
  - 1) WGH actively and cooperatively conducted a series of activities for implementing its most AOPs of 2022 as planned at 54th Session and basically achieved the success indicators.

- 2) WGH proposed 5 new AOPs to be officially launched at TC 55th Session for 2023 and beyond.
  - 3) WGH formulated its AOPs' implementation plan for 2023.
- Organizing WGH annual working meeting
    - 1) WGH successfully held its 11th working meeting on 18-19 October 2022.
    - 2) WGH is planning its face to face WGH 12th working meeting of 2023 which will be join-hosted by Japan and Thailand in Bangkok, Thailand with funding support from MLIT of Japan.

### 2.3. WGDRR

- Implementing WGDRR's Annual Operating Plans in 2022
 

With the continuous travel restrictions and risk of infection of COVID-19, most of the face-to-face meetings which included the 17th WGDRR annual meeting and the seminar for TC Crowd-sourcing high density non-conventional weather data hosted by HKO were conducted online. Projects such as Capacity Building/knowledge Sharing Program, setting up of Early Warning and Alert System in Philippines, benefit evaluation of Typhoon DRR (STI), making an educational video related to DRR, and DRR information sharing were also successfully implemented.
- Conducting the WGDRR annual meeting
 

The 17th WGDRR annual meeting was hosted by NDMI Korea on October 21, 2022 to discuss the issues related to WGDRR activities. WG reviewed the AOP's implementation with the budget expenditure in 2022 and proposed the plans for 2023.

### 3. Strategic Development

The Strategic Plan of Typhoon Committee from 2022 to 2026 has been approved by 54<sup>th</sup> Session of the Committee, hosted by Lao PDR 23-25 February 2022.

The Committee requests WGs to review the priorities in the Strategic Plan and submit updates.

### 4. Asia Pacific Typhoon Collaborative Research Center

The Agreement on Technical Cooperation and Research Activities between Typhoon Committee (TC) and the Asia Pacific Typhoon Collaborative Research Center (AP-TCRC) has been signed and the draft Pilot Project of the Technical Cooperation and Research Activities between TC and the AP-TCRC has been initiated.