**APPENDIX XIX**

**UPDATE OF THE TYPHOON COMMITTEE OPERATIONAL MANUAL**

1. The Typhoon Committee Operational Manual - Meteorological Component (TOM) has been reviewed and updated every year since its first issue in 1987. The 2022 edition was completed and posted on the WMO website in 2022 in accordance with the approval of amendments to the 2021 edition by the Typhoon Committee 54th session (23 - 25 February 2022, Lao PDR, video conference).

2. At the 54th session, the Committee decided that the rapporteur of the RSMC Tokyo - Typhoon Center in Japan Meteorological Agency (JMA) continues arrangements for updating the TOM. In this connection, on 14 October 2022 in advance of the annual revision of TOM, the rapporteur, Mr. HOSOMI Takuya of the RSMC Tokyo - Typhoon Center requested the focal points of the meteorological component of the Members to input on tropical cyclone analysis and forecast procedure by the NMSs.

3. Input on analysis and forecast procedure were submitted by seven focal points of China; Hong Kong, China; Japan; Malaysia; the Philippines; Republic of Korea and Thailand.

4. On 17 January 2023, the rapporteur proposed some revisions, including reflection of the inputs from the members, to the focal points of the meteorological component of the Members and invited them to further provide comments for the revision and proposals for updates.

5. The second meeting of the WMO Advisory Group on Tropical Cyclones (AG-TC) recommended the addition of the five sets of regional tropical cyclone forecaster competencies to the Compendium of WMO Competency Frameworks (WMO-No. 1209) and that the regional competencies be reviewed and updated before the addition, with particular consideration given to the impact-based forecast (IBF) and warning services approach. In light of this, the rapporteur proposed at the WGM parallel meeting on 29 November 2022 that the competency in the region be kept the same when added to the Compendium since it has already incorporated the IBF services approach.

6. Proposed revisions, updates and amendments are embedded as a format of MS-WORD track-changes as attached in Annex 1. The major points of the revisions are given below:

* Proposal by the RSMC-Tokyo – Typhoon Center
* Addition to the description in the Introduction (Section 1.1)
* Update of the description of WWMIWS (Section 4.4)
* Update of the information on the list of names for tropical cyclones adopted by the Typhoon Committee for the western North Pacific Ocean and the South China Sea (Appendix 1-B)
* Update of the information on the list of acronyms used in the operational manual – meteorological component – (Appendix 1-C)
* Update of the map for distribution of the radar stations of typhoon committee members (Appendix 2-D)
* Proposal by the seven focal points of China; Hong Kong, China; Japan; Malaysia; the Philippines, Republic of Korea and Thailand
* Addition of the JMA research vessels (Section 2.2)
* Revision of the description of the satellite imagery data and related products (Section 2.4.1)
* Update of the information on the list of stations from which enhanced surface observations are available (Appendix 2-A)
* Update of the information on the list of stations from which enhanced upper-air observations are available (Appendix 2-B)
* Update of the information on the technical specifications of radars of Typhoon Committee Members (Appendix 2-E)
* Update of the information on the technical specifications of satellite operated by Typhoon Committee Members (Appendix 2-F)
* Update of the table on the satellite imagery receiving facilities at Typhoon Committee Members (Appendix 2-G)
* Update of the products provided by RSMC Tokyo – Typhoon Center (Appendix 3-A)
* Update of the information on the analysis methods, forecasting methods and NWP (Appendix 3-B)
* Updates of the classifications of tropical cyclones in the western north pacific internally used by Members (Appendix 4-A)
* Update of the information on the present operational status of the meteorological telecommunication network for the Typhoon Committee region (Appendix 5-B)
* Update of the contact details (Appendix 5-C)
* Update of the list of collection and distribution of information related to tropical cyclones (Appendix 5-E)
* Correction of description in global tropical cyclone track and intensity data set – report format (Appendix 7-B)