

ESCAP/WMO Typhoon Committee
Forty-ninth Session
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Yokohama, Japan

FOR PARTICIPANTS ONLY
WRD/TC.49/9.1
09 January 2017
ENGLISH ONLY

REPORT ON TCS ACTIVITIES IN 2016

(Submitted by TCS)

ACTION REQUIRED:

The Committee is invited:

- a) To take note of the major TCS activities in 2016
- b) To advise the improvement of the functions carried out by the Secretariat
- c) To approve the recommendations of TCS for 2017

APPENDIXES:

- 1) DRAFT TEXT FOR INCLUSION AT SESSION REPORT
- 2) TCS ACTIVITIES REPORT 2016

APPENDIX A:
DRAFT TEXT FOR INCLUSION IN THE SESSION REPORT

9.1 Report of the Typhoon Committee Secretariat (agenda item X)

9.1.1 The Committee took note of the report of the Typhoon Committee Secretariat.

9.1.2 The Committee noted with appreciation the TCS's activities 2016 in order to enhance support to Members, increase the visibility of Typhoon Committee, and to improve the TC website to share the forecast products and information, and to coordinate Working Groups to evaluate the effectiveness of the activities in the Committee.

9.1.3 The Committee expressed appreciation to Members for their donation for the Typhoon Committee Trust Fund and in-kind contributions, and encourage Members to continue support activities of the Committee.

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

9.1.5 The Committee approved the recommendations submitted by TCS as expressed in paragraph X.X.

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

APPENDIX B: TCS ACTIVITIES REPORT 2016

1. Introduction

In 2016, under the supervision of TC Chair, Vice Chair and the AWG of the Committee, the Typhoon Committee Secretariat (TCS) made efforts on maintaining the Committee mechanism running properly for fulfilling the decisions of 48th Session of the Committee. With the strong support and kind cooperation from all Members, Working Groups, ESCAP and WMO, TCS endeavored to carry out its functions successfully in 2016 as the executive body of the Committee.

2. Execution of the Decisions of the Committee

- **Nomination of AWG Chair and Vice Chairs**
As requested by the Committee, TCS, in consultation with AWG, coordinated in the nomination of AWG Chair and Vice-Chairs. The election of AWG Chair and Vice Chairs will be taken place in related item of the session.
- **Consulting Members on Long Term Appointment Mechanism of TC Secretary**
As requested by the Committee, TCS provided the necessary assistants to the AWG Chair to further consult Members on for the Long-term Mechanism for TC Secretary and to develop a proposal to be presented for approval at the Session.
- **Improving the TC website**
The TC website has been improved including a portal website to share forecast products and information, and a forum to serve as a platform for the Members and provide better support.
- **Evaluate the effectiveness of the activities in the Committee**
As the coordinator, TCS provided the supports for each Working Groups to evaluate the effectiveness of the activities.
- **Strategic Plan 2017-2021**
TCS provided necessary support for AWG to prepare a proposal for the new Strategic Plan including the nomination of the focal points of Members.
- **Hosting next Typhoon Committee Secretariat**
In consultation with TC Chair and AWG, TCS coordinated the Members for proposal of hosting the next TCS. The decision would be made by the Session.
- **50th Anniversary of Typhoon Committee**
TCS coordinated with AWG for the celebration the 50th Anniversary of Typhoon Committee.
- **Kintanar Award**
TCS had received the two nominations for the Kintanar Award 2016: Meteorological Satellite Center of JMA and The Han River Flood Control Office (HRFCO).
- **SSOP Project phase II**
Following the decision of TC 48th Session, TCS tracked the progress of SSOP-II which

was submitted to ESCAP at 10th IWS in 2015. The proposal of SSOP-II was revised several times based on the repeated communication with ESCAP and RCMS-Tokyo. It was informed by ESCAP that the final version of SSOP-II was retained for further consideration in the shortlist selected from all 124 proposals. It was proposed to have final decision at the end of the year of 2016.

3. Coordination and Participation in the Activities of Annual Operation Plan Implementation

- **Participating in the 72nd Session of ESCAP**

72nd Session of the Economic and Social Commission for Asia and the Pacific was held in Bangkok from 15-19 May, 2016. Typhoon Committee Secretariat submitted the TC annual report to the Session. Mr. YU Jixin, on behalf TCS, attended the Session, and made a statement. He mentioned that the tropical cyclone is the most destructive weather system in our atmosphere. The Asia and Pacific is one of the regions over the world that is prone to tropical cyclones. The Typhoon Committee, under the auspice of the ESCAP and WMO, has been playing a unique role in reducing the loss of life and properties and minimizing social, economic, and environmental impacts by typhoon-related disasters. In the past several years, the TC in partnership with the PTC has been managing a project to develop Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System (SSOPs), with financial support from the ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness. This successful project has been ended in May last year. We are willing to implement the SSOP II to benefit more members of TC and PTC. Meanwhile, Typhoon Committee has initiated to update our Strategic Plan 2017-2021. To make sure that the strengthening of cooperation between the TC and the PTC will be one of the key issues in the updated the strategic plan.

- **Technology Transfer of the Typhoon Analysis and Prediction System**

The technology transfer of Typhoon Analysis and Prediction System (TAPS) was conducted for the Philippines from 13 to 14 October 2016. Two experts from KMA visited PAGASA to train the typhoon forecasters on the use of TAPS and provide technical assistance to the Members on the implementation of TAPS. The mission was completed successfully and reported in the 11th Integrated Workshop in Cebu, Philippines.

- **11th Integrated Workshop**

The 11th Integrated Workshop (IWS) was held in Cebu, Philippines from 24 to 28 October 2016 and all 14 Members of Typhoon Committee attended. In the parallel session WGM Members presented the Members Report and discussed the progress of the AOPs, POPs and PPs. Plans in 2017 were also included in the discussion.

- **Research Fellowship Scheme in Shanghai Typhoon Institute**

A research fellowship scheme was offered by Shanghai Typhoon Institute (STI) on tropical cyclone genesis forecast technique. The objectives of the research were to develop techniques for tropical cyclone genesis forecast and implement them in STI's objective typhoon forecast system, and provide the forecast products to Members through WMO-TLFDP's web site. The fellowship was offered to DPRK from 24 October to 23 November 2016.

- **Roving Seminar 2016**

The Roving Seminar 2016 was held in Ha Noi, Viet Nam from 15 to 17 November 2016 with the support of National Hydro-Meteorological Service of Viet Nam and the topic was "Storm Surge". Participants came from Cambodia, China, Hong Kong, Lao PDR, Macao, Philippines, Republic of Korea, Singapore, Thailand and Viet Nam. Lecturers came from USA, Japan and Hong Kong delivered excellent lectures with hands-on

experience sessions and the Seminar was highly appreciated by the participants.

- **Visiting Editors and First Editorial Board Meeting for Tropical Cyclone Research and Review in Shanghai Typhoon Institute**
Experts from USA and Thailand were invited by Shanghai Typhoon Institute (STI) from 17 to 21 October to improve the influence of the Journal “Tropical Cyclone Research and Review” (TCRR) by providing guidance on editorial procedures, seeking and encouraging submission of articles from Members as well as international institutions, and accelerating publicity and promotional activities about the Journal. Furthermore, the First Editorial Board Meeting was held on 21 October with experts from Australia and India to discuss on how to enhance TCRR’s capacity and visibility and make the Editorial Board play a better role.
- **Technical Meeting on Radar Composite Map Project**
The technical meeting between JMA and TMD on radar composite map project was held in Japan from 29 November to 2 December 2016. Quality management, algorithm for developing QPE product and further utilization as well as sharing of radar data were discussed in the meeting.
- **Coordinating and participating in the 5th WGH working meeting**
The meeting was held in Seoul, the Republic of Korea from 5 to 8 September 2016. The meeting was hosted by the Han River Flood Control Office (HRFCO), Ministry of Land, Infrastructure and Transport (MOLIT) of the Republic of Korea (ROK) in cooperation with Korea Institute of Civil Engineering and Building Technology (KICT) with the generous offer of financial support, and co-chaired by WGH chairperson Mr. Tokunaga YOSHIO and the vice chairperson Dr. Hyo-Seob CHO.
- **Coordinating the implementation of 6 WGH AOPs**
The current AOPs in WGH include: (1) Extreme Flood Forecasting System (EFFS); (2) Estimation for Socio-economic Impact of Sediment-related Disaster; (3) Development and Application of Operational System for Urban Flood Forecasting and Inundation Mapping (OSUFFIM) for TC Members; (4) Extension of Xin’anjiang Model Application in Selected River Basins in TC Members; and (5) Guidelines for extreme flood risk management in TC Region.
- **Coordinating and participating in the field survey of OSUFFIM**
The field survey of OSUFFIM project was conducted in China, Thailand, Philippines and Laos, respectively. The hydrologist Mr. LIU Jinping joined the event in Laos from 29 November to 4 December 2017.
- **Coordinating the publishing of technical report of WGH project on Extension of Xin’anjiang Model Application in Selected River Basins in TC Members**
The project is led by Bureau of Hydrology (BOH), China, and launched in 2013 and closed in 2016. BOH, in cooperation with DID Malaysia, drafted the technical report which was published as TC publication (TC/TD-No. 0012) in 2016.
- **Coordinating and guiding the establishment of the project-bank for WGH**
WGH discussed and established the project-bank at 5th WGH working meeting and 11th IWS for next years under TC Strategic Plan and the strategic framework of ESCAP and WMO on water-related disaster reduction, which mainly focuses on enhancing the knowledge and capacity building on the management of flood disaster risks for a resilient future in Typhoon Committee region.
- **Participating in 11th WGDRR Annual Workshop in May**

The 11th WGDRR Annual workshop with the theme of “Disaster Management Experience Sharing” was fruitfully held on 24-27 May 2016 in Ulsan, Republic of Korea with the kind contribution from National Disaster Management Institute (NDMI). This meeting was the first time to be held in Ulsan, as NDMI moved their headquarters from Seoul to Ulsan. Additionally, It was the first time an invitation was extended to AWG Members to join the Annual Workshop via a generous offering from NDMI. Taking this opportunity, AWG Members held a meeting to discuss the issues related to TC’s development and gave their insightful comments to WGDRR. Around 30 participants attended the Workshop from 8 member countries, as well as AWG and TCS Members. In the opening ceremony, TC Secretary, Mr. Yu Jixin was invited to deliver an opening speech and the DRR expert of TCS was invited to share a topic, with the participating DRR members.

- **Participating in TC WGDRR Expert Mission in September**

Following the decision at TC 48th Session, The WGDRR successfully conducted an expert mission in Beijing, China with TC coordination. Through the Expert Mission, the experts from NDMI exchanged information and views related to DRR with the participants from China Meteorological Administration (CMA) and National Disaster Reduction Center of China (NDRCC) suggesting to enhance future cooperation. During the Mission, the team visited the CMA headquarters to learn about technologies used for forecasting and media policies in China. DRR expert of TCS participated in this Expert Mission and provided the effort for coordination.

- **Forum Development on TC website**

In accordance with the decision from WGDRR at 11th IWS, TCS developed a forum on TC website that aims to share information by the DRR Members related to legal information and mechanisms on DRR for implementation of the WGDRR AOP6 2016 as found below:

<http://www.typhooncommittee.org/forum/viewforum.php?f=15>

4. The internal capacity building of TCS

- Under the strong supports of the Macao Meteorological and Geophysical Bureau, the “Agreement between the Government of the Macao Special Administrative Region of the People’s Republic of China and the ESCAP/WMO Typhoon Committee Regarding Administrative, Financial and Related Arrangements for the Typhoon Committee Secretariat” has been completely implemented in 2016.
- According to the Terms of Reference of Secretary of the Typhoon Committee, Paragraph 2 (The Secretary shall maintain and manage an adequate workforce in TCS for effective delivery of TCS output), and the Agreement Between the Macao Special Administrative Region of the People’s Republic of China and The ESCAP/WMO Typhoon Committee Regarding Administrative, Financial and Related Arrangements for the Typhoon Committee Secretariat, the Typhoon Committee Secretariat has been continually employed Mr. Clarence Fong Chi-kong in the position of Meteorologist, Mr. Jinping LIU in the position of Hydrologist. Mr. LEI PunChi (Barrie) is working as the Disaster Risk Reduction (DRR) Expert on secondment continually.
- Macao SAR Government maintained TCS Building in 2016.

5. Other Issues

- **Assisting KMA in its International Internship Programme**
Following request from Korea Meteorological Administration (KMA), TCS accepted two interns from September to December 2016 working in TCS. The DRR expert (Barrie) and Meteorologist (Clarence) were appointed as supervisor of the interns.
- **First China-ASEAN Meteorological Forum**
As the invitation of CMA, TCS attended the First China-ASEAN Meteorological Forum which was held in Nanning, China, 11 to 12 September 2016. The Nanning Initiative on China-ASEAN Cooperation in Meteorology was adopted.
- **The Sixteenth Session Commission for Basic System of WMO**
As the invitation of World Meteorological Organization, TCS, as an observer, attended the sixteenth session of the Commission for Basic System of WMO which was held in Guangzhou China from 23 to 29 November 2016.

6. Recommendations

Based on the experience of routine operation in 2016 and in the past years, and considering needs and possibility, TCS made the following recommendations to TC 49th Session for consideration:

- To allocate US\$28,000 from TCTF for supporting overall TCS activities; US\$3,000 for supporting IWS hosting in 2016 and US\$2000 for IWS related activities;
- To express appreciations to Members for their donation for the Typhoon Committee Trust Fund and in-kind contributions, encourage Members to continue support activities of the Committee.
- To thank Members for their cooperation on SSOP project and encourage continuing the support SSOP phase II to benefit all Members of the TC and PTC.