

## **Working Meeting on Cooperative Mechanism for Coastal Multi-Hazards Early Warning Information Sharing and Technical Transferring between PTC and TC**

Under the project of Synergized Standard Operating Procedures for Coastal Multi-hazards Early Warning System (SSOP)

Bangkok, Thailand, 9-10 October 2014

### **SUMMARY REPORT**

#### **A. Organization of the Working Meeting**

- 1.** The Working Meeting on Cooperative Mechanism for Coastal Multi-hazard Early Warning Information Sharing and Technical Transferring between the Panel on Tropical Cyclones (PTC) and the Typhoon Committee (TC), following the established in the Activity 2.2 of the Work Plan of the project “Synergized Standard Operating Procedures for Coastal Multi-hazards Early Warning System (SSOP)”, was held in the Swissotel Nai Lert Park Hotel, Bangkok, Thailand on 9-10 October 2014.
- 2.** The Meeting was attended by 22 participants (Annex I) which were mainly Chairpersons of the Working Groups on meteorology, hydrology and disaster risk reduction (DRR) of PTC and TC or their representatives; Heads of the Regional Specialized Meteorological Centers (RSMC) of Honolulu, New Delhi and Tokyo, or their representatives; Program Specialist in Early Warning Systems of Asian Disaster Preparedness Center (ADPC); the Acting Administrator of PAGASA, and representatives of the Secretariats of ESCAP, WMO, PTC and TC.
- 3.** Mr. Raymond TANABE chaired the Meeting on behalf of Mr. Edwin Lai, Chairperson of the SSOP Steering Committee and of the TC Advisory Working Group (AWG).
- 4.** The Project Manager/Technical Adviser of SSOP Project, Mr. James Weyman addressed the audience through Skype.
- 5.** Mr. Derek LEONG, Mr. Mahammad RIAZ and Mr. Atiq KANAN were selected as Rapporteurs of Session 2a, 2b and 2c, respectively; Mr. Derek LEONG and Mr. Jinping LIU were selected as Rapporteurs of breakout groups 1 and 2, respectively.

#### **B. Objectives of the Working Meeting**

- 6.** The workshop is part of the activities under the project of SSOP. The main goal of the workshop is to create the basis for building a cooperative mechanism that is expected to support regular consultation and technical transfer between the PTC and TC regions.

7. The Objective of the workshop is to exchange information on what is going on in PTC and TC, to find out the gaps on the Coastal Multi-Hazards Early Warning, and to identify the priority areas on Information Sharing and Technical Transferring between PTC and TC.

8. Focusing on the main goal and objective, the participants of the workshop had very active and full discussion following the scheduled program (Annex II) and achieved major conclusions and raised valuable recommendations.

### **C. Major Conclusions and Recommendations**

9. As result of the discussions held in the parallel discussions in Sessions and on the basis of the information exchanged during the Working Meeting, the following major conclusion and recommendations for establishing the cooperative mechanism for coastal multi-hazard early warning information sharing and technical transferring between PTC and TC were reached and synthesized as:

#### **10. Conclusions**

- 1) The Working Meeting recognized that it is necessary and important to establish a cooperative mechanism between PTC and TC for promoting the capacity on coastal multi-hazards early warning through information sharing and technical transferring between two regional bodies.
- 2) The framework of cooperative mechanism was outlined to enhance the collaboration between TC and PTC with the institutional support from RSMCs. It was suggested to mobilize extra-budgetary resources for the capacity building, joint projects, analytical publications and knowledge sharing activities of RSMCs to strengthen TC and PTC collaboration.
- 3) It was recognized that the SSOP project (under the ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and Southeast Asian Countries) is a very successful example to closely link the two regional bodies together. This kind of cooperation should be encouraged in future.
- 4) It is recognized the following priority areas that need to be emphasized in the cooperation activities between PTC and TC in short-term:
  - a. Enhancement of human Capacity building including training, participating in workshops/seminars, field surveys, exchanging information, expertise and publications;
  - b. Enhancement of capacity building on early warning system (EWS) including QPE/QPF technology; Flood forecasting modeling, inundation and flooding simulation, coupling of storm surge model with runoff model and flash flood model.

- c. Exchanging experiences and know-how in operational Hydrometeorology in flood forecasting modeling in terms of rainfall, runoff and inundation and urban flood forecasting.
- 5) It is recognized that the support and supervision from ESCAP and WMO are very important to promote and enhance the cooperation between PTC and TC.
- 6) The targets and goals of the cooperative mechanism between PTC and TC should be harmonized with the strategies and framework of ESCAP and WMO.

## 11. Recommendations

- 1) To request PTC and TC to establish a mechanism for holding Joint PTC/TC Sessions periodically, around every 6 years.
- 2) To request PTC and TC to conduct analytic study focusing on science and policy related aspects of TC/PTC regional activities;
- 3) To request the PTC and TC to integrate their activities into the Global Framework for Climate Services (GFCS), an UN-led initiative led by WMO to guide the development and application of science-based climate information and services in support of decision-making.
- 4) To request ESCAP to consider the possibility to support conducting SSOP phase II after the current SSOP project is closed.
- 5) To request ESCAP and WMO to continue the support to implement further the on-going project of real-time Operational System for Urban Flood Forecasting and Inundation Mapping (OSUFFIM), which can be used in PTC and TC region.
- 6) To encourage PTC and TC to participate in their Annual Sessions, Integrated Workshops and other workshops/seminars each other.
- 7) To encourage the PTC Members to contribute with research papers to Tropical Cyclone Research and Review (TCRR) of TC.
- 8) To encourage PTC and TC sharing their practices on public awareness programmes and good practices of early warning system.
- 9) To encourage PTC to be involved in Annual Operation Plans (AOPs) of three components (meteorology, hydrology and DRR) of TC with support from ESCAP and WMO.
- 10) To request PTC and TC to establish the mechanism on transfer of technical know-how and sharing experiences on hydro-meteorological and DRR aspects through fellowships, roving seminars, attachment training; specific research projects, tropical cyclone analysis and forecasting, storm surge prediction; flood forecasting modeling, rainfall runoff modeling, inundation mapping and flash flood forecasting; coupling of storm surge model with runoff model and flash flood model.



- 11) To request PTC and TC to conduct ESCAP/WMO joint capacity development programme with support from RSMCs for PTC and TC Members, under support and supervision from ESCAP and WMO.

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## Annex II

### Agenda of Working Meeting

*Chair of the meeting: Mr. Raymond Tanabe (on behalf of Mr. Edwin S.T. Lai, Chair of Steering Committee of SSOP Project)*

Time (min)	Start	End	Agenda	Speakers/Moderators
<b>Day 1 (Thursday, 9 October 2014)</b>				
30	08:30	09:00	<b>REGISTRATION</b>	
			<b>Opening Ceremony</b>	
10	09:00	09:10	Typhoon Committee Secretary	Mr. Olavo Rasquinho
10	09:10	09:20	Panel on Tropical Cyclones Secretary	Dr. Arif Mahmood
10	09:20	09:30	WMO Representative	Mr. Taoyong Peng
10	09:30	09:40	ESCAP Representative	Mr. Sanjay Srivastava
10	09:40	09:50	Project Manager/Technical Consultant Via Skype	Mr. Jim Weyman
10	09:50	10:00	Chair of the Cooperative Mechanism Meeting	Mr. Raymond Tanabe
30	10:00	10:30	<b>Group Picture and Morning Break</b>	
<b>Session 1</b>			<b>SSOP Status and Lessons Learned</b>	
30	10:30	11:00	Status of SSOP Project and Lessons Learned	Mr. Olavo Rasquinho
30	11:00	11:30	Experiences of ADPC in Cooperative Mechanisms	Mr. Atiq Kainan Ahmed
30	11:30	12:00	Experiences of RESAP Education and Training Network as Successful Cooperative Mechanism	Mr. Sanjay Srivastava
60	12:00	13:00	<b>LUNCH BREAK</b>	
<b>Session 2</b>			<b>Parallel Discussions</b>	
<b>Session 2A</b>			<b>Working Group on Meteorology Cooperation (Select a Rapporteur)</b>	
20	13:00	13:20	PTC WGM Activities and Areas of Potential Cooperation between PTC and TC	Mr. Shamsuddin Ahmed
20	13:20	13:40	TC WGM Activities and Areas of Potential Cooperation between PTC and TC	Dr. Wang Dongliang (on behalf of Chair of TC WGM)
100	13:40	15:00	Discussions and then written documentation, goals, objectives, and time lines for completion on WGM cooperation	Dr. Vicente Malano, Moderator
<b>Session 2B</b>			<b>Working Group on Hydrology Cooperation (Select a Rapporteur)</b>	

Time (min)	Start	End	Agenda	Speakers/Moderators
20	13:00	13:20	PTC WGH Activities and Areas of Potential Cooperation between PTC and TC	Mr. Muhammad Riaz
20	13:20	13:40	TC WGH Activities and Areas of Potential Cooperation between PTC and TC	Mr. Minoru Kamoto
100	13:40	15:00	Discussions and then written documentation, goals, objectives, and time lines for completion on WGH cooperation	Mr. Liu Jinping, Moderator
<b>Session 2C</b>			<b>Working Group on DRR Cooperation (Select a Rapporteur)</b>	
20	13:00	13:20	PTC WGDRR Activities and Areas of Potential Cooperation between PTC and TC	Mr. Arun Pinta (on behalf of Chair of PTC WGDRR)
20	13:20	13:40	TC WGDRR Activities and Areas of Potential Cooperation between PTC and TC	Mr. Barrie Lei (on behalf of Chair of TC WGDRR)
100	13:40	15:00	Discussions and then written documentation, goals, objectives, and time lines for completion on WGDRR cooperation	Mr. Arun Pinta (on behalf of Chair of PTC WGDRR)
<b>Session 3</b>			<b>Summation of Potential Areas of Cooperation for WGM, WGH, and WGDRR</b>	
30	15:00	15:30	<i>Afternoon Break</i>	
15	15:30	15:45	Summary of WGM	Rapporteurs selected in each Working Group present Summary of Discussions, Conclusions and Recommendations from each WG
15	15:45	16:00	Summary WGH	
15	16:00	16:15	Summary WGDRR	
60	16:15	17:15	Discussion of goals, objectives, and specific actions for planned cooperation. Develop a draft Action Plan with specific planned cooperative items and associated time lines for WGs.	(Mr. Raymond Tanabe, Moderator) All Participants
<b>Day 2 (Friday, 10 October 2014)</b>				
<b>Session 4</b>			<b>Ideas for Potential Cooperation in other areas</b>	
30	09:00	09:30	Presentation and Discussions on Training, Research, and Fellowship Methodology to Foster Cooperation	Mr. Derek Leong (on behalf of Chair of TRCG)
60	09:30	10:30	Short Overviews (10 minutes or less) by Heads of RSMC and Panel Discussion of RSMC Operations to Enhance Cooperation of PTC/TC with questions/interactions from audience	Ms. Suman Goyal (on behalf of Head of RSMC, New Delhi), Mr. Fujita Tsukasa, Mr. Raymond Tanabe, Mr. Taoyong Peng, Moderator
30	10:30	11:00	<i>Morning Break</i>	
15	11:00	11:15	PTC Secretariat and Session Activities and Areas of Potential Cooperation between PTC and TC	Dr. Arif Mahmood

Time (min)	Start	End	Agenda	Speakers/Moderators
15	11:15	11:30	TC Secretariat and Session Activities and Areas of Potential Cooperation between PTC and TC	Mr. Olavo Rasquinho
20	11:30	11:50	Discussions on PTC and TC Secretariats' and Sessions' Activities to Enhance the Cooperation of PTCS and TCS and PTC and TC Sessions	Moderator
15	11:50	12:00	TC AWG Ideas for Potential Cooperation	Mr. Raymond Tanabe (on behalf of Chair of TC AWG)
60	12:00	13:00	<b>Lunch Break</b>	
<b>Session 5</b>			<b>Breakout Groups</b>	
15	13:00	13:15	Description of Afternoon Activities	Mr. Olavo Rasquinho
105	13:15	15:00	Break Into 2 Integrated Groups to discuss and document future recommendations for PTC/TC Cooperative Mechanism. Prepare conclusions/recommendations from 2 groups to display for group discussion and agreement	
30	15:00	15:30	<b>Afternoon Break</b>	
<b>Session 6</b>			<b>Development/Establishment of PTC and TC Cooperative Mechanism</b>	
15	15:30	15:45	Group 1 Presentation: Conclusions/Recommendations	
15	15:45	16:00	Group 2 Presentation: Conclusions/Recommendations	
60	16:00	17:00	Based upon conclusions and recommendation, discussion on process, timeline, and methodology for drafting an initial Cooperative Mechanism Plan. Result Required: Consensus draft plan with specifics and a time line of actions to be completed to further develop and implement a Cooperative Mechanism Plan.	Mr. Raymond Tanabe, Moderator
<b>Session 7</b>			<b>Closing</b>	
5	17:00	17:05	WMO	Mr. Taoyong Peng
5	17:05	17:10	ESCAP	Mr. Sanjay Srivastava
5	17:10	17:15	Panel on Tropical Cyclones Secretary	Dr. Arif Mahmood
5	17:15	17:20	Typhoon Committee Secretary	Mr. Olavo Rasquinho
5	17:20	17:25	Chair of the Meeting	Mr. Raymond Tanabe

### Annex III

## Section 5 Breakout Groups

### Discussion and Documentation of future recommendations for TC/PTC Cooperative Mechanism

	<b>GROUP 1</b>	<b>GROUP 2</b>
1	Mr. Shamsuddin AHMED, Deputy Director, Bangladesh Meteorological Department, BANGLADESH	Dr. WANG Dongliang, Chief of Editorial Office of Tropical Cyclone Research and Review, Shanghai Typhoon Institute of China Meteorological Administration, CHINA
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