

Typhoon Committee
Forty-fifth Session
29 January -01 February 2013
Hong Kong, China

SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING
SYSTEM (SSOP)

(Item 7 of Provisional Agenda – Crosscutting Projects)

(Submitted by TCS)

ACTION REQUIRED:

This Committee is invited to:

- a) Review the documents of the SSOP project.
- b) Approve the establishment of the Steering Committee, Task Force, Project Manager and the Implementation Plan for SSOP project.

APPENDIXES:

- I - Letter of Agreement with Terms of Reference, Activity Work Plan and Budget
- II - Terms of Reference of the Steering Group
- III - Terms of Reference of the Task Force
- IV - Terms of Reference of the Project Manager
- V - Minutes of the Telephone Conference
- VI - Minutes of the Kickoff Meeting
- VII - Minutes of the Pre-7th IWS Meeting
- VIII - Implementation Plan

Background Information

In December 2011, the TCS noted that the **ESCAP Multi-Donor Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and South East Asia** was willing to finance projects in the area of

the coastal multi-hazards.

This Trust Fund, which was established in 2005 with the overall objective of building and enhancing tsunami early warning capacities, has enlarged its scope and has made known through a Strategy Note issued in November 2011 that it was open to other coastal hazards besides tsunamis. In this Strategy Note it was mentioned that “mechanisms facilitated by ESCAP will be utilized, including the **Panel on Tropical Cyclones, Typhoon Committee ...**”.

In this connection, TCS consulted the TC AWG and the Secretary of the Panel on Tropical Cyclones and formulated, with the collaboration of other entities, the project **Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System (SSOP)** and applied for funds.

Due to the limited time frame for submitting the application (15 January 2012), it was not possible to submit to the Committee, whose 44th Session would be on 06-11 February 2012, the application for endorsement. However, TCS presented to the Committee the version which was not yet approved at that date, and the Committee has expressed its concurrence with the efforts made, through Paragraph 189 of the Report of the 44th Session (*The Committee took note of the submission of the project “Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System” for grant funds from ESCAP Trust Fund for Tsunami Disaster and Climate Preparedness. The Committee would proceed with the project should funds become available*).

During the drafting of the application, AWG members, particularly Mr. Edwin Lai and Mr. Masashi Kunitsugu provided their constructive comments and advice, and TC Members, particularly China, Japan, Hong Kong-China, Malaysia, Thailand and USA provided useful information. WMO, ESCAP, ADRC and IOC have also contributed with their comments and suggestions.

After several submissions of different versions of the Project, the Secretary of TC was authorized by the Chairperson of TC, Ms. JIAO Meiyan, to sign the final version of the Letter of Agreement between ESCAP and TC, on behalf of the Committee, on the 1st August 2012. The Circular Letter TCS/210-2012, dated 08 August, with copies of the Letter of Agreement, Annex I (Terms of Reference, Activity Work Plan and Budget) and Annex II (Standard Terms and Conditions) was sent to all Directors and Focal Points informing on the signing of the Letter of Agreement.

Following telephone conference between representatives of ESCAP, WMO, TCS and Secretariat of PTC, on 12 September 2012, it was established that a kick-off meeting would take place in ESCAP Headquarters, in Bangkok, on 22-23 October 2012, in which it was recommended a meeting of representatives of ESCAP, WMO, PTC, TC, ADRC with the Chairs of the WGs of TC, on 25 November, eve of the 7th TC Integrated Workshop, in Nanjing, so that the SSOP project could be considered a crosscutting project of TC and PTC. In this meeting the Terms of Reference of the Task Force and the Terms of Reference of the Project Manager of the SSOP project were discussed. It was also recommended by AWG to create a Steering Committee for SSOP and to submit to the TC 45th Session, for formal approval, the implementation plan of SSOP, together with the budget and other recommendations.

I

LETTER OF AGREEMENT WITH TERMS OF REFERENCE, ACTIVITY WORK PLAN AND BUDGET

Due to its great volume this document is posted on the TC Website:

<http://www.typhooncommittee.org/45th/7-crosscutting.html>

II

TERMS OF REFERENCE OF THE STEERING COMMITTEE

PROJECT ON

SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING SYSTEM (SSOP)

(Draft version 5 Dec 2012)

1. Background

The Advisory Working Group, in its meeting held in Nanjing on November 30, 2012, recommended the creation of a Steering Committee for the project SSOP, which, besides advising on the implementation of the project, shall have as main task authorize activities involving expenditure, particularly in relation to hiring personnel for execution of activities considered necessary for the implementation of the project.

2. Functions of the Steering Committee

The Steering Committee will perform as the decision body of SSOP, with the main functions:

- a) To select the Consultant (s) and the Project Manager among potential candidates;
- b) To provide guidance to the Task Force, Project Manager and Consultant(s) on the implementation of the Project;
- c) To authorize the hiring of staff to perform duties in the framework of the project;
- d) To authorize activities deemed necessary for the efficient conduct of the project, not foreseen in advance;
- e) To authorize payment of expenses related to project implementation;
- f) To monitor the progress of the SSOP project implementation.

3. Composition

The Steering Committee is composed of:

- Chairperson of Advisory Working Group of Typhoon Committee
- Secretary of the Typhoon Committee;
- Secretary of the Panel on Tropical Cyclones.

The Chairperson of the TC AWG will perform the functions of Head of the Steering Committee.

III
TERMS OF REFERENCE OF THE TASK FORCE
FOR
THE PROJECT ON
SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY
WARNING SYSTEM (SSOP)
(Draft version 4 Dec 2012)

1. Background

On August 1, 2012, on behalf of Typhoon Committee (TC), the TC Secretary of Typhoon Committee (TC) signed the Letter of Agreement (No. 2012-0018) with the United Nations Economic and Social Commission for Asia and Pacific (ESCAP) for implementation of the project of *Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System (SSOP)*, which was funded by *ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and Southeast Asian Countries*.

SSOP is the first project of TC in its history to be funded by international organizations like ESCAP. The longer term goal of the Project is to promote the coastal community resilience to coastal multi-hazards through having standard operating procedures for effective multi-hazards EWS so that improving the policy and institutional arrangements at national and community levels. This Project will involve:

- Two regional bodies of WMO Tropical Cyclone Programme - Typhoon Committee and Panel of Tropical Cyclones (PTC);
- Several international/regional organizations, such as Asian Disaster Reduction Center (ADRC), Intergovernmental Oceanographic Commission (IOC) of UNESCO, ESCAP, WMO, Asia-Pacific Broadcasting Union (ABU), Regional Integrated Multi-Hazard Early Warning System (RIMES) and Asian Disaster Preparedness Center (ADPC) as partners and the potential cooperation entities;
- Thirteen beneficiary countries in TC and PTC region including Bangladesh; Cambodia; China; India; Lao PDR; Malaysia; Maldives; Myanmar; Pakistan; Philippines; Sri Lanka; Thailand and Viet Nam;
- Target groups including National Meteorological and Hydrological Services (NMHSs), National Tsunami Warning Centres (NTWCs) and National Disaster Management Offices (NDMOs) in TC and PTC Members.

Hence, as it is foreseen that this project will be comprehensive and complicate, it is intended to set SSOP as a cross-cutting project among working groups of the TC and PTC in order to effectively and efficiently implement the project and achieve its goals described in the Letter of Agreement.

Consequently, the TC and the PTC decided to create a Task Force (TF) to provide guidance for implementation of SSOP.

2. Terms of Reference

The functions of the Task Force is to provide technical advisory and support to the Project Manger in implementing the cross-cutting project of SSOP, through:

- g) facilitating the collection and exchange of information relating to the performance status of coastal multi-hazard EWS in the Members of TC and PTC;

- h) facilitating the compilation of good practices of SOP in TC and PTC Members and synergizing the existing SOPs, including institutional capacity building and downstream applications such as Community Based Risk Management (CBRM) approach;
- i) coordinating with other ongoing initiatives with similar objectives in the region and drawing on experiences from similar initiatives in the past;
- j) reviewing and providing comments to the drafting of the Manual/Handbook of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning Systems;
- k) offering support in the conduct of training courses in target countries for users and media in the interpretation of EWS products and SSOP guidelines;
- l) building a cooperation mechanism between TC and PTC for coastal multi-hazard EWS information sharing and technical transfer for target countries.

3. Structure and Organization

- 1) Chairpersons or their representatives of WGM, WGH, WGD RR, TRCG of TC, Regional Specialized Meteorological Center Tokyo (RSMC) and the Chairpersons or their representatives of the Working Groups of PTC;
- 2) Representatives from TC and PTC Secretariats;
- 3) Consultants from potential cooperation organizations mentioned above ;
- 4) Focal points from target (beneficiary) countries among Members of TC and PTC; and
- 5) TC Secretary to perform the functions of Head of the Task Force;

IV
TERMS OF REFERENCE OF THE PROJECT MANAGER
OF
SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING
SYSTEM (SSOP)
(Draft version 4 Dec 2012)

To effectively and efficiently implement the project of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System (SSOP) which was funded by *ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and Southeast Asian Countries*, it is expected to be established a contract between TCS, the “*organization submitting proposal*” to the United Nations Economic and Social Commission for Asia and Pacific (ESCAP), and a project manager with large experience related to projects under the UN agencies framework, for specific tasks. The establishment of this contract was recommended during conversations with ESCAP representatives, due to the great complexity of the project.

The Project Manager will conduct his/her work on a part-time basis and mostly in his/her home country, under the guidance of the Steering Committee and with technical support from a joint TC-PTC Task Force, according to the Activity Work Plan of the project described in the Letter of Agreement (No. 2012-0018) between ESCAP and TC.

Terms of Reference

To implement SSOP and coordinate related programmes or activities according to the Implementation Plan and the Activity Work Plan.

To take part in the activities related to SSOP, such as workshops, training courses and missions where needed, and to prepare the material and draft the summary reports for workshops, training courses and missions accordingly.

To maintain the progress of the implementation of the project and to prepare the progress reports to the Steering Committee and ESCAP periodically;

To draft the Manual/Handbook of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System, mainly focusing on the hydro-meteorological service, including SOPs related to warning providers, disaster managers, media and fishermen.

Terms of Contract

The terms of contract of the Project Manager shall comply with the Article II of the Letter of Agreement (No. 2012-0018) between ESCAP and TC.

V

MINUTES OF THE TELEPHONIC CONFERENCE ON IMPLEMENTATION OF THE PROJECT SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING SYSTEM

12 September 2012

PARTICIPANTS:

Edle Tenden (ESCAP)
Koji Kuroiwa (WMO)
QamaruzZaman Chaudhry (PTC)
OlavoRasquinho (TC)

AGENDA OF THE MEETING

- **Kick-off Meeting** – Venue and dates
- **Workshop** for collecting and exchanging the status of coastal multi-hazards EWS in Members of TC and PTC (Activity 1.1 of Activity Work Plan) – Venue and dates
- **Coordination with other project funded by the Trust Fund** (ABU Disaster Risk Reduction Broadcast Media Initiative; ADPC – Tec. Assistance for enhancing the capacity of end-to-end multi-hazard EWS for coastal hazards; RIMES/WMO project Reducing risks of tsunami, storm surges, large waves and other natural hazards in low elevation coastal zones).
- **Appointment of Project Manager**
- **Any other Business**

DISCUSSIONS

- **Kick-off Meeting**

It was considered useful to hold a kick-off / 1st workshop planning meeting, involving representatives of ESCAP, WMO, PTC, TC and ADRC, as soon as possible, and integrate/ charge its expenses to the Activity 1.1 of the Activity Work Plan. For that purpose TCS will send a message to ESCAP proposing to hold this meeting in ESCAP headquarters. Several dates were suggested and discussed. However, it was agreed that Mr. Olavo will decide the final date in consultation with other members and he will also ensure that Dr. Yuichi Ono, who has sufficient knowledge and back ground of the project, could attend the meeting. TCS was also asked to send another message to ESCAP regarding charging the expenses of the meeting from the project.

- **Workshop (Activity 1.1 of Activity Work Plan)**

The realization of the Workshop for collecting and exchanging of performance status of coastal multi-hazards EWS in Members of TC and PTC (Activity 1.1 of Activity Work Plan) was discussed in detail. Keeping in view the engagements of TCS with other meetings and particularly with the preparation of the 45th TC Annual Session, which will be held from 28 January to 1 February 2013, in Hong Kong, China, it was agreed to hold the Workshop as soon as possible, preferably immediately after this Session.

- **Coordination with other project funded by the Trust Fund**

It was suggested that TCS may contact directly with the focal points of other projects under the Tsunami Trust Fund, namely:

- ABU Disaster Risk Reduction Broadcast Media Initiative;
- ADPC – Tec. Assistance for enhancing the capacity of end-to-end multi-hazard EWS for coastal hazards;

- RIMES/WMO project Reducing risks of tsunami, storm surges, large waves and other natural hazards in low elevation coastal zones).

ESCAP agreed to provide the contacts of the Focal Points of these projects.

- **Project Manager/Coordinator**

The appointment of project Manager/Coordinator was discussed and it was agreed that considering that TCS staff is very busy in their routine activities of the TC, a project manager/coordinator be appointed for the project, not in full time, to work under TC/PTC supervision. The payment be mainly supported from the item Personnel costs.

Any other Business: 7th IWS

As the next TC integrated workshop, whose theme is “Effective Warnings” and subtheme “Common Alerting Protocol”, which will be held in Nanjing on 26-30 November 2012, will tackle issues related to early warnings and CAP, WMO will collaborate providing keynote speakers on issues of interest for the Project.

VI

MINUTES OF THE KICK-OFF MEETING SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING SYSTEM (SSOP) Bangkok, 22-23 October 2012

Venue:

Room C of United Nations Conference Centre (UNCC)

Participants:

Dr. Yuichi Ono – Chief, Disaster Risk Reduction, Information and Communications Technology and Disaster Risk Reduction Division (IDD), ESCAP

Edle Tenden - ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness Information and Communications Technology and Disaster Risk Reduction Division

Ms. Mari Sawai- Associate Economic Affairs Officer Disaster Risk Reduction, Information and Communications Technology and Disaster Risk Reduction Division (IDD), ESCAP

Ms. Kelly Hayden – Economic Affairs Officer, DRR Section, ESCAP

Ms. Pradtana Limkralassiri – Space Application Section Information and communications Technology and Disaster Risk Reduction Division, ESCAP

Mr. Koji Kuroiwa – Chief WMO Tropical Cyclone Programme

Dr. Wattana Kanbua - Director, Marine Meteorological Center, Thai Meteorological Department

Mr. Imran Akram - Meteorologist of Panel on Tropical Cyclones (PTC) Secretariat

Mr. Olavo Rasquinho - Secretary of Typhoon Committee

1. Introduction of the project SSOP

In accordance with the Agenda (Appendix I) Mr. Olavo Rasquinho made a presentation (Appendix II) on the main aspects of the Letter of Agreement between ESCAP and TC (Appendix III) and the Activity Work Plan (Appendix IV)

2. Tasks assigned to the Secretariats of TC and PTC

During the discussions it was established:

- The contacts with the beneficiary countries will be made by the Secretariats of TC and PTC:

PTC: Bangladesh; India; Maldives; Myanmar; Pakistan; Sri Lanka.
TC: Cambodia; China; Lao PDR¹; Malaysia; Philippines; Thailand and Viet Nam.
- A survey on the current situation on Standard Operating Procedures (SOP) related to EWS in Members of PTC and TC will be carried out with the collaboration of Consultants.
- PTC and TC, with the collaboration of consultants and project manager, will carry out an analysis of the areas of common interest between SSOP and other projects financed by ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and Southeast Asian Countries, namely in what refers to the projects:
 - “ABU Disaster Risk Reduction Broadcast Media Initiative” (Asia Pacific Broadcasting Union -**ABU**);
 - “Technical Assistance for enhancing the capacity of end-to-end multi-hazard EWS for coastal Hazards in Myanmar, Sri Lanka and Philippines” (Asian Disaster Preparedness Center-**ADPC**);

¹ Lao PDR is a landlocked country but is Member of Typhoon Committee and affected by tropical cyclones.

- "Reducing risks of tsunami, storm surges, large waves and other natural hazards in low elevation coastal zones" (Regional Integrated Multi-Hazard Early Warning System – **RIMES**, in cooperation with **WMO**)
- Contacts will be established with the organizations in charge of those projects on areas of common interest to avoid duplications.
- Analysis of other common interest areas in projects/actions not directly under the ESCAP Tsunami Trust Fund, e.g. WMO's projects in the TC and PTC regions such as "Coastal Inundation Forecast Demonstration Project" and "Severe Weather Forecast Demonstration Project".

3. Discussion of the Activity Work Plan

a) Activity 1 (Reviewing and synergizing the existing SOPs for coastal multi-hazard EWS in the Members of TC and PTC and developing the Manual/Handbook of Synergized SOPs for Coastal Multi-Hazards EWS)

1.1- First Workshop for collecting and exchanging information on the status of coastal multi-hazards EWS in the beneficiary countries.

It was recommended that the Workshop will be tentatively held on 18-20 March, in Bangkok, taking into consideration the geographic localization of Thailand, between PTC and TC Members. Two possibilities were raised for the venue: Thai Meteorological Department headquarters or United Nations Conference Centre (UNCC) – ESCAP.

Dr. Wattana Kanbua will be in contact with TCS and PTC Secretariat regarding this possibility of hosting the Workshop.

It was also established that representatives of other organizations involved in projects with common areas of interest with SSOP could be invited to participate in the Workshop. It would be convenient that some of these participants should be supported by themselves or involved in consultancy actions.

1.2- Selection of Pilot countries where the use of SOP are already in practice so that an expert mission can report their procedures.

Pilot countries will be selected with the assistance of consultants, two in TC and one in PTC regions.

1.3- Synergizing the existing SOPs to compile a manual/handbook

A Manual/handbook will be compiled by the consultants. Nevertheless, before the work of the consultants a draft document should be made, focusing on the most relevant aspects. This document may be the starting point based on which partner agencies and consultants can develop the different chapters.

b) Activity 2

The Activity 2 consists of:

2.1 Training on the interpretation of EWS products for decision making, media, etc.

2.2 Working meeting on cooperation between TC and PTC on coastal multi-hazard EW information sharing and technical transfer for beneficiary countries.

It was decided that the Activity 2 would be discussed in more detail as the project progresses.

4. Development of regional multi-hazard early warning operational procedures, involving WMO, ESCAP, IOC, ADRC, ADPC, RIMES, etc.

Further discussion on this issue will be held more as the project progresses.

5. Coordination with global media who broadcast warning without borders (e.g. case of Oman)

It was focalized the experience of Oman on broadcasting warnings at international level. It was recommended to get more information on this issue.

6. Recent tsunami warning lessons from Japan

It was considered advisable to get more information on the experience that Japan has gotten in terms of lessons learnt in relation to EWS related to natural disasters.

7. Project Manager and Consultant.Terms of Reference

As it was agreed during the telephone conference held on 12 September (Appendix V), consultants will be contracted for specific tasks. Also a Project Manager, not in full time, will be contracted. The terms of reference of consultants and project manager will be drafted by TCS and PTC Secretariat. ESCAP was requested to give examples of the ToR already adopted for previous projects. ESCAP encouraged the TC Secretariat to draft the Terms of Reference based on the actual tasks that had to be completed for the project, taking into account division of labour with TCS staff and other experts and consultants that will be mobilized for the project.

ADRC can likely recommend eventual consultants on DRR and WMO on EWS aspects.

8. Any other business

- **Typhoon Committee Integrated Workshop on Effective Early Warnings**

Taking advantage of the realization of the 7th TC Integrated Workshop (IWS), to be held in Nanjing on 26-30 November 2012, whose main theme is “Effective Warnings” and sub-theme “Common Alerting Protocol – CAP”, it was recommended to organize a meeting on 25 November (eve of the start of the IWS Sunday) for discussing the linkage of SSOP with in the TC WGs AOPs for 2013. The participants would be the 3 WGs Chairs and 2 representatives of PTC and 1 from ADRC. Two days of DSA and travels for PTC representatives could be paid through Activity 1 of the SSOP Activity Work Plan, under decision taken in the current meeting (the Activity Work Plan permits a certain flexibility). Also a representative of ESCAP could be paid through the project in case unavailability of funds from ESCAP for this purpose.

It was suggested the possibility of TCS to invite representatives of the Google for the discussions on EWS and CAP to be held on the first and second day of the IWS, supported by themselves (Mr. Koji Kuroiwa will give Google contacts). Google has been giving great attention to meteorological information and it has already approached WMO and JMA for this purpose. Invitations could also be made to representatives of IOC, ABU, RIMES, ADRC and ADPC to attend the discussions on EWS and CAP, which will take place on the first and second day of IWS. The agencies’ representatives would be self-supported, unless they participate as resource persons, not only to attend, but also to act as consultants later.

- **Inclusion of activities related to SSOP project in the TC WGs Annual Operating Plan (AOP) and PTC WGM plan for 2013**

It was recommended to include in the AOPs of the TC WGs for 2013, activities related to the SSOP project. This issue will be addressed in the TC 7th IWS. It was also recommended that the meeting of the WGM of the PTC to be held in Oman, in December 2013, could raise discussions on how to include SSOP activities in the work plan for 2013. This procedure would be a kind of commitment from the

Members in relation to linkage with the SSOP project.

- **ESCAP Committee on DRR meeting**

As the meeting of the ESCAP Committee on Disaster Risk Reduction will be held in 2013 (not yet decided when – June, July or August), and considering that main key agencies will be represented, it was recommended to take advantage of this event to share information on the progress of the SSOP. It was also recommended that ESCAP should recommend to the project managers of projects under the ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and Southeast Asian Countries, to maintain close contacts to prevent duplication.

NOTE:

Whenever there are changes of the Activity Work Plan (AWP), not much significant, TCS shall previously notify ESCAP by email on actions to be taken. On the other hand, alterations involving substantive changes of the AWP would imply a written revision of the AWP.

VII

MINUTES OF THE PRE-7TH INTEGRATED WORKSHOP MEETING ON SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING SYSTEM (SSOP)

(Suning Venice Hotel, Nanjing, 25 November 2012)

Following recommendation of the Kick-off Meeting, which was held in Bangkok on 22-23 October 2012, and taking advantage of the occasion of the 7th TC Integrated Workshop in Nanjing on 26-30 November 2012, it was held a meeting of the Chairs of the WGs and TRCG of the TC, on 25 November, to discuss the adoption of SSOP as a crosscutting project and the possibility of the WGs integrate in their Annual Operating Plans (AOP) for 2013 activities related to the project. Representatives of the Panel on Tropical Cyclones (PTC), who were supposed to attend this meeting, were not able to attend.

The Secretary of Typhoon Committee, after submitting Tentative Agenda (Annex I), presented a PowerPoint with the current status of the Project (Annex II).

Considering the complexity of the project he also presented a proposal for the creation of a Task Force for the project and the draft Terms of Reference of an eventual Project Manager. It was also raised the necessity of consultants be contracted for specific tasks foreseen in the Activity Work Plan (Annex III).

After the presentation on the status of SSOP, the participants raised some questions related to the implementation of the project, stressing that the procedures related to the issuance of early warnings vary from country to country and also that, even in the same country, different entities issue warnings following different criteria, which means that the accomplishment of this project will be a complicated task.

Comments were also made considering this project too comprehensive in relation to the assigned funds (USD 457,000) and to the time frame (two years), and that it would be necessary:

- establish some limitations for its implementation, focusing in some important aspects, avoiding diversifying;
- more clear outcomes;
- avoid duplication with other ongoing projects.

Another question was also raised, which consisted of who would be the decision board of this project.

It was also stressed that the only decision of the Committee regarding this project was taken in the 44th TC Session (Hangzhou, China on 06-11 February 2012), which consisted of *"The Committee took note of the submission of the project "Synergized Standard Operation Procedure for Coastal Multi-Hazards Early Warning System" for grant funds from ESCAP Trust Fund for Tsunami Disaster and Climate Preparedness. The Committee would proceed with the project should funds become available"* (Paragraph 189 of the Report of the 44th TC Session).

The Secretary explained that the time for the formulation of the project was very short and that the decision of the Committee was interpreted by ESCAP and by TCS as an authorization to proceed with the process of submitting the application in time, otherwise awaiting for 45th TC Session for approval of the last version of the application would imply the non-acceptance of the proposal because the deadline for submitting the application would be exceeded.

It was also mentioned that waiting for a decision of the Committee would imply delay in the realization of the activity 1.1 of the Activity Work Plan, *"conducting a workshop for collecting and exchanging the performance status of the coastal multi-hazard EWS in the Members of the TC and PTC at high risk"* and, consequently in the remaining activities.

It was recommended that TCS circulate the proposed implementation plan of this project, together with the budget and other recommendations, among Members for review and submit them to the next TC Session, which will be held in Hong Kong-China, on 29 January-1 February 2013, for formal approval.

Participants:

Ms. Kelly HAYDEN-Economic Affairs Officer (IDD Division, ESCAP)

Mr. Koji KUROIWA-Chief, Tropical Cyclone Programme Division

Mr. Junji MORIWAKI - ADRC

Lei Xiaotu, Chair of WGM
Mr. Minoru KAMOTO, Chair of WGH
Mr. YEO WoonKwang, Chair of WGDRR
Mr. Edwin Lai (Chair of TRCG)
Mr. Chihun Lee (assisting the Chair of WGDRR)
Mr. SHIM Jae Hyun (assisting the Chair of WGDRR)
Mr. Yu Jun (representing the Chair of TC)
Mr. Olavo Rasquinho, Secretary of TC / Mr. Leong Kai Hong, Meteorologist of TCS
Mr. Jinping Liu, Hydrologist of TCS/ Ms. Denise Lau Senior Administrative Secretary, TCS
Ms. Lisa Kou, Senior Accounting Officer of TCS

VIII

IMPLEMENTATION PLAN for SYNERGIZED STANDARD OPERATING PROCEDURES FOR COASTAL MULTI-HAZARDS EARLY WARNING SYSTEM (SSOP)

(Draft for discussion)

According to the Letter of Agreement (No. 2012-0018) signed by Typhoon Committee (TC) with United Nations Economic and Social Commission for Asia and Pacific (ESCAP), the implementation plan on the activities related to the technique study to be conducted for SSOP is proposed for the period of August 2012 to July 2014.

TCS will submit to ESCAP the biannual progress reports, together with cumulative financial reports and will arrange an independent audit of the project funds at the end of the project with agreed timeframe. The activities related to the Monitoring, evaluation and audit will not be included in this Implementation Plan.

Activity 1: Reviewing and synergizing the existing SOPs for coastal multi-hazard EWS and developing the Manual/Handbook of Synergized SOPs for Coastal Multi-Hazards EWS

1.1 Telephone Conference

Objective: discuss dates for the Kick-off Meeting and Workshop; coordination with other projects; Project Manager and Consultants.

Participants:

ESCAP: Ms Edle Tenden

WMO: Mr. Koji Kuroiwa

PTC: Qamar uz Zaman Chaudhry

TCS: Olavo Rasquinho

Date: 22 September

Output: Minutes of the conference

Status: done

1.2 Kick-off Meeting

Objective: to discuss how to implement the project

Participants:

ESCAP: Dr. Yuichi Ono, Ms Edle Tenden, Ms. Mari Sawai, Ms. Kelly Hayden and Ms. Pradtana Limkrailassiri;

WMO: Mr. Koji Kuroiwa;

TMD: Dr. Wattana Kanbua,

PTC: Mr. Imran Akram; and

TCS: Mr. Olavo Rasquinho

Venue: United Nations Conference Centre (UNCC), ESCAP, Bangkok

Budget: USD2,804.37

Date: 22-23 October 2012

Output: Minutes of the meeting with recommendations

Status: done

1.3 Pre-meeting of TC 7th IWS for SSOP

Objective: to take the advantage of TC 7th IWS to discuss the recommendation of kick-off meeting and implementation of the project

Participants: totally 16, including:

ESCAP: Ms. Kelly Hayden

WMO: Mr. Koji Korojima;

ADRC: Mr. Junji MORIWAKI

Representatives of China and Republic of Korea

TC AWG members and TCS staffs

Venue: Suning Venice Hotel, Nanjing, China

Budget: USD739.00

Date: 25 November 2012

Output: Minutes of the meeting with recommendations

Status: done

1.3 Endorsement for implementation of SSOP

Objective: to approve the establishment of Steering Committee, task force; the TORs for Steering Committee, task force and the project manager; and implementation plan

Participants: delegations of TC Members

Venue: Hong Kong, China

Budget:

Date: 29 Jan.2012 – 1 Feb. 2013

Output: endorsed Steering Committee, task force; the TORs for Steering Committee, task force and the project manager; and implementation plan

Status: in the work

1.4 Workshop of SSOP

Objective: collecting and exchanging the performance status of coastal multi-hazard EWS in the Members of TC and PTC at high risk

Participants: 30 (estimated), including expected representatives from Members of TC and PTC, partners, ESCAP, WMO, members of SSOP steering committee and task force; project manager.

Venue: Bangkok, Thailand (proposed)

Budget: USD51,156.63 (estimated)

Date: 18-19 March, 2013 (proposed)

Output: Report of the workshop with summary of existing circumstances of SSOP in the region

Status: in the works

1.5 Piloting in selected countries

Objective: to conduct survey in selected countries in TC and PTC for better understanding the gaps and needs on SSOP, focusing on institutional capacity building and extending where applicable downstream in CBRM approach.

Participants: 6 (proposed), including expected representatives from TC, PTC and partners, and also representative from ESCAP, WMO in need.

Venue: one country in TC and two countries in PTC (proposed, and TBD)

Budget: USD53,200 (estimated)

Date: 2-3 days in each selected countries in May – June, 2013 (proposed)

Output: Report of the Survey with summary of gaps, needs and good examples on SSOP in the selected countries

Status: in the works

1.6 Drafting the Manual/Handbook of SSOP

Objective: To synergize the existing SOPs to draft and compile a Manual/Handbook of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning Systems based on the works of earlier stages.

Participants: project manager working as chief drafter, **with Taskforce members and consultants providing technical advice and support.**

Venue: home countries with internet communication, ADRC/IOC Office and 13 target countries

Budget: USD174,500 (estimated)

Date: submit the final version of Manual to ESCAP up to July, 2014

- Provide the structure of Chapters with contents and detail annotation for discussion and comments up to August 15, 2013;
- present first version of Manual/Handbook for discussion and comments at 8th IWS in October/November, 2013;
- Report the progresses of SSOP implementation and submit the second version to Steering Committee, Task Force and consultants for comments at TC 47th Annual Session in January or February, 2014;
- Provide the final version to Steering Committee, Task Force and consultants for final comments in April or May, 2014;
- Expert Mission to ADRC and IOC office for discussing the final version of Manual/ Handbook (5 Members from TC, PTC, Project manager, partners) in June, 2014
- Submit the finalized Manual/Handbook to ESCAP with final progress report in July, 2014;
- Print and distribute the Manual/Handbook up to TC 9th IWS in October/November, 2014.

Output: Manual/Handbook of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning Systems

Status: in the works

Activity 2: Conducting Training of users in the interpretation of EWS products for decision-making, media, etc.

2.1 Training course on SSOP

Objective: to conduct training course of users in the interpretation of EWS products for decision-making, media, etc.

Participants: 50 (proposed), including expected representatives from TC, PTC and experts from partners, ESCAP and WMO.

Venue: (TBD)

Budget: USD99,023 (estimated)

Date: 3 days in March – April, 2014 (proposed)

Output: trained 50 participants with the comments to the second version of Manual/Handbook.

Status: in the works

2.2 Working meeting between TC and PTC

Objective: to conduct working meeting for building a cooperation mechanism between TC and PTC for coastal multi-hazard EW information sharing and technical transferring for target countries

Participants: 20 (proposed), including expected representatives from target group of TC, PTC and experts from partners, ESCAP and WMO.

Venue: (TBD)

Budget: USD39,800 (estimated)

Date: 2 days in June-July, 2014 (proposed)

Output: Communication mechanism between TC and PTC on SSOP

Status: in the works

Monitoring & Evaluation & Audit

Objective: to conduct the evaluation work and audit work of SSOP project after completing the meetings and workshops

Participants: Consultant, auditing company and TCS staff

Venue: (TBD) and TCS office

Budget: USD18,200.00 (estimated)

Date: 5 months in Aug-Dec 2014 (proposed or conclusion of events)

Output: Report of the result of SSOP project to ESCAP

Status: in the works