



ESCAP Trust Fund for Tsunami, Disaster and
Climate Preparedness in Indian Ocean
and Southeast Asian Countries

Briefing SSOP-II Proposal for ESCAP Trust Fund Application

Typhoon Committee Secretariat (TCS)
October 15, 2015

1. BACKGROUND

Under the great support and guidance from ESCAP and WMO, and the close cooperation from Secretariats of TC and PTC, a series of international/regional organizations, beneficiary countries and targets groups, the project of Synergized Standard Operating Procedures (SSOP) for Coastal Multi-Hazards Early Warning System (hereinafter referred to as “SSOP-I”) conducted successfully the proposed activities and achieved the expected outputs including compiling the Manual/Handbook of Synergized Standard Operating Procedures for Coastal Multi-Hazards Early Warning System.

The successful SSOP-I project is regarded as an excellent example on the cooperation on promoting the capacity building of multi-hazards early warning among two regional bodies. However, due to the limitation of budget and time, TC and PTC could not extend the results and achievements of the project to all their Members deeply and widely.

Therefore, it was suggested very strongly at the 3rd joint Session of TC and PTC (TC 47th Session and PTC 42nd Session) to request the Members, after the Manual is complete, to consider ways to make the best use of it, and to develop a proposal for SSOP Phase II, based on the successful completion SSOP-I project, and submit to ESCAP for funding consideration.

The SSOP Phase II is proposed to be mainly focused on the training on how to establish an appropriate standard operating procedure (SOP) based on the published SSOP Manual and on promoting the TC and PTC Members' capacity building on Multi-hazards Risk early warning based on existing technical achievement for National Meteorological and Hydrological Services (NMHSs) in proposed beneficiary countries.

2. PROJECT TITLE

SSOP Phase II: Implementation of Synergized Standard Operating Procedures (SSOP) for Coastal Multi-Hazards Early Warning System

3. ORGANIZATION SUBMITTING PROPOSAL

ESCAP/WMO Typhoon Committee Secretariat (TCS)

4. FOCAL POINT

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5. BENEFICIARY COUNTRIES

16 Countries in TC and PTC region: Bangladesh; Cambodia; China; India; Islamic Republic of Iran; Lao PDR; Malaysia; Maldives; Myanmar; Oman, Pakistan; Philippines; Sri Lanka; Thailand, Timor-Leste and Viet Nam.

6. TARGET GROUP (S)

- National Meteorological and Hydrological Services (NMHSs) / National Tsunami Warning Centers (NTWCs)
- National Disaster Management Offices (NDMOs)
- Government sectoral agencies

7. TIME FRAME

18 months: expected period: from 1 May 2016 to 31 October 2017

8. PROJECT STRATEGY

SSOP-II is the continuation of the project of SSOP-I, which has been close in May 2015. The purpose of SSOP-II is to extend the achievements among 16 beneficiary countries, and transit the existing technical methodologies on coastal multi-hazards early warning into productive forces so that to promote the capacity on disaster risk reduction.

The activities of SSOP-II will be mainly focused on the training the mechanism on how to establish and prepare an appropriate standard operating procedure (SOP) based on the published SSOP Manual and on promoting the TC and PTC Members' capacity building on Multi-hazards Risk early warning based on existing technical achievement for National Meteorological and Hydrological Services (NMHSs) in the beneficiary countries, and also on enhancement of mutual support between TC and PTC through the continuation of the project.

SSOP-II also will consider providing resources and opportunities to involve social scientists and warning experts from National Tsunami Warning Centres (NTWCs), National Disaster Management Offices (NDMOs), and Government sectoral agencies including national level, local level and community level to improve the training and capacity building on social science aspects of EWS, such as risk and impact assessment, warning communication strategies, partnership/stakeholder engagement, society response capability, etc.

9. GOAL OF SSOP-II

The goal of the Project of SSOP-II is to promote the capacity on coastal community resilience to coastal multi-hazards through extending the achievement of SSOP-I in TC and PTC regions by conducting a series of training courses and workshops on the "mechanics" of preparing and implementing synergized standard operating procedures for coastal multi-hazards early warning system in beneficiary countries, aiming at the problems and gaps.

10. PARTNERS

Following partners will be involved in the implementation of the project of SSOP-II and play their specific:

- ESCAP and WMO: will provide supervise and guidance for implementation of proposed SSOP-II;
- ABU, GAATES, IOC of UNESCO, UN-Women, RIMES; UNDP Asia-Pacific Regional Centre, IRIDeS and ADPC, ADRC: used to be partners of SSOP-I, may provide potential resources persons for SSOP-II;
- RSMCs in Tokyo, New Delhi and Honolulu, Shanghai Typhoon Institute (STI), etc.: may provide resource persons and technical support for SSOP-II;
- NMHSs, NTWCs, NDMOs of capable Members such as China; Hong Kong, China; Japan and Public of Korea: may provide resource persons and technical support for SSOP-II;
- WMO Nanjing Regional Training Centre (TC Training Centre), SYS University: may provide facilities for training courses and workshops of SSOP-II;
- The Secretariats of PTC (PTCS): in cooperative with TCS, will take the responsible for the provision of secretariat support for implementation of SSOP-II.

11. CAPACITY

During the implementation of SSOP-I project, Steering Committee composed of Secretaries of Tc and PTC, the technical advisor/project manager and Task Force composed of Working Group Chairpersons provided strong support on expertise and displayed immense courage and wisdom in coordination for success of SSOP. This capacity formed in the practice could ensure the smooth progress of SSOP-II.

The consultant team and resource persons formed in SSOP-I played very active and import role for success of Project in the past years. The expert team already involved with SSOP-I understand very well about the situation of coastal multi-hazards early warning in the regions of TC and PTC, and this team can be the potential candidates for implementation of SSOP-II as resource persons.

The resource persons for training courses and workshops are available from RSMSs in Tokyo, New Delhi and in Honolulu as well as National Meteorological and Hydrological Services (NMHSs), National Tsunami Warning Centres (NTWCs), National Disaster Management Offices (NDMOs) and Government sectoral agencies of capable Members such as China; Hong Kong, China; Japan and Public of Korea, etc.

Through SSOP project, TC and PTC established close cooperation relationship with GAATES, IOC of UNESCO, UN-Women, RIMES; UNDP Asia-Pacific Regional Centre, IRIDeS. Those organizations would be available to provide support and cooperation for SSOP-II.

The Secretariats of TC (TCS) and PTC (PTCS) will take the responsible for the provision of secretariat support for implementation of SSOP-II. And TCS and PTCS could further explore with working groups on possible collaborations and activities related to this aspect for SSOP-II.

12. PROPOSED ACTIVITIES AND EXPECTED OUTCOMES

Expected Outcome 1: Promotion of society response capacity building in TC and PTC regions focusing on the "mechanics" of preparing and implementing SSOPs

Activity 1: *Conducting the training courses/workshops on mechanism of establishing and preparing SSOP for coastal multi-hazards EWS, focusing on social scientists, DRR experts and*

warning experts from NTCs, NDMOs, and Government sectoral agencies to improve capacity building on social science aspects of EWS, such as risk and impact assessment, warning communication strategies, partnership/stakeholder engagement, society response capability, etc.

- 1.1 Conducting Training Course on establishment of SSOP for coastal multi-hazards EWS mainly for social scientists with participation of DRR experts and warning experts from 16 beneficiary Countries of TC and PTC (3days in RTC, Nanjing)

Indicator: about 50 participants joining the training course

- 1.2 Conducting Training Course/workshop on performance of SSOP of coastal multi-hazards EWS mainly for warning experts with participation of social scientists and DPP experts from 16 beneficiary Countries of TC and PTC (3 days in UNCC Conference Centre of ESCAP, BKK) (linked with TC 3rd TRCG Forum and 12th IWS in 2017)

Indicator: about 50 participants joining the training course/workshop

Expected Outcome 2: Promotion of capacity building on science and technology of early warning for severe weather in beneficiary Countries of TC and PTC

Activity 2: Conducting training courses/workshops on radar/satellite information utilization for Tropical Cyclone EW (tentatively)

- 2.1 Conducting Training Course on satellite and radar image interpretation and applications, including intensity assessment, structure analysis, high wind and rainstorm nowcasting, etc. (4 days in Japan)

Indicator: about 23 participants joining the training course

- 2.2 Conducting Training Course on storm surge/tsunami monitoring (3 days in Hong Kong, China)

Indicator: about 25 participants joining the training course

Expected Outcome 3: Promotion of capacity building on science and technology of early warning for urban flood risk EW in beneficiary Countries of TC and PTC

Activity 3: Conducting training courses/workshops on real-time operational Urban Flood Forecasting and Inundation Mapping (OSUFFIM)

- 3.1 Conducting Workshop on Innovative Technology for Urban Flood Risk EW (2 days in Bangkok, Thailand)

Indicator: about 35 hydrologists participating in the workshop

- 3.2 Conducting Training Course on Real-time Operational Urban Flood Forecasting and inundation Mapping (OSUFFIM) (3 days in SYS University, Guangzhou, China)

Indicator: about 15 hydrologists from selected pilot cities in TC and PTC joining in the training

• Outputs

Main output 1: Established pool of accredited and competent experts to administer the MHEWS, in appropriately resourced facilities, nationally and regionally.

Main output 2: established real-time EWS in selected 2-3 pilot cities.

Main output 3: established real-time OSUFFIM in selected 2-3 pilot cities.

13. PROPOSED IMPLEMENTATION SCHEDULE

Yr.	2016								2017									
No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mon.	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
		Months 2-6 ACTIVITY 1.1 (3 days in RTC, Nanjing-56 persons)																
												Months 12-16 ACTIVITY 1.2 (3 days in ESCAP, BKK-56 persons)						
			Months 3-7 ACTIVITY 2.1 (4 days in Japan-26 persons)															
											Months 11-15 ACTIVITY 2.2 (3 days in Hong Kong-28 persons)							
		Months 2-6 ACTIVITY 3.1 (2 days in BKK, Thailand-38 persons)																
							Months 7-11 ACTIVITY 3.2 (3 days in SYS Uni. Guangzhou-18 persons)											
																Months 16-17 MONITORING AND AUDIT		

14. BUDGET

TOTAL BUDGET (US\$): ESCAP Trust Fund: US\$ 498,000.

Break down by Activities:

Activity	Time Frame	Total (in USD)
Activity 1		
Conducting the training courses/workshops on mechanism of establishing and preparing SSOP for coastal multi-hazards EWS		
1.1 Training Course one: 1.1 Conducting Training Course on establishment of SSOP for coastal multi-hazards EWS mainly for social scientists with participation of DRR experts and warning experts from 16 beneficiary Countries of TC and PTC (3 days in RTC, Nanjing)		
1.1.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Jun - Oct2016	4,000
Lecturers cost	Jun - Oct2016	7,200
1.1.2 Supplies, Commodities, materials		
Office supplies	Jun - Oct2016	1,400
1.1.3 Equipment, vehicles and furniture (including depreciation)		
1.1.4 Contractual Services		
1.1.5 Travel		
Travel for 56 Participants (Air-ticket and Lump Sum payment)	Jun - Oct2016	90,000
1.1.6 Transfers and grants to counterparts		
1.1.7 General Operating and other direct costs		
Organization Costs & other cost	Jun - Oct2016	3,700
1.1.8 Indirect support costs		
Indirect cost (4%)	Dec. 2016	4,252
Sub-Total		110,552

1.2 Training Course Two: Training Course on performance of SSOP of coastal multi-hazards EWS mainly for warning experts with participation of social scientists and DRR experts from 16 beneficiary Countries of TC and PTC (3 days in UNCC Conference Centre of ESCAP, BKK) (linked with TC 3rd TRCG Forum and 12th IWS in 2017)		
1.2.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Apr-Aug2017	4,000
Lecturers cost	Apr-Aug2017	7,200
1.2.2 Supplies, Commodities, materials		
Office supplies	Apr-Aug2017	1,400
1.2.3 Equipment, vehicles and furniture (including depreciation)		
1.2.4 Contractual Services		
1.2.5 Travel		
Travel for 56 Participants (Air-ticket and Lump Sum payment)	Apr-Aug2017	79,000
1.2.6 Transfers and grants to counterparts		
1.2.7 General Operating and other direct costs		
Organization Costs & other cost	Apr-Aug2017	3,700
1.2.8 Indirect support costs		
Indirect cost (4%)	Sept2017	3,812
Sub-Total		99,112
Total		209,664
Activity 2		
Training Courses/Workshops on Radar/Satellite Information Utilization for Tropical Cyclone EW		
2.1 Conducting Training Course on satellite and radar image interpretation and applications, including intensity assessment, structure analysis, high wind and rainstorm nowcasting, etc. (4 days in Japan)		
2.1.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Jul-Nov2016	4,000
Lecturers cost	Jul-Nov2016	4,800
2.1.2 Supplies, Commodities, materials		
Office supplies	Jul-Nov2016	1,000
2.1.3 Equipment, vehicles and furniture (including depreciation)		
2.1.4 Contractual Services		
2.1.5 Travel		
Travel for 28 Participants (Air-ticket and Lump Sum payment)	Jul-Nov2016	65,000
2.1.6 Transfers and grants to counterparts		
2.1.7 General Operating and other direct costs		
Organization Costs & other cost	Jul-Nov2016	4,000
2.1.8 Indirect support costs		
Indirect cost (4%)	Dec2016	3,152
Sub-Total		81,952
2.2 Conducting Training Course on storm surge/tsunami monitoring (3 days in Hong Kong)		
2.2.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Mar-Jul2017	3,000
Lecturers cost	Mar-Jul2017	3,600
2.2.2 Supplies, Commodities, materials		
Office supplies	Mar-Jul2017	800
2.2.3 Equipment, vehicles and furniture (including depreciation)		
2.2.4 Contractual Services		
2.2.5 Travel		
Travel for 28 Participants (Air-ticket and Lump Sum payment)	Mar-Jul2017	62,000
2.2.6 Transfers and grants to counterparts		
2.2.7 General Operating and other direct costs		

Organization Costs & other cost	Mar-Jul2017	4,000
2.2.8 Indirect support costs		
Indirect cost (4%)	Sept2017	2,936
Sub-Total		76,336
Total		158,288
Activity 3		
Training Courses/Workshops on Urban Flood Risk EW		
3.1 Workshop on Innovative Technology for Urban Flood Risk EW (2 days in BKK)		
3.1.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Jun-Oct2016	3,000
Lecturers cost	Jun-Oct2016	2,400
3.1.2 Supplies, Commodities, materials		
Office supplies	Jun-Oct2016	1,000
3.1.3 Equipment, vehicles and furniture (including depreciation)		
3.1.4 Contractual Services		
3.1.5 Travel		
Travel for 38 Participants (Air-ticket and Lump Sum payment)	Jun-Oct2016	60,000
3.1.6 Transfers and grants to counterparts		
3.1.7 General Operating and other direct costs		
Organization Costs & other cost	Jun-Oct2016	4,000
3.1.8 Indirect support costs		
Indirect cost (4%)	Dec2016	2,816
Sub-Total		73,216
3.2. Training Course on Real-time Operational Urban Flood Forecasting and inundation Mapping (3 days in SYS University, Guangzhou, China)		
3.2.1 Staff and other personnel costs		
Remuneration for Project Manager/Technical Advisor	Nov2016-Mar2017	3,000
Lecturers cost	Nov2016-Mar2017	3,600
3.2.2 Supplies, Commodities, materials		
Office supplies	Nov2016-Mar2017	546
3.2.3 Equipment, vehicles and furniture (including depreciation)		
3.2.4 Contractual Services		
3.2.5 Travel		
Travel for 18 Participants (Air-ticket and Lump Sum payment)	Nov2016-Mar2017	32,000
3.2.6 Transfers and grants to counterparts		
3.2.7 General Operating and other direct costs		
Organization Costs & other cost	Nov2016-Mar2017	2,000
3.2.8 Indirect support costs		
Indirect cost (4%)	Sept2017	1,646
Sub-Total		42,792
Total		116,008
4. Monitoring & Evaluation		
4.1 Staff and other personnel costs		
Audit professional costs	Aug - Sept 2017	6,500
Evaluation costs	Aug - Sept 2017	7,000
4.2 Supplies, Commodities, materials		
4.3 Equipment, vehicles and furniture (including depreciation)		
4.4 Contractual Services		
4.5 Travel		
4.6 Transfers and grants to counterparts		
4.7 General Operating and other direct costs		

4.8 Indirect support costs Indirect cost (4%)	Sept2017	540
Total		14,040
Grand total		498,000

15. ACKNOWLEDGEMENT

TCS received the comments and inputs from Olavo Rasquinho (former Secretary of TC), James Weyman (project manager/technical advisor of SSOP-I), TC LEE of HKO, Taoyong PENG of WMO and Xiaotu LEI of STI, also got guidance and advice from Alf Ivar Blikberg of ESCAP.