WORKING GROUP on METEOROLOGY (WGM) - AOP 2011

SP's KRA and SG	Objecti ve Numbe r	Objective	Action	Other WG's	TCS responsibi lity	Expected Quarter Complete d	Other Organization s Involved	Success Indicators	Fundin g Requir ed	Fund ing Sour ces	Completed – Yes or No
KRA 1 KRA 2 KRA 4	1	2nd assessmen t report on the impact of climate change on tropical cyclone track and impact areas in TC region	 (a) To collect and integrate the operational and technical report or research paper form Members (b) To collect and integrate the technical report from Expert team and the articles from scientist (c) To hold the expert symposium on revising the report (d) Prepare and update second draft report on "assessment of impact of climate change on tropical cyclone in TC region track and impact area". (e) follow-up of the recommendation of the best-track consolidation meeting 	WGDRR	Provision of administrati ve support	(a)2 nd (b-c)3 rd (d)4 th	CMA, USA, KMA, JMA, HKO/China, Macao/China (coordinator)	 (a) framework of the 2nd report (b) collection of the material (c) to hold the expert symposium (d) distribution an draft report in 44th session (e) consolidate the inputs for inclusion in the TOM by 2012, and exchange of historical best-tack datasets, including CI numbers if available, among the centers 	US \$2,500	TCTF	 (a) Yes (b) Yes. To be held in Nov. 20-21 (d) Will be submitted at the 44th Session (e) Yes. To be continued in 2012
KRA 1 KRA 2 KRA 4 /SG4(a)	2	Storm surge watch scheme for UFRM	 (a) To hold the workshop of storm surge watch scheme for UFRM (b) To conduct training of storm surge model for UFRM during the annual TC attachment training by RSMC-Tokyo (c) To produce storm surge distribution maps and to develop storm surge time series charts at one point for TC Members 	WGH WGDPP TRCG	Provision of administrati ve and logistic support	(a)3 rd (b-c) 4 th	(a) WMO (b) JMA (c)Macao/Chi na	(a) Hold storm surge workshop (b) Conduct of training (c) Production of storm surge distribution maps	US \$2,000	TCTF	YES
KRA 1 KRA 2 KRA 6 / SG 6b and 6c	3	Transfer of the Typhoon Informatio n Processin g System technobgy	 (a) To develop and share the typhoon information processing system (b) To train the meteorologists and forecasters of TC Members on TIPS 	TRCG	Provision of administrati ve and logistic support	2 nd - 4 th	KMA; Viet Nam; Members	submission of a report on the technique development and course completion	US \$2,000	TCTF	YES
KRA 1 KRA 2 KRA 6 / SG 6b and 6c	4	Ensemble forecast	 (a) To upgrade the super- ensemble forecast system on tropical cyclone (NWP-TCEFP) (b) Feedback to NWP-TECFP (c) To carry out operational test and publish the evaluation report. 	WGDRR TRCG	Provision of administrati ve and logistic support	2nd - 4 th	JMA, CMA, HKO/China and WMO	Progress and evaluation report			YES

SP's KRA and SG	Object ive Numb er	Objective	Action	Other WG's	TCS responsibilit y	Expected Quarter Completed	Other Organizat ions Involved	Success Indicators	Funding Require d	Fund ing Sour ces	Completed – Yes or No
KRA 6 / SG 6b and SG 6c	5	Web-based typhoon forum	 (a) To upgrade the on-line forum by sharing more real-time observation, forecast and warning information by Members (b) To expand the number of registered users and the team of moderators on related topics (c) To hold the moderator's forum 	P TRCG	Provision of administrative support	2 nd	STI/CMA RSMC Tokyo	Effective use of web-based typhoon forum as shown by website access statistics	US \$1,500		YES
KRA1 KRA2 KRA6 /SG6b and 6c	6	Developmen t of regional radar network	(a) To establish composite map pilot project in typhoon region (Thailand) (b) The collaboration with radar experts	WGH	Provision of administrative support	4 th	TMD, Japan	Improve radar composite map in Thailand based on the standardized system	US \$3,000	TCTF	No, to be continued in 2012 Expert Mission on 7- 9 Sept.
KRA1 KRA2 KRA6 / SG 6b and 6c	7	Verification of Landfall Typhoon Forecast	 (a) To upgrade the verification system by expanding the evaluating technique, especially for landfall typhoon (b) Experiment to assess the performance of objective and the official forecast of Members 		Provision of administrative support	4 th	STI/CMA, RSMC- Tokyo, KMA, HKO, USA	Submission of report			YES
	8	Publication of Tropical Cyclone Review	 (a) To set up the editorial committee and editorial office (b) To apply the ISSN (c) To design the sample edition 	AWG , WGH, WGDR R, TRCG	Provision of administrative support and application of ISSN	3rd	STI/CMA, TCS	Complete progress report			YES
KRA1 KRA2 KRA4 / SG4a	9	QPE/QPF for UFRM	 (a) Provide QPE/QPF training to members participating in the three UFRM pilot projects upon a request. (b) To hold workshop on QPE/QPF in conjunction with 6th IWS (c) To conduct training on QPE/QPF for UFRM during the annual TC attachment training at RSMC Tokyo (d) To publish the JMA QPE/QPF technique in the RSMC Technical Review 	WGH WGDR R TRCG	Provision of administrative support	(a)4 th (b-c) 2 nd	RSMC Tokyo HKO, CMA	 (a) Hold QPE/QPF workshop (b) Conduct of training (c) Publish the RSMC Technical Review on QPE/QPF 	US \$2,000	TCTF	YES
	10	Effective warning	 (a) collect format of warnings of each member and share information (b) Review warnings for user friendly nature and effectiveness (c) Organize workshop with WMO, WGDRR, and media to identify synergy possibilities 	WGDR R	Provision of administrative and logistic support		WMO, Media	Hold a workshop on effective warning	US \$2,000	TCTF	No (a) Partly completed (b) No (c) Postponed

SP's KRA and SG	Objective Number	Objective	Action	Other WGs Involve d	TCS Responsibilit y	Completed	Other Organizati ons Involved	Success Indicators	Funding Required	Funding Sources
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	1	Urban Flood Risk Management in TC Region	a) to conduct consultancy work; b) to carry on the pilot study in 3 pilot cities; c)to seek the support and cooperation from potential support groups; d)to prepare drafting the guideline on Urban Flood Forecasting Management * To enhance TC Members' Capacity on Urban Flood Risk Management * to prepare the Guidelines on risk management for Urban Planning development in Typhoon Area.	WGM WGDRR	See above	 (a) First (b) Second (c) Third (d) Fourth 	ESCAP WMO	 (a-1)to consult with WB for the funding support; (YES) (a-2) conduct consultancy and finalize of guidance material for pilot study and sent it to PC; (YES) (a-3) Confirmation of Support Groups (SG) for resource mobilization. (YES) (a-4) Pilot Cities (PC) prepare the implementation plan in consultation with Task Force (TF) by March, 2011; (partial YES) (a-5)confirm the possibility of providing experts from Members for pilot studies (YES) (b-1) Implementation of pilot studies by PCs (YES) (b-2)confirm the possibility of conducting the PCs visiting Good Practice cities (YES) (b-3)to seek the linkage with City-Net and ISRD (YES, no result) (c) workshop of consultant, TF and PC in June/July 2011 funded by ESCAP; (NO, postponed) (d)TF starts drafting the guideline (YES, on-going) 	a) TCTF 9000USD for TF/PC activities (b)Funding required from funding agencies to promote integrated approaches to urban flood risk managemen t	(potential) ESCAP, WMO, ADB, JICA, KOICA, etc
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 6b	2	Assessment System of Flood Control Measures on Socio-economic Impacts	To utilize the assessment methodology and system in selected Members			(a) First (b) Second (c) Third (d) Fourth		 (a)Arrange a project seminar for TC WGH prior to 43rd Session; (YES) (b-1) Framing the plans for maintenance and utilization. (b-2) to consider how to link with UFRM project; (YES) (c1) ROK requests members to provide their own assessment system on infrastructure investment, etc (YES) (c1) ROK compiles information from the members to solicit them to participate in (YES) (c,d) ROK conducts current status and assessment system analysis. (YES) 		

SP's KRA and SG	Objective Number	Objective	Action	Other WGs Involve d	TCS Responsibilit y	Completed	Other Organizati ons Involved	Success Indicators	Funding Required	Funding Sources
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	3	Project on Hazard Mapping for sediment- related disasters	To raise local people's and local government's awareness for sediment-related disasters. To separate people and their properties from high- risk areas to reduce their damages by disasters	WGDRR	See above	(a) First(b) Second(c) Third(d) Fourth		 (a,b,c,d) guide Members countries to make Hazard map. (YES) (b) Find requirement from TC Members.(YES) (d1) Workshop to solve the Member's issues at next IWS (YES) (d2) drafting the guideline to reduce damage of sediment-related disaster and to spread Japanese technique in Typhoon Committee Region. (YES, on-going) 	TCTF	TCTF NILIM SABO
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	4	Project on development and application of flood disaster preparedness indices	To promote the actions of local government bodies/ communities to strengthen the level of preparedness for flood disasters, by applying a set of evaluation indices	WGDRR	See above	 (a) First (b) Second (c) Third (d) Fourth 		(a)Questionnaire survey in TC members. Answers will be compiled and processed by ICHARM. The results will be sent to TC Members, as well as diagnosis report. (YES) (b,c) develop revised/improved set of FDPI, and inform participating municipalities/ communities and test again the revised set of FDPI. (YES) (c) present final proposed set of FDPI together with self- diagnosis manual for flood preparedness level (YES, on-going) (d) compile the final set of FDPI questionnaires, together with the self- diagnosis manual. The final report for the project will also be prepared (YES, on- going)		
RA1, SG1 KRA2, SG2 KRA4 SG 4a, KRA5, SG 5b	5	Project on the utilization of Satellite-based information for Typhoon-related disaster management	To enhance TC members are to utilize various satellite-based information and products to better monitor, prepare and respond to Typhoon- related disasters	WGDRR,	See above	(a) First (b) Second (c) Third (d) Fourth	ESCAP, JAXA, ICHARM	(if funds are made available in 2011, the same cycle will be implemented) (YES, on-going)	inviting participants, lecturers and other WS organization	ESCAP, JAXA, ICHARM

SP's KRA and SG	Objective Number	Objective	Action	Other WGs Involve d	TCS Responsibilit y	Expected Quarter Completed	Other Organizati ons Involved	Success Indicators	Funding Required	Funding Sources
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	6	Operation with the Variability of Water Resources Impacted by Climate Change	0	WGM, WGDRR, TRCG		(a) First(b) Second(c) Third(d) Fourth		 (a) Officially launch the project at the 43rd Session, (YES) (a, b, c) draft the detail proposal of implementation plan and report at 44th IWS. (YES, on-going) 		

WORKING GROUP on DISASTER RISK REDUCTION (WGDRR) - AOP 2011

SP's KRA and SG	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organiza- tions Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA 4 SG 4b SG 4c KRA 5 SG 5b	1	Extension of WEB GIS based TCDIS (WGTCDIS) to Multi-Hazard Early Warning Systems	Extend WGTCDIS for Multi- Hazard Early Warning Systems in conjunction with other WGs to make a link with the WGTCDIS and send expert missions on the WGTCDIS for Lao PDR, Philippines, and Thailand on Feb., 2011 and for USA and Cambodia on June, 2011	TCS	Assist in planning the expert mission	First	WMO, UNESCAP, ADRC, UN/ISDR, etc.	Complete collect disaster information from Lao PDR, Thailand, Philippines, USA, Cambodia and send expert team for implementation of the WGTCDIS to five Members	USS \$12,000	NEMA, Korea and TCTF	YES
KRA 4 SG 4b SG 4c KRA 5 SG 5b	2	Enhance WGTCDIS and develop disaster risk map methodology to assess the impacts of disasters	Develop DiMap to enhance information shearing method, collect major typhoon information from Members to provide brochures and conduct the 6 th WGDRR Meeting to discuss on method for assessment of impacts of natural disasters	WGM WGH	Provide guideline to support \$1000 for collecting disaster information	Fourth	ADRC, UN/ISDR, etc.	Complete collect disaster information for DiMap and provide the brochures and report and discuss on assessment method for the social and economic impacts of natural disasters	US\$ 36,000	NEMA, Korea and TCS	YES
KRA ALL SG ALL	3	Operational implementation of WGTCDIS	Maintain Hardware, Software of WEB GIS based TCDIS System and upgrade disaster information and other contents by inputs from Members	WGM WGH TRCG AWG RMG	Provision of administrative support	Second or Third		Complete collecting each Member's typhoon related disaster information by 2011	US\$ 10,000		YES On-going
KRA 4 SG 4b SG 4c KRA 5 SG 5b	4	Review progress of WGTCDIS project and enhance the TC's effectiveness and efficiency in meeting its purpose stated in the Statute of the TC	Participate in a focused, integrated WGM, WGH, WGDPP, TRCG, and AWG Workshop with specific deliverables defined and to review progress of WGTCDIS project and future activities of WGDRR		Assist in including presentation on the TC Session agenda	Fourth		Discuss future activities of WGDRR, report on Urban Flood Risk Management (UFRM) Project and WGTCDIS and collaboration with other WGs			YES
KRA 4 SG 4b SG 4c KRA 5 SG 5b	5	Maintain and Modification to adapt WGTCDIS on TC Members	Calibration and Validation of WGTCDIS for typhoons of 2011 and make a presentation of modification activities in 2011	WGM WGH TRCG AWG	Assist in collecting disaster information from Members	Fourth		Successful acceptance of WGTCDIS by TC Members			YES

SP's KRA and SG	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organiza- tions Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA 4 SG 4b SG 4c KRA 5 SG 5b	6	Develop a conceptual framework in conjunction with other WGs to make a link with the WGTCDIS	Prepare concept report or paper and proposal on program of action	AWG, WGH, TRCG	Assist in collecting inputs from Members	Concept paper by Fourth Qt. and initiate public education activities jointly with mission	WMO, UNESCAP, ADRC, UN/ISDR, Columbia University, etc.	Acceptance of concept report or paper and mission			YES
KRA 4 SG 4b and 4c KRA 5 SG 5b	7	Develop a feasibility study on the real-time transmission of severe weather warning and carry out trials	Liaison work for implementation commenced and warnings from Korea and Singapore are expected to become available on SWIC by the 43rd Session.	WGM, TRCG	Assist in liaising with focal points	Fourth	WMO	Trial dissemination of weather warnings by a couple of TC members before 42nd Session of the Typhoon Committee; extend dissemination of warnings to a few more members end of 2010			YES
KRA 4 SG 4b and 4c KRA 5 SG 5b	8	Implement of a pilot project of community weather stations in TC Members for raising public awareness on climate change	Offer an expert of Hong Kong, China for visiting Vietnam to implement the community weather station with completion expected before the 43rd Session.	WGM, WGH	Assist in liaising with focal points	Fourth	ESCAP	Weather station installed in two interested TC member using TCIF and subject to funding under GFDRR, weather stations in more members may be set up	US \$4,000	TCTF	YES

- SG 1: To enhance cooperation among TC Members to reduce the number of deaths by typhoon-related disasters by half (using the decade 1990-1999 as the base line to compare with the decade 2006-2015).
- SG 2: To reduce the socio-economic impacts of typhoon-related disasters per GDP per capita by 20 per cent (using the decade 1990-1999 as the base line to compare with the decade 2006-2015).
- SG 3a: To improve the beneficial use of typhoon-related effects of typhoons by 10 per cent in water management by selected Members (using the decade 1990-1999 as the base line to compare with the decade 2006-2015)
- SG 3b: To promote increasing use of the typhoon-related beneficial effects among the Members
- SG 4a: To provide reliable typhoon-related disaster information for effective policy making in risk management in various sectors.
- SG 4b: To strengthen capacity of the Members in typhoon-related disaster risk management in various sectors
- SG 4c: To enhance international and regional cooperation and assistance in the field of disaster risk reduction.
- SG 5a: To promote and enhance culture of community-based disaster risk management among the Members
- SG 5b: To promote education, training and public awareness of typhoon-related disasters among the Members
- SG 6a: To strengthen RSMC capacity to respond to the needs of the Members in forecasting and capacity building
- SG 6b: To improve capacity of Members to provide timely and accurate user-oriented and friendly TC products and information
- SG 6c: To enhance capacity of Members' typhoon-related observation and monitoring
- SG 7a: To strengthen the capacity of TCS to effectively discharge its responsibilities and functions described in the Terms of Reference and support the Members in the implementation of the strategic goals
- **SG 7b:** To strengthen the capacity for resources mobilization for the implementation of the strategic goals

- KRA 1: Reduced Loss of Life from Typhoon-related Disasters.
- KRA 2: Minimized Typhoon-related Social and Economic Impacts.
- KRA 3: Enhanced beneficial typhoon-related effects for the betterment of quality of life.
- KRA 4: Improved Typhoon-related Disaster Risk Management in Various Sectors.
- KRA 5: Strengthened Resilience of Communities to Typhoon-related Disaster.
- KRA 6: Improved capacity to generate and provide accurate, timely and understandable information on typhoon-related threats.
- KRA 7: Enhanced Typhoon Committee's Effectiveness and International Collaboration.

SP's Objecti Expected Other Fundin Funding KRA ve Objective Other WG's Quarter Organization Success Indicators Coordinator Action g and Numbe Required Sources s Involved Completed SG r (a) Publish the 2nd report in 45th Session; Assessme Publish the "2nd assessment (b) Consolidate the nt report operational procedures KRA report on the impact of HKO/China, US \$2,500 (a) Leong Weng on the CMA, USA, of tropical cyclone 1 climate change on tropical (for Kun impact of analysis for inclusion in KRA cyclone track and impact JMA, KMA, publicatio (Macau/China) (a) 3rd WGDRR TCTF climate the TOM, exchange and area in TC region "; (b) 4th Macao/China n of the 2 change on Follow-up of the KRA (coordinator) compare the historical 2nd (b) Masashi tropical recommendation of the bestbest-tack datasets. and Members 4 report) Kunitsugu (JMA) cyclone in track consolidation meeting including CI numbers if TC region available, among the centers To conduct training of storm (a) Conduct of training surge model for UFRM and subsequent during the annual TC KRA evaluation attachment training by RSMC (b) Provide storm surge 1 Storm Tokvo KRA time series charts at one To provide storm surge time WGH Masashi surge (a)3rd point upon TC Member's 2 2 watch series charts at one point WGDRR (b-c) 4th IMA Kunitsugu KRA request upon TC Member's request TRCG scheme (IMA) (c) Develop storm surge 4 To develop storm surge time for UFRM /SG4(time series charts at series charts at more than more than one point if a) one point if so requested by so requested by Members Members To improve the English KRA version of KMA's typhoon Transfer 1 of the information processing KRA Typhoon system(TAPS) 2 KMA, Submission of report on Informatio To train the meteorologists Mr. Ki-Ho Chang KRA 3 TRCG 2nd - 4th Viet Nam. the technique and US \$2000 TCTF and forecasters of TC (KMA) n training of TAPS 6 / SG Members Members on TAPS from Processin 6b April or May within 3 g System and technology months 6c To get feedback from KRA Members for improvement 1 KRA of the TCEFP website Enhanced IMA, CMA, 2 through WMO's Masashi HKO/China, use of WGDRR KRA 4 questionnaire 2nd - 4th Progress report Kunitsugu ensemble TRCG Viet Nam and 6 / SG To promote Members' (IMA) WM0 forecast understanding of EPS 6b through SWFDP and its and 6c training workshop

WORKING GROUP on METEOROLOGY (WGM) - AOP 2012

KRA 6 / SG 6b and SG 6c	5	Web- based typhoon forum	Expand the number of registered users and the team of moderators on related topics; To upgrade the on-line forum by sharing more real-time observation, forecast and warning information by Members	AWG, WGH WGDRR	1st - 4th	STI/CMA RSMC Tokyo, JTWC, Members	Effective use of web- based typhoon forum as shown by website access statistics			Tan Yan (CMA)
KRA1 KRA2 KRA6 /SG6 b and 6c	6	Developm ent of regional radar network	Specialized attachment training for TMD radar staff upon submission of the progress report of the operating status of the TMD radar system by TMD To follow-up the recommendations and the suggested roadmap of the expert team and to develop the radar composite map which covers the area of the UFRM pilot city in Thailand as the first step	TRCG	4th	TMD, JMA	Submission of the progress report, including a detailed schedule for the establishment of the radar composite map	US \$3000	TCTF	Masashi Kunitsugu (JMA) Derek Leong (TCS) Patchara Petvirojchai (TMD)
KRA1 KRA2 KRA6 / SG 6b and 6c	7	Verificatio n of tropical cyclone operation al forecast	Organize a training workshop on typhoon landfall forecast demonstration project Set up the assessment scheme and procedures to evaluate the model prediction of the location, intensity and forecast accuracy of tropical cyclones in the Asian-Pacific Region by STI Assess the performance of objective model prediction and the official forecast of Members.	TRCG	(a-b) 2nd (c) 4th	STI/CMA, RSMC Tokyo, JTWC, Members,WM O	(a)Hold a training workshop and subsequent evaluation of the training (b)Submit report in 45th Session (c) Report of the assessment of the performance of objective model prediction and the official forecast of Members	US\$3,000	TCTF	Yu Hui (CMA)
	8	Publicatio n of Tropical Cyclone Research and Review	Install the online manuscript submission and review system; Try to invite visiting editors; Edit and publish the journal quarterly since February.	AWG , WGH, WGDRR, TRCG	1st - 4th	CMA, TCS Members	Complete progress report	US\$3,000	TCTF	Zhou Xiao (CMA)

KRA1 KRA2 KRA4 / SG4a	9	QPE/QPF for UFRM	To conduct a forum and training for UFRM pilot cities To provide QPE/QPF training to TC Members participating in the UFRM pilot projects upon a request. To conduct training on QPE/QPF during the annual TC attachment training at RSMC Tokyo	WGH WGDRR TRCG	(a) 4th (b) 1st - 4th (c) 3rd	RSMC Tokyo HKO, CMA	Conduct of training and subsequent evaluation of the training	US\$5,000	TCTF	Masashi Kunitsugu (JMA)
KRA1 KRA2 KRA6	10	South China Sea typhoon forecast	Further improvement of TRAMS model Provide more products relate to typhoon assess through website Establish the feedback column for all Members			CMA, Viet Nam, PAGASA, MMD	Submission of the report on the assessment of model and website			Wan Qilin (ITMM/CMA)

WORKING GROUP on HYDROLOGY (WGH) - AOP 2012

SP's KRA and SG	Objective Number	Objective	Action	WGS Involv	Responsibi	Expected	Other Organizat ions Involved	Success Indicators		Funding Sources
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	1	Projects on Urban Flood Risk Management in TC Region	a)Initiate developing OSUFFIM in case the STDF of Macao, China approved the proposal; b)case Study on QPE/PQF Application in UFRM in cooperation with WGM; c)Continue to conduct case Study on SSWS Application in UFRM; d)Continue to conduct pilot study in Pilot cities; e)Drafting UFRM Guidelines	WGM WGDR R		(a) First (b) Second (c) Third (d) Fourth		(a-1) compile the first draft and send to all drafting members ASAP, but not later than Jan. 1, 2012; (a-2)UFRM guidelines drafting meeting was proposed to be held in WMO Nanjing RTC (a-3) UFRM Workshop, funded by ESCAP (b-1)Fund application from Macao STDF (b-2)initiate developing OSUFFIM (c-1)start the case study on QPE/QPF application in UFRM, in cooperation with WGM (c-2)start the case study on SSWS application in UFRM (c-3)continue the pilot study in pilot cities (c-4)training for pilot city Members (d-1)second version of UFRM guidelines at IWS (d-2)pilot study report from related Members (d-3)finalizing the Guidelines at 45th Session.	(a) TCTF 10000USD for TF/PC activities (b)Fundin g from STDF of Macao, China	(potential) ESCAP, WMO, ADB, JICA, KOICA, Macao STDF; etc
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 6b	2	Flood Control	Apply ASFCM system in TC members who want to participate in to evaluate and enhance system capability		See above	(a) First (b) Second (c) Third (d) Fourth		(a,b,c,d)Drafting ASFCM Guidelines (b)Apply and assess the information provided from TC members to consult the effect of the measures (c)Encourage TC members to utilize ASFCM system to assess their own economic impacts of flood control alternatives by distributing manual of ASFCM		MLTM
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	3	Hazard	To raise local people's and local government's awareness for sediment- related disasters. To separate people and their properties from high-risk areas to reduce their damages by disasters	WGDR R	C I	(a) First (b) Second (c) Third (d) Fourth		 (a,b,c,d) guide Members countries to make Hazard map. (b) Find requirement from TC Members. (d) Workshop to solve the Member's issues at next IWS (d) Drafting the guideline to reduce damage of sediment-related disaster and to spread Japanese technique in Typhoon Committee Region. 	TCTF (1)2000US D for publishing the guideline;	TCTF NILIM SABO

SP's KRA and SG	Objective Number	Objective	Action	Other WGs Involv ed	TCS Responsibi lity	Expected Quarter Completed	Other Organizat ions Involved		Funding Required	Funding Sources
KRA 1 SG 1 KRA 2 SG 2 KRA 4 SG 4a KRA 5 SG 5b	4	Project on development and application of flood disaster preparedness indices		WGDR R	See above	(a) First (b) Second (c) Third (d) Fourth		(b)create multi-language FDPI and FDPI	TCTF 2000USDf orPrinting final report	ICHARM
RA1, SG1 KRA2, SG2 KRA4 SG 4a, KRA5, SG 5b	5	Project on the utilization of Satellite-based information for Typhoon- related disaster management		WGM, WGDR R, TRCG	See above	(a) First (b) Second (c) Third (d) Fourth	ESCAP, JAXA, ICHARM	 (a) Operational Sentinel Asia and Orban Flood Training for TC, PTC & Pacific members from 27th Feb – 2nd March 2012 in Macao, China. (b-d) to conduct case study and good practice of image product of various satellites 	Funds for inviting participant s, lecturers and other WS organizati on cost	
KRA 4 SG 4a SG 4b KRA5 SG 5a KRA 7 SG 7b	6	Development of comprehensive counterplan for extra-ordinary flood	Develop comprehensive counterplan for extra- ordinary flood by investigation and analysis of historical flood damage	WGDR R	See above	First Second Third Fourth	RID of Thailand, PAGASA of Philippine s		for survey	MLTM (KICT, K- Water), TCTF
	7	estimation for socio- economic impact of sediment-	to improve former projects with establish common collecting format and methods of investigation for disasters to estimate estimation for socio- economic impact of sediment-related disaster and to share common technical background in TC members.	WGDR R	See above	(a)First (b)Second (c)Third (d)Fourth	ICHARM	Submit tentative format and methods of investigation from Japan for TC members. Collecting the idea to improve tentative format and make trial version.		NILIM SABO ICHARM

WORKING GROUP on DISASTER RISK REDUCTION (WGDRR) - AOP 2012

SPs KRA and SGs	Objectiv e Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organiza- tions Involved	Success Indicators	Funding Required	Funding Sources	Complet ed Yes or No
KRA 4 SG 4b SG 4c KRA 5 SG 5b	1	Transferring the WGTCDIS	 (i) Extend the WEB GIS based Typhoon Committee Disaster Information System (WGTCDIS) for early warning system and localized assessing in conjunction with other WGs (ii) Perform the expert mission on the WGTCDIS for Philippines and USA on March, 2011 	TCS WGM WGH	Assist in planning the expert mission	First	WMO UNESCAP ADRC UNISDR	 (i) Complete collecting disaster information from Thailand, Philippines, USA and Cambodia (ii) Send expert team for implementation of the WGTCDIS to two Members of Philippines and USA 	US \$12,000	NDMI, Korea and TCTF	
KRA 4 SG 4b SG 4c KRA 5 SG 5b	2	Enhancing the WGTCDIS	 (i) Develop Geo-Linking system for integrated disaster risk assessment (ii) Develop GIS based information sharing system to collect and disseminate various disaster related information 	WGM WGH	Provide guideline to support \$1000 for collecting disaster information	Fourth	ADRC UN/ISDR	 (i) Complete developing the Geo-Linking system (ii) Complete developing the GIS based information sharing system 	US \$ 36,000	NDMI, Korea and TCS	
KRA ALL SG ALL	3	Providing WGTCDIS for UFRM Project	 (i) Provide WGTCDIS training in a focused, integrated WGM, WGH, TRCG Workshop (ii) Review progress of WGTCDIS project for UFRM and future activities of WGDRR (iii) Produce localized disaster risk maps for TC Members 	WGM WGH TRCG AWG RMG	Provision of administrative support	Second or Third		(i) Complete report on Urban Flood Risk Management (UFRM) Project			
KRA 4 SG 4b SG 4c KRA 5 SG 5b	4	Modifying the WGTCDIS	 (i) Calibrate and validate the WGTCDIS for all typhoons in 2012 with TC Members (ii) Modify the estimation methods to adapt WGTCDIS on TC Members. 		Assist in including presentation on the TC Session agenda	Fourth		(i) Successful acceptance of WGTCDIS by TC Members			

KRA 4 SG 4b SG 4c KRA 5 SG 5b	5	Publishing the annual disaster assessment report	 (i) Collect disaster information from TC Members (ii) Held annual WGDRR Workshop (iii) Assess typhoon related disasters in the TC Region (iv) Establish the standard disaster information database 	WGM WGH TRCG AWG	Assist in collecting disaster information from Members	Fourth		 (i) Publish the annual disaster assessment report (ii) Hold WGDRR workshop 	US \$ 3,000		
KRA 4 SG 4b SG 4c KRA 5 SG 5b	6	Emergency response network for urban risk management	 (i) Develop the urban disaster risk assessment system based on risk maps (ii) Develop the dissemination system to share situation information to escape from dangerous area or reduce traffic jam (iii) Provide guideline to manage disasters in urban area, educate and train earlier disaster 	AWG WGH TRCG	Provision of administrative support	Fourth	WMO UNESCAP ADRC UNISDR Columbia University	(i) Devebp the urban disaster risk assessment system			
KRA 4 SG 4b and 4c KRA 5 SG 5b	7	A feasibility study on the real-time transmission of severe weather warning and carry out trials	 (i) Assist in liaison work for implementation commenced (ii) Extend dissemination of warnings to become available on SWIC (Severe Weather Information Center) by the 44th Session 	WGM TRCG	Assist in liaising with focal points	Fourth	WMO	 (i) Complete trial dissemination of weather warnings (ii) Extend dissemination of warnings to a few more members 			
KRA 4 SG 4b and 4c KRA 5 SG 5b	8		 (i) Raise public awareness on climate change (ii) Offer an expert of Hong Kong, China for visiting Vietnam to implement the community weather station 	WGM WGH	Assist in liaising with focal points	Fourth	ESCAP	(i) Weather station installed in two interested TC member	US \$4,000	TCTF	

SG 1: To enhance cooperation among TC Members to reduce the number of deaths by typhoon-related disasters by half (using the decade 1990-1999 as the base line to compare with the decade 2006-2015).

SG 2: To reduce the socio-economic impacts of typhoon-related disasters per GDP per capita by 20 per cent (using the decade 1990-1999 as the base line to compare with the decade 2006-2015).

SG 3a: To improve the beneficial use of typhoon-related effects of typhoons by 10 per cent in water management by selected Members (using the decade 1990-1999 as the base line to compare with the decade 2006-2015)

SG 3b: To promote increasing use of the typhoon-related beneficial effects among the Members

SG 4a: To provide reliable typhoon-related disaster information for effective policy making in risk management in various sectors.

- SG 4b: To strengthen capacity of the Members in typhoon-related disaster risk management in various sectors
- **SG 4c:** To enhance international and regional cooperation and assistance in the field of disaster risk reduction.
- **SG 5a:** To promote and enhance culture of community-based disaster risk management among the Members
- SG 5b: To promote education, training and public awareness of typhoon-related disasters among the Members
- SG 6a: To strengthen RSMC capacity to respond to the needs of the Members in forecasting and capacity building
- SG 6b: To improve capacity of Members to provide timely and accurate user-oriented and friendly TC products and information
- SG 6c: To enhance capacity of Members' typhoon-related observation and monitoring
- SG 7a: To strengthen the capacity of TCS to effectively discharge its responsibilities and functions described in the Terms of Reference and support the Members in the implementation of the strategic goals
- SG 7b: To strengthen the capacity for resources mobilization for the implementation of the strategic goals
- KRA 1: Reduced Loss of Life from Typhoon-related Disasters.
- KRA 2: Minimized Typhoon-related Social and Economic Impacts.
- KRA 3: Enhanced beneficial typhoon-related effects for the betterment of quality of life.
- KRA 4: Improved Typhoon-related Disaster Risk Management in Various Sectors.
- KRA 5: Strengthened Resilience of Communities to Typhoon-related Disaster.
- KRA 6: Improved capacity to generate and provide accurate, timely and understandable information on typhoon-related threats.
- KRA 7: Enhanced Typhoon Committee's Effectiveness and International Collaboration.