



UNESCO IOC

UNESCO IOC / NOAA INTERNATIONAL TSUNAMI INFORMATION CENTER (ITIC) ITIC TRAINING PROGRAMME INTERNATIONAL (ITP-INTL)

PACIFIC ISLAND COUNTRIES REGIONAL TRAINING AND CONSULTATION WORKSHOPS ON STRENGTHENING TSUNAMI WARNING AND EMERGENCY RESPONSE AND ICG/PTWS PTWC NEW ENHANCED TSUNAMI PRODUCTS

12-16 August 2013

Wellington, New Zealand

Hosted by New Zealand Ministry of Civil Defence and Emergency Management
(MCDEM)

Principal Speakers:

David Coetzee, Manager, Capability & Operations, Ministry of Civil Defence & Emergency Management (MCDEM), New Zealand

Dr. Ken Gledhill, GeoNet Project Director, Department Head, GeoHazards Monitoring, Institute of Geological and Nuclear Sciences (IGNS), New Zealand

Jo Guard, Team Leader, National Operations, NZ MCDEM

Dr. Laura Kong, Director, International Tsunami Information Centre, UNESCO IOC - NOAA, USA

Dr. Charles McCreery, Director, Pacific Tsunami Warning Center, NOAA, USA

Rajendra Prasad, Programme Officer for DRR/TW, IOC Tsunami Unit

This 1-week workshop will cover essential topics involved in end-to-end tsunami warning, and include a regional consultation for Pacific Island Countries (PICs) on the planned PTWS PTWC Enhanced Products. In event time, the topics include event monitoring and detection, threat evaluation and warning, alert dissemination, emergency response, evacuation, and public action. An effective tsunami warning system is achieved when all people in vulnerable coastal communities are prepared to respond appropriately and in a timely manner upon recognizing that a potential destructive tsunami may be approaching. Meeting this challenge requires round the-clock monitoring with real-time data streams and rapid alerting led by national tsunami warning centers, as well as prepared communities, a strong emergency management system able to respond immediately and efficiently, and close and effective cooperation between all stakeholders during the tsunami emergency. Stakeholders must be able to work in coordination and with good understanding of each other's roles, responsibilities, authorities, procedures, and action during a tsunami event. Planning and preparedness, and practicing in advance of the real event, are important to familiarize agency staff with the steps and decision-making that will need to be carried out without hesitation in a real emergency. In this context, the training emphasizes the development of sound tsunami warning and emergency response standard operating procedures (SOPs) as a key requirement for successful end-to-end warning. On Day 4 and 5, the PTWS Working Group 2 Task Team on Enhanced Products will convene a regional consultation for PICs to obtain feedback on the understandability and use of the PTWC Enhanced Products, and their readiness for the expected PTWC product changeover in 2014.

PROVISIONAL AGENDA (5 August 2013)

Session	Start Time	End Time	Topic	Speaker
1-3			DAY 1: SESSIONS 1, 2, 3 - OVERVIEW AND COUNTRY PRESENTATIONS	
			MORNING: Opening	
	8:30	9:00	Registration	NZ
1.1	9:00	10:00	Opening Ceremonies	IOC/PTWS US, Japan, NZ
	10:00	10:30	COFFEE / TEA BREAK - Group Photo	
1.2	10:30	10:35	Logistics and other administrative items	NZ
1.3	10:35	10:45	Agenda Overview	Kong
2			Tsunami Warning and Emergency Response – Overview	
2.1	10:45	11:30	Successful End-to-End Tsunami Warning – Stakeholders, Standard Operating Procedures, and Requirements	Kong
2.2	11:30	12:30	Warning and Emergency Response Lessons Learned from Past Tsunamis - What to do and what not to do	McCreery/ Gledhill, Coetzee/ Guard
	12:30	13:30	LUNCH	
			AFTERNOON: PLENARY	
3			Country Presentations - Tsunami Standard Operating Procedures	
3.1	13:30	15:00	Country Presentations - Tsunami Warning Center (TWC) and Tsunami Emergency Response (TER) SOPs / Challenges - 10 min/country	Prasad, Countries
	15:00	15:30	COFFEE / TEA BREAK	
3.1	15:30	16:30	Country Presentations - TWC and TER SOPs / Challenges - 10 min/country	Prasad, Countries
3.2	16:30	17:00	Discussion: Challenges for successful end-to-end Tsunami Warning: Data, Resources, Communication, Stakeholders, Coordination, Evacuation	Prasad, Countries, All
4			DAY 2: SESSION 4 - TSUNAMI STANDARD OPERATING PROCEDURES	
			MORNING:	
4.1	9:00	9:45	National Tsunami Warning Centres Standard Operating Procedures - Overview on Routine and Event Operations, Flow Charts, Timelines, Checklists	Gledhill
4.2	9:45	10:30	Tsunami Emergency Response Standard Operating Procedures - Overview on Stakeholder Roles and Coordination, Event Operations, Timelines, Checklists	Guard
	10:30	11:00	COFFEE / TEA BREAK	
4.3	11:00	11:45	Emergency communication considerations – robustness, reliability, redundancy	Coetzee, Kong
4.4	11:45	12:30	Case Study: Warning Dissemination and Public Alerting – Authoritative agencies, media, and the public – Hawaii Emergency Alert System	Kong
	12:30	13:30	LUNCH	
4			AFTERNOON:	
4.6	13:30	14:15	Evacuation Planning and Conduct - Requirements and Considerations (include Role and Value of Tsunami Inundation Modelling), When is it Safe to Return (All-Clear)?	Gledhill
4.6	14:15	15:00	Tsunami Warning Decision Support Tools: Earthquake and Sea Level Monitoring, PTWC SMS Alerts, Historical Databases, Tsunami Travel Time Calculation	Kong
4.7	15:00	15:15	Tsunami Warning and Emergency Response Timeline - What happens when? exercise	Coetzee
	15:15	15:45	COFFEE / TEA BREAK	

4.8	15:45	16:30	PTWS Pacific Tsunami Warning Center Current Criteria and SOPs for issuing Warnings and Watches - Typical PTWS Fixed and Expanding Tsunami Warning Events	McCreery
4.9	16:30	17:15	PTWC New Enhanced International Protocols and Products - Overview - Why, What, When, How	Gledhill
5			DAY 3: PTWC NEW ENHANCED PRODUCTS	
5			MORNING:	
5.1	9:00	10:00	The Enhanced Products - What they are and What they mean. Text Message, Forecast Polygon Map, Forecast Polygon Table, Energy Forecast Map, Coastal Forecast Map, Coastal KMZ file	McCreery
5.2	10:00	10:30	Staging: Expected Product Issue Time and Type of Products based on Wave Forecast Threat Level	McCreery
	10:30	11:00	COFFEE / TEA BREAK	
5.3	11:00	12:00	TWC Understanding of Enhanced Products - What you need to know on their use and limitations, particularly for wave forecasting	McCreery
5.4	12:00	12:30	TER Understanding of Enhanced Products - Threat Levels and Public Safety Guidance	Kong
	12:30	13:30	LUNCH	
6			AFTERNOON:	
6.1	13:30	14:15	SOP Guidance - How to Guidance, including Analysis Processes, Flow Charts and Checklists. Timeline-driven SOPs, Discussion and Questions	Kong, Coetzee
6.2	14:15	15:00	Tsunami Exercise Preparation: Creating SOPs Breakout Groups - Using Templates to Develop Timeline of Processes and Actions as SOPs (Messages, Checklists, Information Dissemination, Evacuation, Safe-to-Return)	TWC and TER/DMO Groups
	15:00	15:30	COFFEE / TEA BREAK	
	15:30	16:30	cont'd	
6.3	16:30	17:00	Tsunami Exercise – Background and Scenarios for Day 4	Exercise Controllers - Kong, Coetzee
6-7			DAY 4: EXERCISE, CONSULTATION	
6			MORNING: Tsunami Exercise	
6.4	9:00	9:30	Exercise Set-up according to Stakeholder Warning and Response Groups	Exercise Controllers- Kong, Guard
	9:30	9:45	COFFEE / TEA BREAK	
6.5	9:45	12:30	Tsunami Exercise on PTWC Enhanced Products	Exercise Controllers, Groups
	12:30	13:30	LUNCH	
7			AFTERNOON: Enhanced Products Consultation	
7.1	13:30	14:15	PTWS WG 2 Task Team on Enhanced Products: Consultation Overview, Goals and Outcomes	Kong, McCreery
7.2	14:15	15:00	PTWC Enhanced Products Feedback - Summary to Date: PacWave13 Post-Exercise Evaluation - Summary Feedback Post-exercise evaluation of this morning's exercise	Guard
	15:00	15:30	COFFEE / TEA BREAK	
7.3	15:30	16:30	Feedback: Products - Overall on Format, Content, Usefulness, Staging, Understanding	Gledhill
7.4	16:30	17:00	Feedback: Products - Specific: Text Message, Forecast Polygon Map, Forecast Polygon Table, Energy Forecast Map, Coastal Forecast Map, Coastal KMZ file	McCreery
7-8			DAY 5: CONSULTATION, CLOSING	
			MORNING: Enhanced Products Consultation	
7.4 (cont'd)	9:00	9:45	Feedback: Products - Specific: Text Message, Forecast Polygon Map, Forecast Polygon Table, Energy Forecast Map, Coastal Forecast Map, Coastal KMZ file (cont'd)	McCreery

7.5	9:45	10:30	Feedback: Public Release: Which, if any, can be made public?	Gledhill
	10:30	11:00	COFFEE / TEA BREAK	
7.6	11:00	12:00	Feedback: Understanding, Use, Limitations: TWC, DMO, other response stakeholders, public	Coetzee
5.7	12:00	12:30	Other Feedback	Gledhill
	12:30	13:30	LUNCH	
			AFTERNOON: Summary, Report Adoption, Closing	
7.8	13:30	14:30	Feedback: Issuance of Warnings by Country: Modification of SOPs - Ready, or not ready and why not? What is needed? Training, outreach materials,?	Kong
7.9	14:30	15:00	Adoption of Consultation document	Gledhill, McCreery
	15:00	15:30	COFFEE / TEA BREAK	
6	15:30	16:30	Presentation of Certificates, Closing Ceremony	IOC, ITIC, All