



Regional SOP Training on End to End Tsunami Early Warning System

**11 – 15 August 2008
Jakarta, Indonesia**

COURSE MANUAL DETAILED TABLE OF CONTENTS

1) Workshop Overview

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- b) Participant List (Day 5 distribution)
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- d) List of Reference Materials (electronic only)

2) National Tsunami Warning and Emergency Response System (SOPs)

- a) Indonesia
- b) Maldives
- c) Sri Lanka
- d) Thailand

3) IOC Global Tsunami Warning and Mitigation System

- a) IOC Tsunami Programme
- b) Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System – Information, Fact Sheet, IOTWS-V Summary, 2007 Achievements
- c) Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System – Information, Fact Sheet, PTWS-XXII Summary, 2007 Achievements
- d) Excerpt from IOTWS Implementation Plan for Regional Tsunami Watch Providers (RTWP)

4) Tsunami Warning and Mitigation Overview (distributed separately)

- a) Tsunami Hazards in the Indian Ocean and SE Asia
- b) A Global Tsunami Reduction Strategy: Building Effective Tsunami Warning and Mitigation Systems
- c) Guarding Against Tsunamis: What does it mean to be ready?
- d) End to End Tsunami Warning - Stakeholders, Roles and Responsibilities, Standard Operating Procedures, and their Linkage
- e) Concept of Operations for End-to-End Tsunami Response and Standard Operating Procedures for Tsunami Early Warning and Mitigation System
- f) Types of documentation to support Global Tsunami Warning Systems and/or National Tsunami Warning Centre and Tsunami Emergency Operations Centre operations
- g) Developing Early Warning Systems: A Checklist (EWC III, 2006)
- h) End-to-end Tsunami Warning Considerations: Public Alert Systems
- i) Alerting Technologies: RANET example (in binder)

- j) Indonesia Case Study: Status of Tsunami Warning Chain on Community Level (GFZ, Oct 2007)
- k) IOTWS Users Guide - IOTWS System, including PTWC and JMA Communications and Message Content
- l) PTWS Operational Users Guide – PTWS System, including PTWC and JMA Communications Methods and Message Content

5) Tsunami Warning Centres - Guidance and Templates

- a) Tsunami Warning Centres – An Overview
- b) Tsunami Product Codes – WMO Headers
- c) National Tsunami Warning Centre SOP Templates - 4 NTWC Cases: Seismic / No Seismic Monitoring - Local / Distant Tsunami Threats
- d) NTWC SOP (Guidance and Samples)
- e) PTWS Operational Users Guide - Annexes
 - i) Annex I. Tsunamis
 - ii) Annex II. Earthquake Source Characterization
 - iii) Annex III. Interpretation of PTWC Messages and Emergency Response Guidance
 - iv) Annex IV. Sea Level Measurement
 - v) Annex V. Methods for Tsunami Travel Time Calculation used by PTWC,
 - vi) WC/ATWC, and JMA
 - vii) Annex VI. Tsunami Wave Forecasting
 - viii) Annex VII. Glossary of Tsunami Terms (Tsunami Glossary, Revised Jul 2008)
- f) Tsunami Warning Centre Operations Manual – PTWC example: System, processing, products, flow charts, checklists, and abbreviated SOPs (cheat sheets)

6) Tsunami Warning Centres - Case Studies

- a) Lessons Learned from Past Tsunami: Highlights from Indian and Pacific Oceans
- b) Case Study - Local Tsunami: 17 July 2006, Java, Indonesia

7) Tsunami Emergency Response – Guidance and Templates

- a) Tsunami Education and Awareness
- b) 10 Steps to Enable a Successful Tsunami Emergency Response
- c) Tsunami Planning Template
- d) Standard Operating Procedure for Tsunami, including Media Releases - New Zealand Civil Defense and Emergency Management
- e) Tsunami Emergency Response SOPs
 - i) Roles and Responsibility Matrix
 - ii) Evacuation Checklist
 - iii) Emergency Response Matrix
 - iv) Tsunami Occurrence Checklist
 - v) Tsunami Information Checklist
 - vi) Tsunami Warning Checklist
 - vii) Timeline Template for Tsunami Emergency Response
- f) Tsunami Evacuation and Sheltering, City and County of Honolulu
- g) Local Planning Guidance on Tsunami Response - California Office of Emergency Services

8) Tsunami Emergency Response - Case Studies

- a) Wakayama Prefecture, Japan: Local Government Tsunami Emergency Response SOP
- b) Hawaii, USA: State Civil Defense Distant and Local Tsunami Response

- i) Hawaii SOP for Distant Generated Tsunami
 - ii) Hawaii Distant-Generate Tsunami Response Checklist
 - iii) SOPs for Locally Generated Tsunami and Earthquake
 - iv) Locally Generated Tsunami Response Checklist
 - v) Hawaii Urgent Local Tsunami Warning Emergency Broadcast Script
- c) Shizuoka Prefecture, Japan: Earthquake and Tsunami Disaster Prevention
Earthquake and Tsunami Preparedness
- d) Vertical Evacuation (see also electronic Supporting docs, Mitigation)
 - i) Japan Guideline: Buildings Used for Tsunami Evacuation
 - ii) Volunteer Evacuation Building Agreement - Yaizu City, Shizuoka Prefecture
- e) Small Boat Safety (see also electronic Supporting docs, Mitigation)
 - i) Japan Tsunami Response: Fishing Ports and Harbors
 - ii) Hawaii Boaters Manual: Tsunami guidance
 - iii) ITIC Tsunami Safety for Boaters
- f) Community Based Disaster Risk Management
- g) Aceh Darussalam, Indonesia: Draft SOP for local tsunamis

9) Drills and Exercises

- a) Exercise Types
- b) Exercise Planning Templates – US Department of Homeland Security Exercise and Evaluation Program, 2006
- c) Tabletop Exercise Development Steps
- d) Tsunami Warning Communications Exercise: State of California Exercise Program, 28 March, 2007
- e) Training Exercise Jakarta 08 (General Instruction) (distributed separately)
- f) Training Exercise Jakarta 08 – messages, injects, and other outputs (Day 5 electronic only)

10) Media Interactions (distributed separately)

- a) Media Plan and Template – Examples, tips, guidance
- b) Case Study: Japan: JMA and NHK – overview (electronic only)
- c) Case Study: USA: 15 Nov 2006 Kurils event: USA (PTWC, Hawaii, California), Japan (JMA) – News releases, media advisories, news reports
- d) Washington State Broadcasters Tsunami Emergency Guidebook (electronic only)

11) Miscellaneous

- a) Tsunami Glossary – Disaster Management Organizations (in packet)
- b) ITIC Tsunami Awareness and Educational Material DVD Overview (in packet)
- c) ITIC Tsunami Warning Decision Support Tools (in packet)
- d) Indonesia materials – list (electronic only)
- e) New Zealand materials – list (electronic only)
- f) USA materials – list (electronic only)