Day 5: EMAC-14
Exercise Meso America Caribbean 2014
General Instruction

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Participants will gain a better understanding of SOP’s, checklists, and roles and responsibilities during the exercise and will, as a result, be able to apply the lessons learnt to their internal and collective tsunami processes.
EXERCISE EMAC-14 Objectives

- Apply a tsunami warning scenario to participant-developed SOPs
- Describe actions taken by Stakeholder Agencies to a tsunami warning
- Demonstrate knowledge through use of timeline of events and actions
- Receive comment from Trainers and other participants
Day 4 - Exercise Preparations

When earthquake or tsunami occurs, are you prepared to respond immediately?
Do you have written SOPs for Duty Staff to follow?

☐ What will you do when an EQ occurs?
   How will you know if there is a tsunami?

☐ Is there a Hazard? Is there a Risk?

☐ For TWC, what will you do after issuing a Warning?

☐ For DMO / Response Agencies, after you receive a Warning, what will you do?

☐ What will you do if Public / Media wants information?

☐ What will you do if High-level Official wants information?

☐ Do you have a Backup or Contingency Plan should your Center become inoperable?
EXERCISE SCOPE and FORMAT

- Conducted on Day 5 – Saturday, April 5
- Tabletop format (discussion exercise)
- Real time, and Controllers can advance / slow clock
- 3 Country Groups (NTWC, TER/NDMO): Honduras, Jamaica, Mexico
- Take action based on Day 4 SOPs
- Post-Exercise Evaluation - report-back through NTWC/TWFP & NDMO timeline of events, actions, communications
Exercise: Begin 0000Z (~0830 local)  
End   0300Z (~1130 local)

Source will be in Cayman Trough

PTWC existing product messages + partial new products

Inject events

Each Group simulate interactions between Stakeholders, or through Controllers

Log actions and responses, answers/best practices for report-back to Plenary
Each NTWC and NDMO is responsible for:

- **MESSAGES THEY WILL ISSUE (CONTENT)**
- Controller will provide EQ parameters, Tsunami arrivals, expected heights, observations, other situation injects
- **WHEN MESSAGES ISSUED (HOW OFTEN)**

Within each country, NTWC and TER / NDMO communicate with each other, and to their country.

National Agencies can contact other countries if they would like, especially if there are already pre-arranged information sharing agreements.

=> **USE TEMPLATES AND CHECKLISTS YOU DEVELOPED**
TEWS: End-to-End SOPs

Earthquake

- NTWC Receipt, Assessment & Notification SOP
- RTWC Detection & Notification SOP
- NDMO/DMO Receipt & Notification SOPs
- Public Responds Public Aware
- Pre-Event activity: Signage Evac Maps Natural Warnings Exercises

Tsunami
- DMO Evacuation SOPs
- Tsunami Attacks

Tsunami Attacks
EXERCISE FORMAT

- Groups of TWC and TER stakeholders
- During Exercise, Groups ‘execute’ SOPs
- SOPs should be timeline-driven (actions based on time after earthquake)
- The Exercise will follow this information flow / format:
  - Controller gives scenario inject. Each Group discusses and takes action. Followed by next inject
  - Each Group has Recorder to log actions (on laptop or by hand on paper)
  - Each Group has Reporter to report to Plenary
- Real-time
- Post-Evaluation
Generalized Scenario Timeline

- **Time 0**: EQ occurs with strong ground shaking
- **Time A**: Initial EQ info, or outside data
- **Time B**: Initial PTWC new products
- **Time C**: Initial waves arrive at coastline
- **Time D**: Initial sea level gauge readings
- **Time E**: PTWC last forecast issued
- **Time F**: Country warning cancellation
- **Time G**: Country All-Clear for some communities
Exercise Controllers will control the pace and can suspend or advance the exercise Clock.

Controllers -- Laura Kong, Masahiro Yamamoto

Messengers and Outside agencies / Individuals (i.e. Media, President, Local Agency, etc.) not physically in exercise room – Alison, Mexico

Media – Christa von Hillebrandt, Nic Arcos

Observers – All
GROUND RULES

- All communications/actions must pass through Controller (as Exercise Messages)

- Exercise Message
  - Is Paper
  - Includes Communication Method (e.g., Fax, telephone, radio, SMS, e-mail, satellite phones, Twitter, other depending on your SOPs)
  - Includes From, To, Time, Content

- Exercise Injects will also be Paper

- Exercise Log documents key actions (Who, How, What), e.g., as receipt and issuance of messages, and/or key decisions or actions
EXERCISE MESSAGES (through Controller)

<table>
<thead>
<tr>
<th>Communication Method:</th>
<th>TELEPHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From:</td>
<td>NTWC</td>
</tr>
<tr>
<td>To:</td>
<td>NDMO</td>
</tr>
<tr>
<td>Time:</td>
<td>0010</td>
</tr>
<tr>
<td>Date:</td>
<td>8 NOVEMBER 2013</td>
</tr>
<tr>
<td>Subject:</td>
<td>TSUNAMI WARNING, ST LUCIA</td>
</tr>
<tr>
<td>Message:</td>
<td>A TSUNAMI WARNING HAS BEEN ISSUED FOR THE ST LUCIA REGION. EXPECTED ARRIVAL TIME IS 0023Z. EXPECTED HEIGHT IS 8 M. A MAJOR TSUNAMI MAY HAVE BEEN GENERATED BY A M8.3 EARTHQUAKE LOCATED AT XXX. EMERGENCY RESPONSE AGENCIES SHOULD TAKE APPROPRIATE ACTIONS TO ENSURE PUBLIC SAFETY.</td>
</tr>
</tbody>
</table>
## EXERCISE LOG (electronic or hand-written)

### LOG OF EVENTS

<table>
<thead>
<tr>
<th>Time</th>
<th>From</th>
<th>To</th>
<th>Communication Method</th>
<th>Activity / Action</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0010</td>
<td>NTWC</td>
<td>NDMO</td>
<td>SMS Text</td>
<td>Issue Warning</td>
<td>2nd attempt, 1st failed</td>
</tr>
<tr>
<td>0015</td>
<td>NTWC</td>
<td>NDMO</td>
<td>VHF Radio</td>
<td>Issue Warning</td>
<td></td>
</tr>
</tbody>
</table>
Exercise Report Back

- Late Morning, Lunch – Prepare Post-exercise Report
- Report-back - 10 minutes each Group
- Groups should focus on –
  - What went well?
  - What did not go well?
  - Lessons Learned, Gaps in SOPs
  - Recommendations
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