







UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-TEWS Chile)

TSUNAMI EARLY WARNING SYSTEMS
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
19-30 August 2024, Valparaiso, Chile

ECW-24 Exercise Chile Wave 2024 General Instruction

Dr. Charles McCreery
Director, PTWC, USA NOAA

Dr. Laura Kong Director, ITIC, USA, NOAA







EXERCISE Chile Wave 2024 - Summary

- Use and interpret PTWC products
- Apply a tsunami warning scenario to participant developed SOPs
- Describe actions taken by stakeholder agencies to tsunami warning
- Demonstrate knowledge through the 'Press Conference'
- □ Receive comment from trainers and other participants

EXERCISE ECW-24 - Activities

ECW-24 to simulate decision-making on

- Issuance of Warning, or not, and where
- □ Upgrade of Warning, or not
- Coastal evacuation of threatened communities
- Continuing, Canceling, and Downgrading Warnings
- □ Criteria for Search and Rescue, Public All-Clear

INJECTS AND ACTIONS:

- 0-60 min: EQ Monitoring and Early Source Characterization,
 TSP Forecasts, Threat decision-making, DMO/TER risk decision-making,
 alerting and evacuation
- Min hrs: Wave arrivals through Warning cancellation
- Hrs days: TER Search-and-Rescue, Safe-to-Return

EXERCISE ECW-24 - Scope and Format

- Conducted on Thursday, 29 August
 Modified Functional (role play of separate NTWC / TER)
- □ Real time, but Controllers will advance / slow clock
- 6 sets of Country Groups with NTWC and TER taking actions based on their SOPs
 - 1. Tonga
 - Cook Islands
 - 3. French Polynesia
 - 4. Nicaragua
 - 5. Peru
 - 6. Chile
- NTWC and DMO (TER) physically separate

ECW-24 - Conduct

- □ Exercise Begins 1400 local (0600 UTC)Ends 1600 local (0800 UTC)
- □ PTWC injects will be their tsunami bulletins
- □ Situation injects will be issued
- □ Each Group evaluates injects, take actions, and simulate interactions between stakeholders, and/or through Controllers
- □ Each Group documents its actions and responses, reviews its performance for report-back to Plenary through next-day Press Conference
- □ Each Group will need to assign a person to record its decisions and actions, and a person to report out the following day

EXERCISE CONTROL

- Exercise Controllers will control the pace and will suspend or advance the exercise Clock.
- Controllers and Simulators may act as any outside agencies and individuals (i.e. media, prime minister, etc.) not physically present in order to interact with TWC & DMO groups.
- Observers will observe and note the good, the bad, and the ugly

GUIDANCE

- Each NTWC and TER is responsible for:
 - COMMUNICATION WITH OTHER ORGANIZATIONS (WHO, WHAT, AND WHEN)
 - MESSAGES THEY ISSUE (TO WHOM, CONTENT AND WHEN)
 - OTHER ACTIONS THEY TAKE (WHAT, WHEN)
- Within each country, NTWC and TER communicate with each other / 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

GROUND RULES

- All communications are Messages that are delivered by
 - 1. PHONE (but actually by voice) to another place or agency
 - 2. EMAIL (in standard format) through Controller
- PTWC Text Products issued to everyone.
 PTWC Enhanced Products issued to NTWC only. It is up to the NTWC to decide which, if any, of products to issue to the TER or to the public
- Message standard format (electronic, ECW-24_Actions_Template_
 - Includes: To, From, Time, Method, content
 - Method of communication could be: Fax, telephone, radio, SMS, e-mail, satellite phones, WhatsApp, Twitter (X), other
- Log Messsages (electronic, ECW-24_ExerciseLog_Template)

EXERCISE MESSAGES

EXERCISE CHILE WAVE 2024 THIS IS AN EXERCISE

TO:

FROM:

TIME: UTC

METHOD:

MESSAGE:

CONSIDERATIONS

- What is the Message and what does that mean?
- What is the Hazard?
- What is the Risk from this Hazard?
- Is there an immediate action the Group needs to take right now?
- Consider contingencies or back up plans in the event of system failures
- Who must the Group notify in the DMO, Government, public, and the media?
- Who will take the action?

EXERCISE LOG

EXERCISE CHILE WAVE 2024 (ECW-234) 29 August 2024, Valparaiso, Chile

LOG OF EVENTS

ORGANIZATION NAME	

Time	From	То	Communication Method	Activity / Action	Comments

EVALUATION - Press Conference

- □ 29 August, 0900-1000, Rm 1377
- □ Preparation for Press Conference today, after exercise to 1645 and tonight
- □ Press Conference (60 min)
 - Group statements for each Country (NTWC and TER) 5 min each
 - Media Question and Answer 30 min
- □ Group Statements should focus on
 - What was supposed to happen
 - What went well Sustainable
 - What needs work Improvement
 - Did we accomplish our Goals?
 - What are your recommendations

ECW-24 Preparation – 1045 – 12 noon (and lunch)

■ Meet in your Group (country)

- Review 'Tsunami Exercise Preparation Standard Operating Procedures (SOP) Checklists, Messages, and Communications'
- Discuss and decide on SOPs (both by TWC/DMO and together as a 'Country')
- Decide focal points, how decisions will be made
 Communications, Inject Analysis, Messages, Action Logs, Media, etc
- Decide who will do Press Conference (NTWC-TER)

□ Be Ready!

ECW24 – Exercise Participant Assignments

Exercise Country	Exercise Role	Participant Name	Participant Country	Language
Tonga	NTWC	Mr. Joji Malodali Mr. Darcy Luuga Naivins Chan-Kum Tong Ms. Linda Tonowane	Fiji Samoa Solomon Is.	English
	NDMO	Ms. Danielle Jalisa Howell Mr. Grenfel Defoe Ms. Claudia Collao	Barbados Dominica Chile	
		No. Gladdia Golido	Office	
Cook Islands	NTWC	Dr. Muhammed Harvan Ms. Jasna Haro	Indonesia Chile	English
	NDMO	Mr. Diminski Reweru Mr. Mabius Francis	Nauru St. Lucia St. Vincent	
		Ms. Leanka RT Henry	St. Vincent	
Fr. Polynesia	NTWC	Ms. Kassia Johnson Mr. Alejandro Maraboli-Quezeda Mr. Igor Olivares	Grenada Chile Chile	English
	NDMO	Mr. Fabian Hinds Ms. Lisi Seumanutafa Uini	Barbados Samoa	
Nicaragua	NTWC	Mr. Steven Aguilera Ms. Dulce Calan Ms. Hita Zabi Ortiz	Ecuador Guatemala Mexico	Spanish
	NDMO	Mr. David Cruz Mr. Francisco Uribe Mr. Julio Castro	Belize Chile Chile	
Ecuador	NTWC	Mr. Wilberth Forero Ms. Juritzy Perez Mr. Jaime Corales	Colombia Mexico Chile	Spanish
	NDMO	Mr. Andres Romero Ms. Carolina Henriquez Mr. Cesar Nunez	Chile Chile Chile	
Chile	NTWC	Mr. Luis Fernando Alconero Mr. Christian Gomez Ms. Denisse Llacuachaqui	Argentina Ecuador Peru	Spanish
	NDMO	Mr. Rodrigo Andres Asenjo Paredes Ms. Valeria Tapia	Chile Chile	









UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-TEWS Chile)

TSUNAMI EARLY WARNING SYSTEMS
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
19-30 August 2024, Valparaiso, Chile

Thank You

Muchas Gracias

Dr. Charles McCreery
Director, PTWC, USA NOAA

Dr. Laura Kong Director, ITIC, USA, NOAA















UNESCO/IOC – NOAA ITIC – Chile SHOA International Tsunami Training Program (ITP-Chile) 19-30 August 2024, Valparaiso, Chile

Thank You

Dr. Laura Kong Director, ITIC, USA, NOAA

Ardito Kodijat Head, IOTIC, Indonesia





Dr. Charles McCreery
Director, PTWC, USA NOAA