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How to become Tsunami Ready ?

4.2 Available Tools and Support Training to achieve indicators

Dr. Laura Kong
International Tsunami Information Centre (ITIC)

Training support for Tsunami Ready

- **What is Tsunami Ready? How to get Tsunami Ready?**

  Modality:

  - This training – in-person
  - Ocean Teacher Global Academy (online, hybrid) – programme officials, community, facilitation

- **Achieving Indicators**

  Modality: OTGA (pass test for certificate), in-person

  Topics:

  - **Tsunami Awareness –** 4-8 hrs, req for later course
  - **TWC, TER SOP (IOC MG 76)** – 1 week
  - **TEMPP** (Inundation, Evacuation, Response Plan, Exercise) (IOC MG 82) – 4 modules (1 week each)
  - **Tsunami Early Warning System** – 2 week

3 Course breakdown

3 Types of modules	**Course 1** Introduction to Tsunami Ready and the Indicators	**Course 2** Implementing Tsunami Ready	**Course 3** Facilitating Tsunami Ready
Module 1 Tsunami Ready for Decision Makers *(Gov Officials, NDMO, DDMO, NTWC)*	**4 x lectures: # hours Training program (Incl. Quiz)**		
Module 2 Tsunami Ready for Community *(Community Leader, Community DRM, NGO, DDMO)*	**4 x lectures: # hours Training program (Incl. Quiz)**	**2 x lectures: # hours Training program (Incl. Quiz)**	
Module 3 Tsunami Ready for Facilitators *(Community DRM, NGOs, Students, Youth groups, DDMO)*	**4 x lectures: # hours Training program (Incl. Quiz)**	**2 x lectures: # hours Training program (Incl. Quiz)**	**4 x lectures: # hours Training program (Incl. Quiz)**

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Module 1
Tsunami Ready for Decision Makers

Training for Government Officials i.e. from National or Local Disaster Management Offices, National Tsunami Warning Centres, Focal Points, and Donors

- 1 Courses
- 4 Lectures (Lecture 1 – 4)
- Approximately 4 x 45 minutes

Module 2
Tsunami Ready for Community

Training for Community leaders, Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), Academics and Scientists, Community members, Private, Business, Tourisms sectors, etc.

- 2 Courses (Course 1 - 2)
- 6 Lectures (Lecture 1 – 6)
- Approximately 6 x 45 minutes

Module 3
Tsunami Ready for Facilitators

Training for Disaster Risk Reduction Facilitators for Disaster risk reduction workers and volunteers who are interested in assisting the community in capacity building for tsunami preparedness, etc.

- 3 Courses (Course 1 - 3)
- 10 Lectures (Lecture 1 – 10)
- Approximately 11 meetings x 45 minutes

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Course 1 Introduction to Tsunami Ready

- **Lecture 1: What is Tsunami Ready and what are the benefits to the Community?**
- **Lecture 2: What is the process for implementing Tsunami Ready?**
- **Lecture 3: Overview of the Tsunami Ready Indicators**
- **Lecture 4: How do the indicators relate to each other and the community?**

Course 2 Implementing Tsunami Ready

- **Lecture 5: How does a community start to implement Tsunami Ready?**
- **Lecture 6: Who are the stakeholders and technical organisations involved?**

Course 3 Facilitating Tsunami Ready

- **Lecture 7 : How to achieve the indicators – ASSESSMENT**
- **Lecture 8 a&b : How to achieve the indicators – PREPAREDNESS**
- **Lecture 9 : How to achieve the indicators – RESPONSE**
- **Lecture 10 : Engaging the community in a participatory approach**

Tsunami Ready Courses (available in 2023/2024)

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3 Course breakdown

3 Types of modules	Introduction to Tsunami Ready and the Indicators	Implementing Tsunami Ready	Facilitating Tsunami Ready
Tsunami Ready for Officials and Programme Implementors	**4 x lectures 4 x 45 minutes**		
Tsunami Ready for Community	**4 x lectures 4 x 45 minutes**	**2 x lectures 2 x 45 minutes**	
Tsunami Ready for Facilitators	**4 x lectures 4 x 45 minutes**	**2 x lectures 2 x 45 minutes**	**4 x lectures 4 x 60 minutes**

OTG@
OceanTeacher Global Academy

Course 1 Introduction to Tsunami Ready & the Indicators

- **What is Tsunami Ready**
- **Why is it important**
- **What is the benefit of implementing TR**
- **What are the indicators**
- **Why are these indicators**

Course 2 Implementing Tsunami Ready

- **What do community do to start to implement TR**
- **Who are the stakeholder and the technical organization**
- **How to approach the organizations**

Course 3 Facilitating Tsunami Ready

- **What does each of these indicator means and the relation of each indicators**
- **How to work on each of the Indicators**

Module 1 Tsunami Ready for Officials and Programme Implementors (1 Course)

The training is targeted for Government Officials (i.e. from National or Local Disaster Management Offices, National Tsunami Warning Centres, Gov Institutions) and Programme / Project planner and implementor (Donors, Funding agencies), etc.

Module 2 Tsunami Ready for Community (2 Courses)

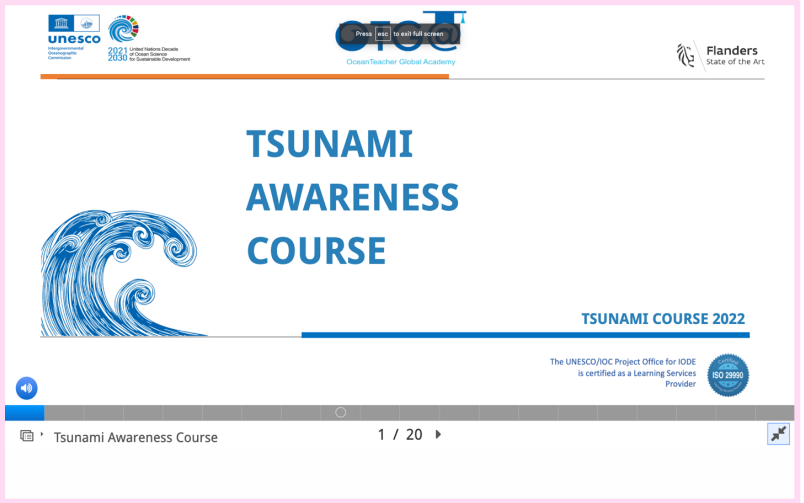
The training is targeted for Community leaders, Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), Academics and Scientists, Community members, Private, Business, etc.

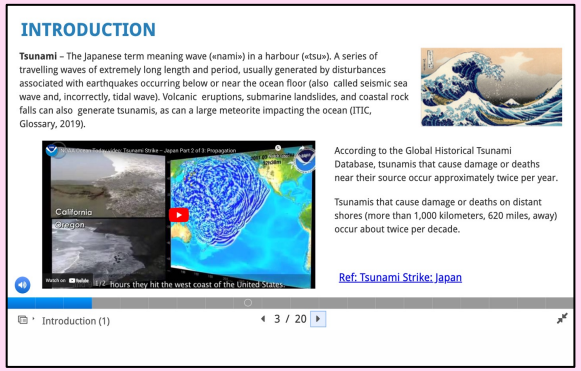
Module 3 Tsunami Ready for Facilitators (3 Courses)

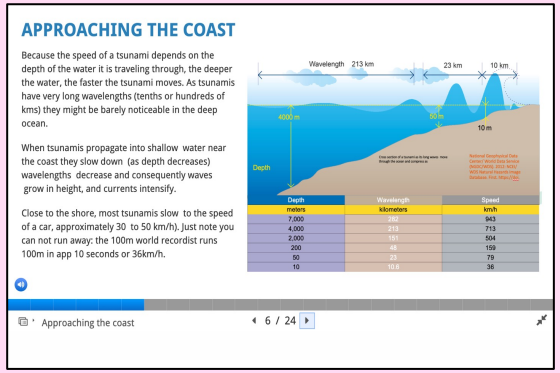
The training is targeted for Disaster Risk Reduction Facilitators for Disaster risk reduction workers and volunteers who are interested in assisting the community in capacity building for tsunami preparedness, etc.

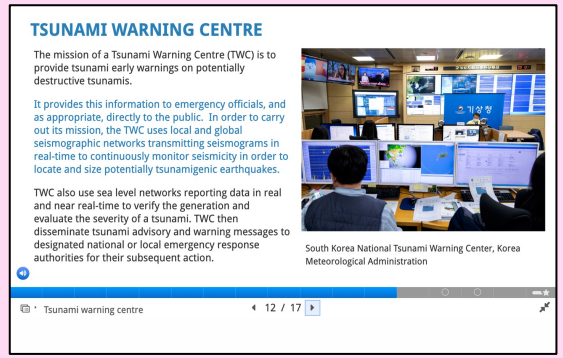
Tsunami Awareness – 3 Modules

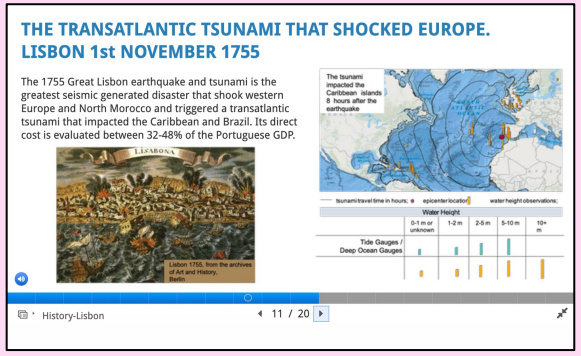
1. Tsunami Basics – 1, 2
2. Tsunami Warning Systems – 1, 2
3. Tsunami Preparedness – 1, 2

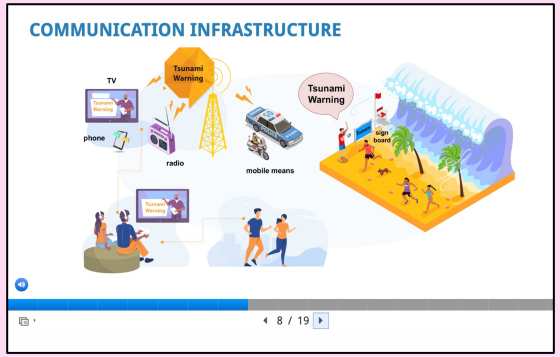


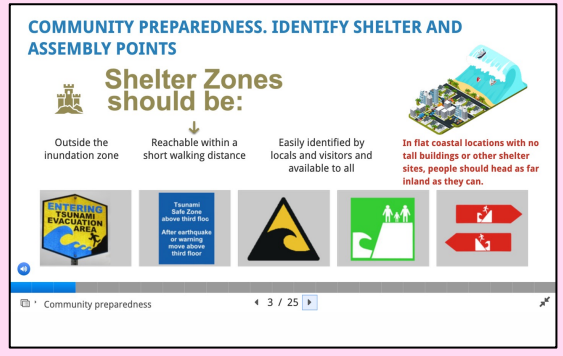


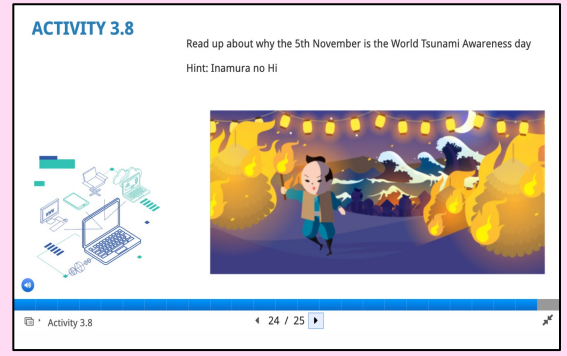








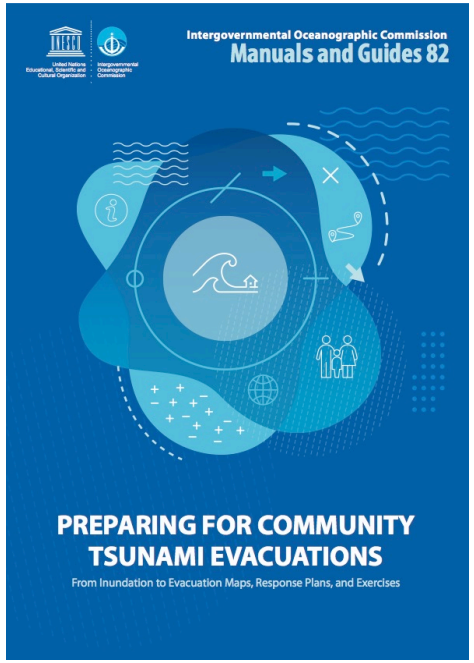




ITIC Training - TEMPP

- **Tsunami Evacuation Maps, Plans, and Procedures (TEMPP) – IOC MG 82** *Preparing for Community Tsunami Evacuations: from inundation to evacuation maps, response plans and exercises (2020)*
- Manual (English, Spanish)
- Supplement 1 (Detail Module Explanations, Guidance) (English)
- Specialized Documents

http://itic.ioc-unesco.org/index.php?option=com_content&view=category&layout=blog&id=2166&Itemid=2640



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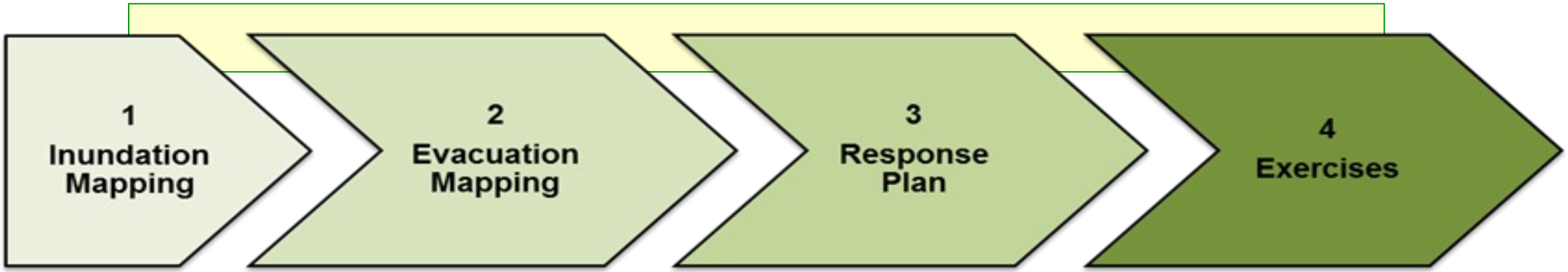
Preparing for Community Tsunami Evacuations
From Inundation to Evacuation Maps, Response Plans, and Exercises … communities knowing what to do and where to go

IOC ITIC Tsunami Evacuation Maps, Plans, and Procedures (TEMPP) Pilot Capacity Building, Honduras and Central America, 2015-17

IOC Manual and Guide 82 (2019) - TEMPP

PREPARING FOR COMMUNITY TSUNAMI EVACUATIONS: FROM INUNDATION TO EVACUATION MAP, RESPONSE PLANS, AND EXERCISES



4 Foundation Blocks

- *Key element of tsunami response involves evacuation, including self-evacuation of exposed people & key assets to safer areas*
- *Effective and successful evacuations require proper planning by relevant authorities.*

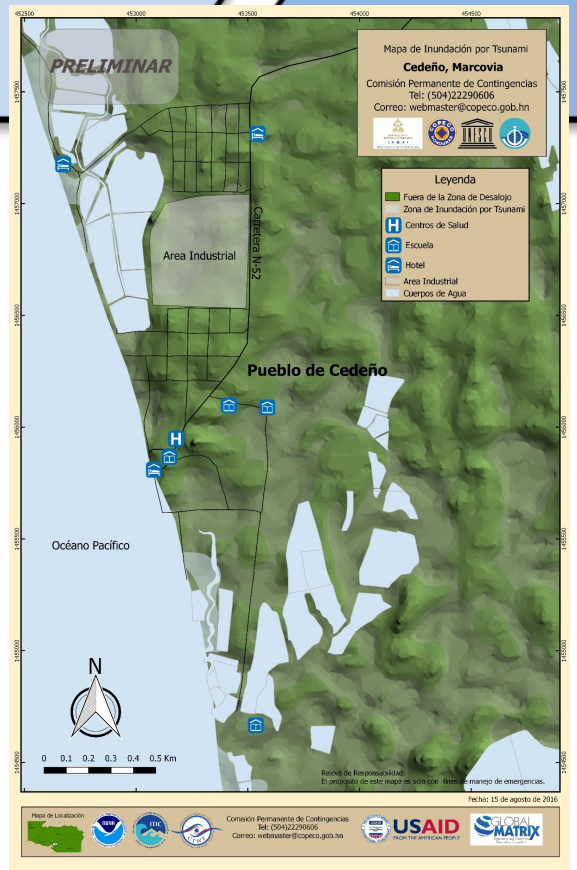
Module 1 – Inundation Mapping

1 Establish the required information

2 Learn the basics of tsunami science and numerical modelling

3 Conduct tsunami modelling or no modelling

4 Create an inundation map



Inundation/flooding map developed for Cedeño, Honduras.

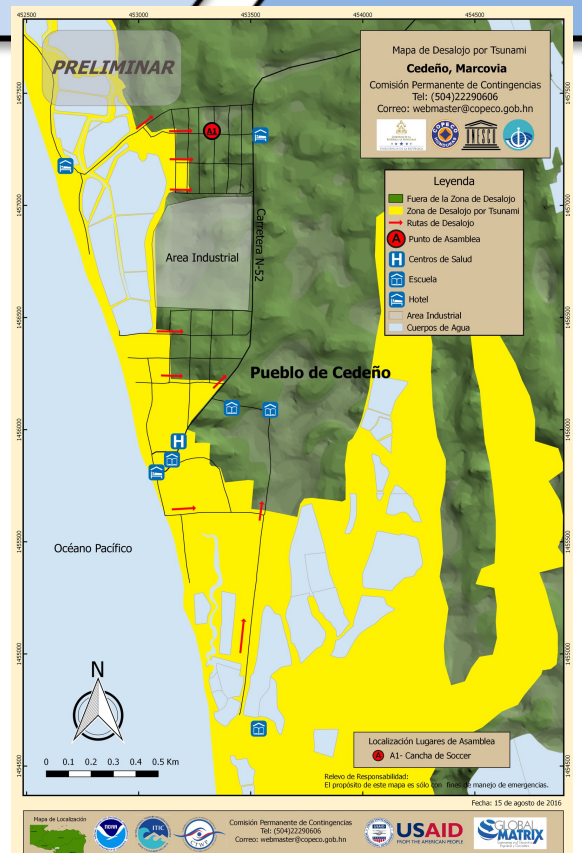
Module 2 – Evacuation Mapping

1 Establish the required information

2 Learn the basics of tsunami science and numerical modelling

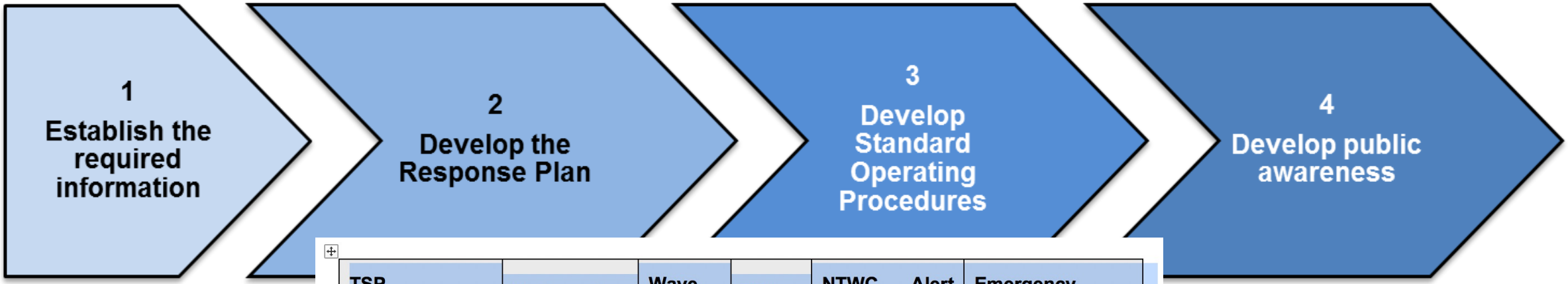
3 Conduct tsunami modelling or no modelling

4 Create an inundation map



Evacuation map developed for Cedeño, Honduras.

Module 3 – Tsunami Response Planning



TSP Notification	Earthquake	Wave forecast	ETA	NTWC Alert Level	Emergency Response Action
Tsunami Threat Message	**Magnitude:** >7.0 **Depth:** <100km	≥ 1 m	<3 hrs	WARNING	Evacuate xxx zones
			3 - 6 hrs	WATCH	Prepare to evacuate
			>6 hrs	INFORMATION	Monitor for subsequent forecasts
		0.3 to 1 m	<3 hrs	ADVISORY	Evacuate beaches and harbours
			3 - 6 hrs	WATCH	Prepare to evacuate
			>6 hrs	INFORMATION	Monitor for subsequent forecasts
		< 0.3 m	-	INFORMATION	Monitor for subsequent forecasts

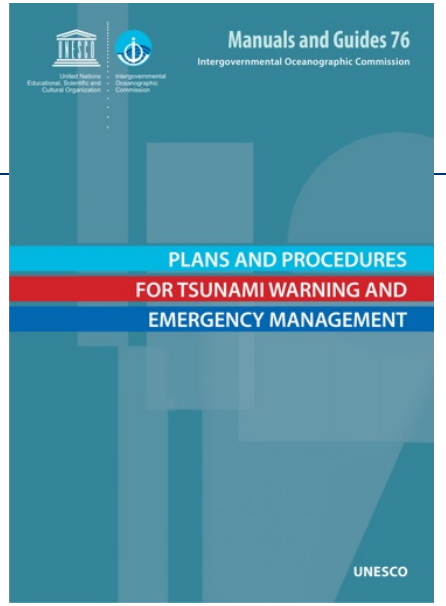
Module 4 – Evacuation Exercising

1. Establish the required information
2. Plan the exercise
3. Conduct the exercise
4. Evaluate the exercise
5. Implement recommen-dations

IOC MG 82 – Topics, Templates, etc

1. **HAZARD ASSESSMENT – INUNDATION MODELING**
   - Numerical Models in Hazard Assessment
   - ComMIT tool (MOST model) – inundation mapping for evacuation
   - Seismic Worst-Case Scenarios for Tsunami Hazard Assessment (no credible sources)
   - Establishing Tsunami Inundation for areas not-modeled or low-hazard (no history, low population, poor DEM)
   - Tsu Coastal Assessment Tool (TsuCAT) - exercise scenario, PTWC msgs
2. **COMMUNITY – EVAC MAP, RESPONSE, EXERCISES**
   - Best Practice Country Examples - Chile, Indonesia, Japan, New Zealand, Philippines, USA
   - How to Create Evacuation Maps (templates)
   - How to Create Community Tsunami Response Plans (templates)
   - How to Create Community Tsunami Exercises (templates)

ITIC Training – SOPs



- **Tsunami Warning Center and Tsunami Emergency Response Standard Operating Procedures (TWC TER SOPs) –** IOC MG 76 *Plans and Procedures for Tsunami Warning and Emergency Management, Guidance for countries in strengthening tsunami warning and emergency response through the development of Plans and Standard Operating Procedures for their warning and emergency management authorities (2017)*
- Manual (English)

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Tsunami Ready
2022 - 2026

THANK YOU
Vinaka Vaka Levu

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