



**unesco**

Intergovernmental  
Oceanographic  
Commission

# Supporting Tsunami Ready in the NWIO

RWG NWIO  
30 May 2023

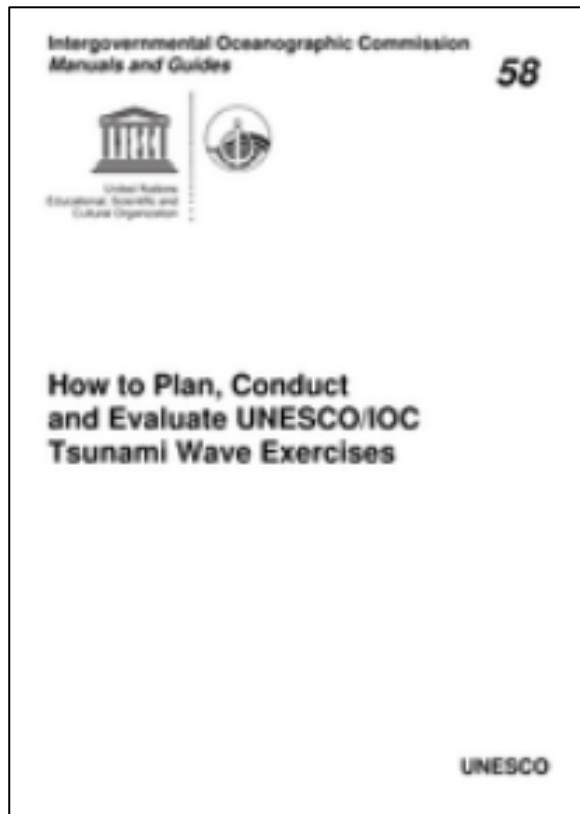
**Ardito M. KODIJAT**

*Disaster Risk Reduction and Tsunami Information Unit  
UNESCO Office Jakarta  
Indian Ocean Tsunami Information Centre of IOC-UNESCO  
[a.kodijat@unesco.org](mailto:a.kodijat@unesco.org)*

# Tsunami Ready Tools

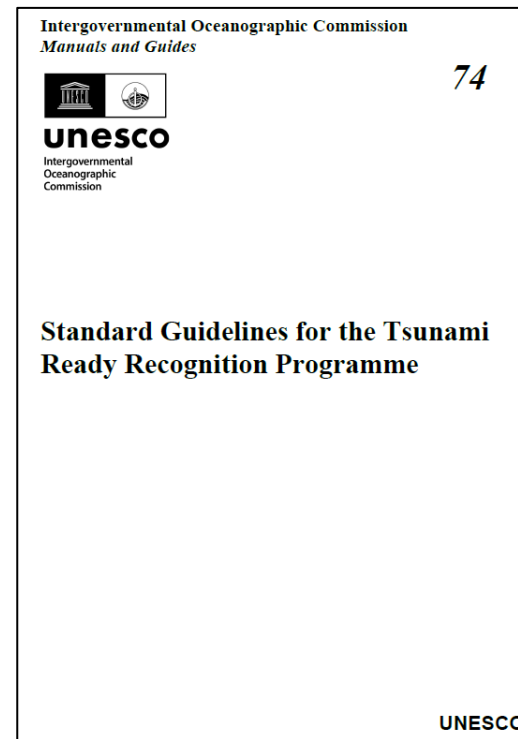
## Manual and Guides

### Manual and Guide No 58



<https://unesdoc.unesco.org/ark:/48223/pf0000218967>

### Manual and Guide No 74



<https://oceanexpert.org/downloadFile/50068>

### Manual and Guide No 76



<https://unesdoc.unesco.org/ark:/48223/pf0000256552>

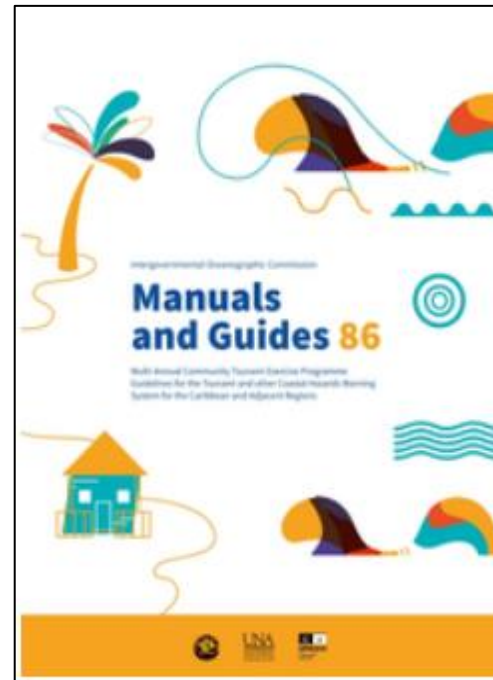
# Tsunami Ready Tools

## Manual and Guide No 82



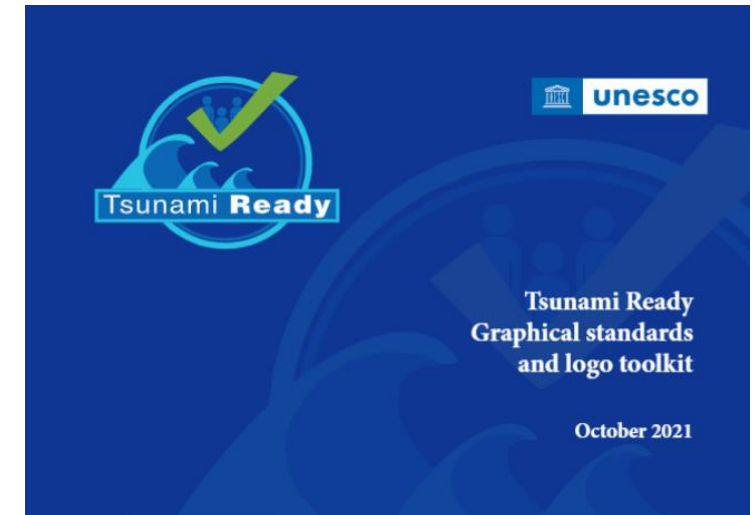
<https://unesdoc.unesco.org/ark:/48223/pf0000373019?posInSet=17&queryId=947ca611-1880-4ded-bb5a-4bd61c93c161>

## Manual and Guide No 86



Multi-annual community tsunami exercise programme: guidelines for the tsunami and other coastal hazards warning system for the Caribbean and Adjacent Regions

<https://unesdoc.unesco.org/ark:/48223/pf000380540.locale=en>

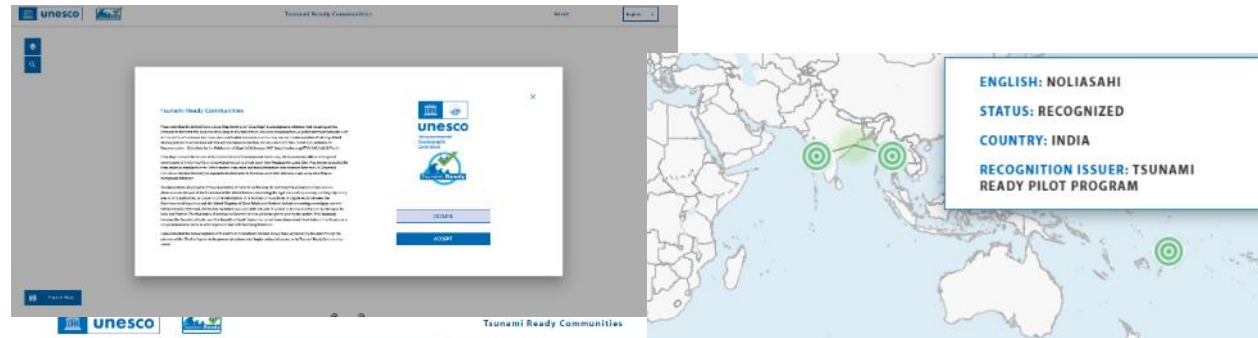


Use of the Tsunami Ready logo would need to request the approval from UNESCO/IOC Tsunami Unit. Please contact: [ioc-tsu@unesco.org](mailto:ioc-tsu@unesco.org) for permission.

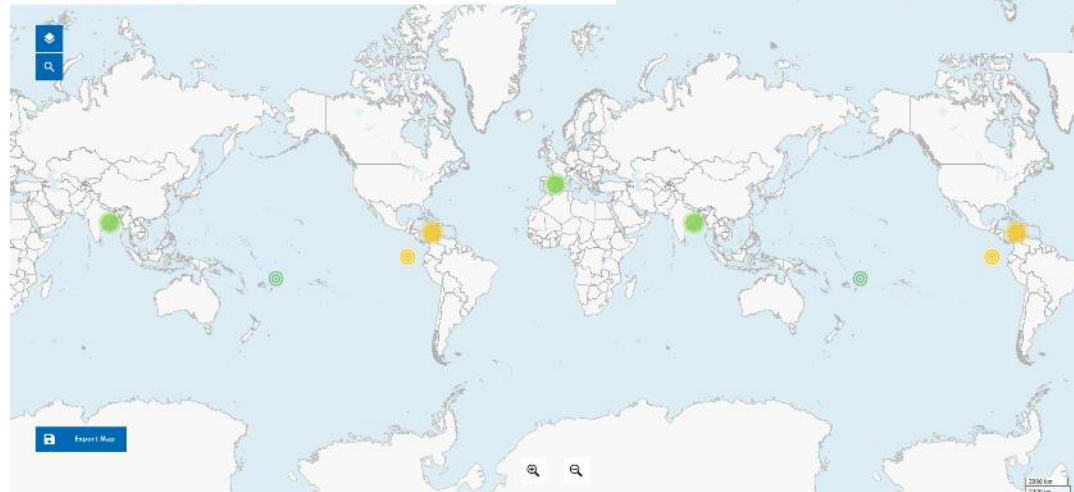
<https://unesdoc.unesco.org/ark:/48223/pf0000380936>

# Tsunami Ready Tools

## Global Tsunami Ready Map



<https://tsunamireadyviewer.ioc-tsunami.org/>



# Tsunami Ready Tools



## Tsunami Ready Website

The screenshot shows the ITIC website interface. At the top, there are navigation links for UNESCO, IOC, IOC Tsunami, NOAA, US Tsunami, and NOAA Tsunami. The main header features the ITIC logo and the text 'International Tsunami Information Center' over a background image of a tsunami wave. Below the header, there is a breadcrumb trail: 'You are here: Home > Intergovernmental > UNESCO/IOC Tsunami Ready Programme'. A search bar is located on the right side of the header.

**Home**  
Contact ITIC  
General Info  
World Tsunami Day  
Hawaii Information  
American Samoa Info  
About Tsunamis  
Am I in Danger?  
What to Do?  
Aware, Educate  
Photo, Video, Graphic  
Quick Info - Media  
FAQs  
About ITIC  
Technical Info  
Current Warnings  
About Warnings  
Tsunami Events  
Earthquake Monitors  
Sea Level Monitors  
Research  
Meetings  
Tools & Products  
Library  
ITST Tsunami Survey  
Marine Ports Guide  
Vertical Evac Guide

### UNESCO/IOC Tsunami Ready Programme

- Caribbean
- Pacific
- Indian Ocean
- North Atlantic and Mediterranean
- Background
- Pilot Programme

### UNESCO/IOC Tsunami Ready Recognition Programme

The logo consists of a blue wave graphic on the left and a green checkmark on the right, both contained within a blue rectangular border. Below the graphic, the text 'Tsunami Ready' is written in white on a blue background. To the left of the logo is the UNESCO logo and the text 'Intergovernmental Oceanographic Commission'.

**UNESCO/IOC** **NOAA**

**IOC Tsunami Information Centres**

**ITIC** **CTIC**

**IOTIC** **NEAMTIC**

**ITIC CARIBBEAN OFFICE (ITIC-CAR)**

**Quick Links**

[http://itic.ioc-unesco.org/index.php?option=com\\_content&view=category&id=2234&Itemid=2758](http://itic.ioc-unesco.org/index.php?option=com_content&view=category&id=2234&Itemid=2758)

# Tsunami Ready Tools

## Tsunami Ready Posters

### UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME

A voluntary international community-based programme

Active collaboration of the community, community leaders, warning centre, and local and national emergency management agencies

The concept of readiness through actions to meet 12 key indicators

Part of an end-to-end tsunami early warning and mitigation system with a particular focus on building resilient communities through awareness and preparedness strategies

### UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME

Bringing the ownership of preparedness to the community

Ensures structural, systematic, and sustainable approach in building community preparedness

Strengthen preparedness for other hazards

Improves community pre-planning

### UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME

CONTRIBUTES TO GLOBAL FRAMEWORKS :

SDG      SFDRR      UNDOS

### GET YOUR COMMUNITY TSUNAMI READY

#### Tsunami Ready in The Caribbean

The UNESCO/IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions comprises 46 Member States and 140 islands and special territories.

Some 15 communities in 12 countries are recognized as Tsunami Ready. More communities are preparing to become Tsunami Ready through collaboration by national and community authorities, the UNESCO/IOC Caribbean Tsunami Information Centre, donors, regional partners and other stakeholders.

For more information or to initiate Tsunami Ready in the Caribbean, contact CTC, via [ctc@unesco.org](mailto:ctc@unesco.org) or visit [www.ctc@unesco.org](http://www.ctc@unesco.org)

### GET YOUR COMMUNITY TSUNAMI READY

#### Tsunami Ready in Indian Ocean

There are 26 Member States in the Indian Ocean under the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/INWATWS).

Two Communities in India, Varkkadipal and Nollasah, and one Community in Indonesia, Tanjung Banes, have been recognized as Tsunami Ready.

For more information or to initiate Tsunami Ready in the Indian Ocean, contact The Indian Ocean Tsunami Information Centre of UNESCO/IOC via [ioct@unesco.org](mailto:ioct@unesco.org) or visit [www.ioct@unesco.org](http://www.ioct@unesco.org)

### GET YOUR COMMUNITY TSUNAMI READY

#### Tsunami Ready in Northeast Atlantic and The Mediterranean Seas

There are 40 North-Eastern Atlantic, Mediterranean and connected Seas (NEAM) Member States under the Intergovernmental Coordination Group for the North-Eastern Atlantic, Mediterranean and Connected Seas Tsunami Warning and Mitigation System (ICG/NEAMTWS).

Italy, Spain, France, Turkey, Malta, Cyprus, Morocco, Egypt and Greece are in process of implementing the ICG/NEAMTWS Tsunami Ready Programme.

For more information or to initiate Tsunami Ready in the NEAM, contact The North Eastern Atlantic, Mediterranean and Connected Seas Tsunami Information Centre of UNESCO/IOC via [neamtws@unesco.org](mailto:neamtws@unesco.org) or visit [www.neamtws@unesco.org](http://www.neamtws@unesco.org)

### GET YOUR COMMUNITY TSUNAMI READY

#### Tsunami Ready in The Pacific

There are 46 Member States in the Pacific Ocean and its marginal seas under the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS).

Ten communities in five countries (Costa Rica, El Salvador, Guatemala, Honduras, Samoa) have been recognized as Tsunami Ready. An additional 30 communities in 10 countries are in the process.

For more information or to initiate Tsunami Ready in the Pacific, contact The International Tsunami Information Centre of UNESCO/IOC (ITIC) via [itic@unesco.org](mailto:itic@unesco.org) or visit [www.itic@unesco.org](http://www.itic@unesco.org)

The ITIC is a joint partnership of the IOC and US NOAA.

### UNITED NATIONS DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

#### Safe Ocean

... in coastal area and ocean that is understood, observed, and can be predicted, and where the people can continue to interact with the sea for their livelihood and lifestyle without having the fear of coastal hazards (tsunami), as they already have the awareness, knowledge, preparedness, skills, and abilities to safe themselves in case of an emergency (tsunami)

### UNITED NATIONS DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

#### Safe Ocean

... with the aim of making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO/IOC Tsunami Ready Programme

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

1 ASSESSMENT 1  
Tsunami hazard zones are mapped and designated

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

4 PREPAREDNESS 1  
Easily understood tsunami evacuation maps are approved

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

8 PREPAREDNESS 5  
A community tsunami exercise is conducted at least every two years

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

9 RESPONSE 1  
A community tsunami emergency response plan is approved

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

2 ASSESSMENT 2  
The number of people at risk in the tsunami hazard zone is estimated

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

5 PREPAREDNESS 2  
Tsunami information including signage is publicly displayed

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

7 PREPAREDNESS 4  
Outreach or educational activities are held at least three times a year

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

10 RESPONSE 2  
The capacity to manage emergency response operations during a tsunami is in place

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

3 ASSESSMENT 3  
Economic, infrastructural, political, and social resources are identified

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

6 PREPAREDNESS 3  
Outreach and public awareness and education resources are available and distributed

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

11 RESPONSE 3  
Redundant and reliable means to timely receive 24-hour official tsunami alerts are in place

### GET YOUR COMMUNITY TSUNAMI READY

#### UNESCO/IOC Tsunami Ready Indicators

12 RESPONSE 4  
Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public are in place

## 21 E-Posters Tsunami Ready

# Tsunami Ready Tools

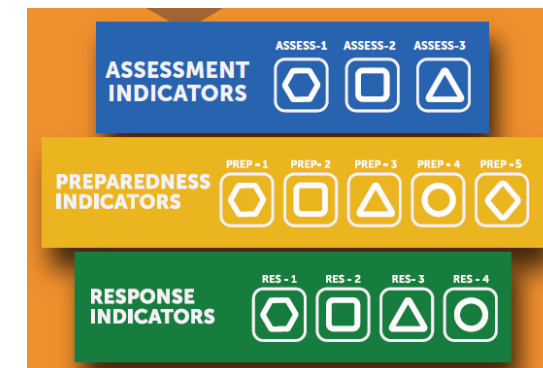
## Tsunami Ready Game



- Could be played in different levels
1. Beginner ( $\pm 1$  hour)
  2. Middle ( $\pm 2$  hours)
  3. Advanced ( $\geq 2$  hours)

Cards 375 ( $\pm 300$  questions, 75 instructions)

To introduce the 12 Tsunami Ready Indicators to the stakeholders (12 + years)

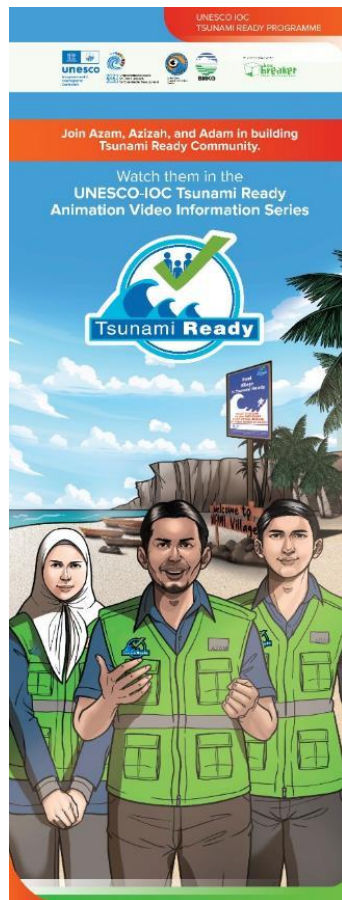


# Tsunami Ready Tools

## Tsunami Ready Videos

### Story line:

Following the journey of Azam, Azizah, and Adam in building their Village “Nami” to be a Tsunami Ready Community based on UNESCO-IOC Tsunami Ready Indicators



- Video 1: Tsunami Ready (an introduction) **+ 7:10 minutes**
- Video 2: Tsunami Hazard for Tsunami Ready Community **+ 8:02 minutes**
- Video 3: Knowing people at risk of tsunami **+ 4:48 minutes**
- Video 4: Resource and capacity for Tsunami Ready Community **+ 6:57 minutes**
- Video 5: Public Tsunami Information in Community **+ 5:32 minutes**
- Video 6: Tsunami Evacuation Map for the community **+ 5:15 minutes**
- Video 7: Public Awareness and Education Resources **+ 5:07 minutes**
- Video 8: Outreach Activities in Tsunami Ready Community **+ 4:39 minutes**
- Video 9: Community Tsunami Exercise **+ 6:49 minutes**
- Video 10: Community Tsunami Emergency Operation Plan **+ 5:28 minutes**
- Video 11: Building Capacity in community for Emergency Response **+ 7:50 minutes**
- Video 12: Linking the Community to the Tsunami Warning Chain **+ 4:40 minutes**
- Video 13: Providing warning to the community **+ 5:27 minutes**
- Video 14: Getting Tsunami Ready Recognition **+ 6:50 minutes**

IOTIC YouTube Channel: <https://www.youtube.com/channel/UCFSPN4dJXOvFrMIkmlQdumQ>

Playlist: <https://www.youtube.com/playlist?list=PLDzuUvIHTE3BLFcGDGXAkwCdTQ6VngH>



# Tsunami Ready Tools



## Tsunami Ready Online Lecture Series

**Tsunami Ready  
Online Lecture  
Series Recording**



**FB IOTIC : <https://www.facebook.com/iotsunami>**

**IG IOTIC : <https://www.instagram.com/iotsunami/>**

**YouTube IOTIC: <https://www.youtube.com/user/iotsunami>**

**Twitter IOTIC : <https://twitter.com/iotsunami>**

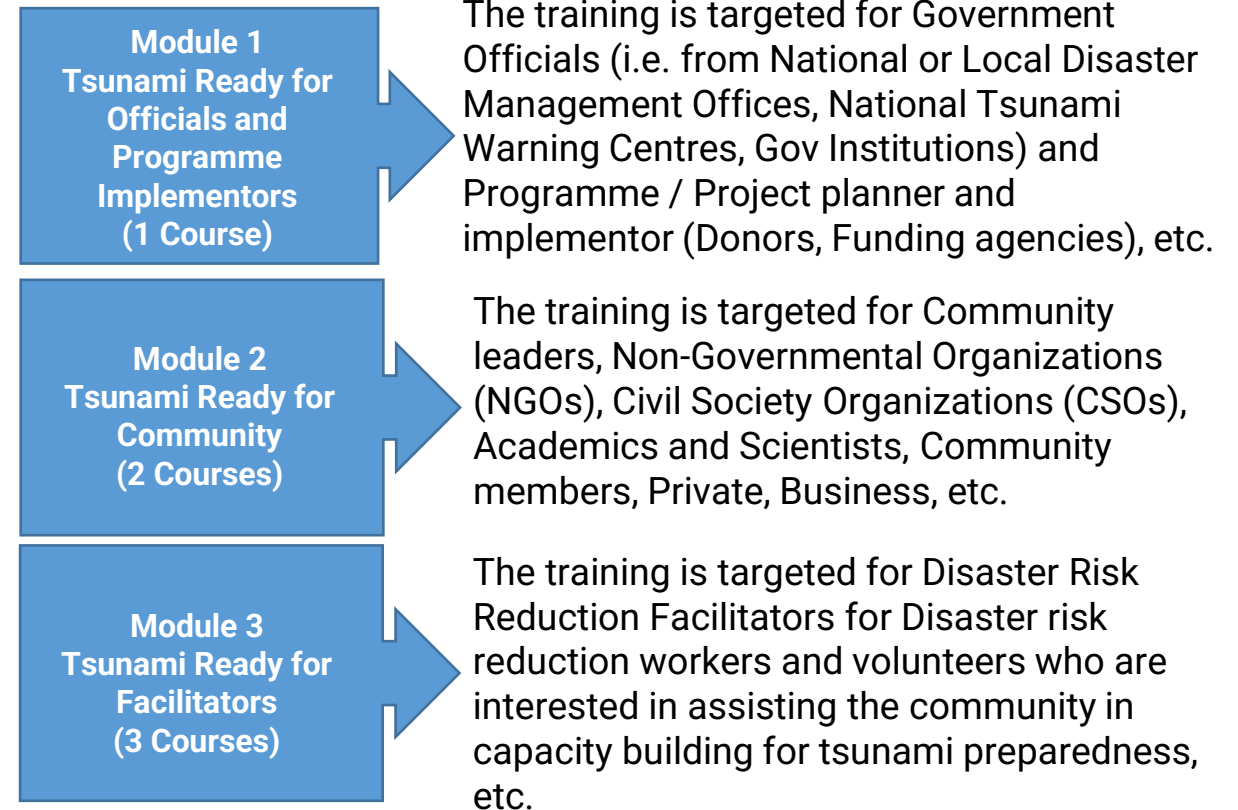
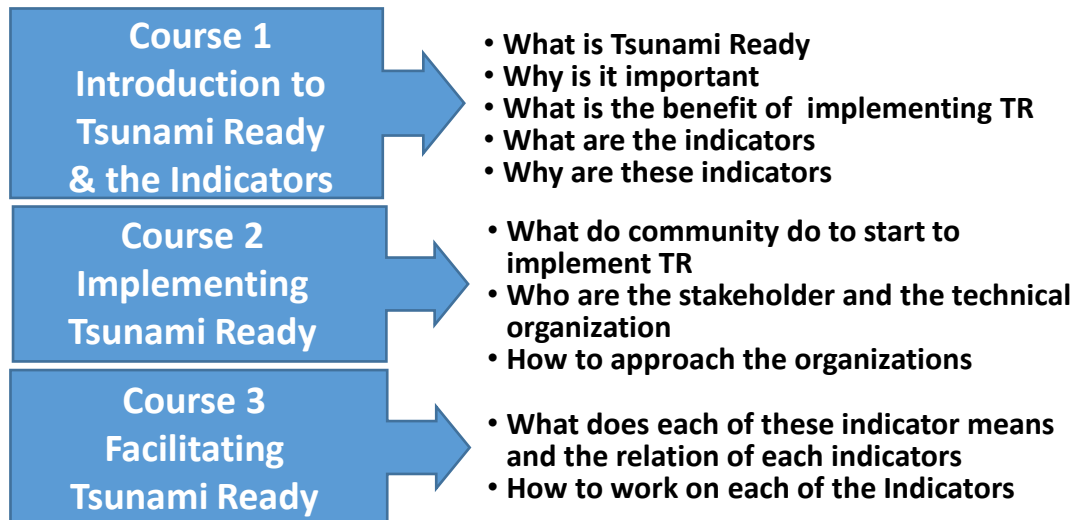
# Tsunami Ready Tools

## Tsunami Ready Courses (available in 2023/2024)

3 Course breakdown

	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

3 Types of modules



# Tsunami Ready Tools

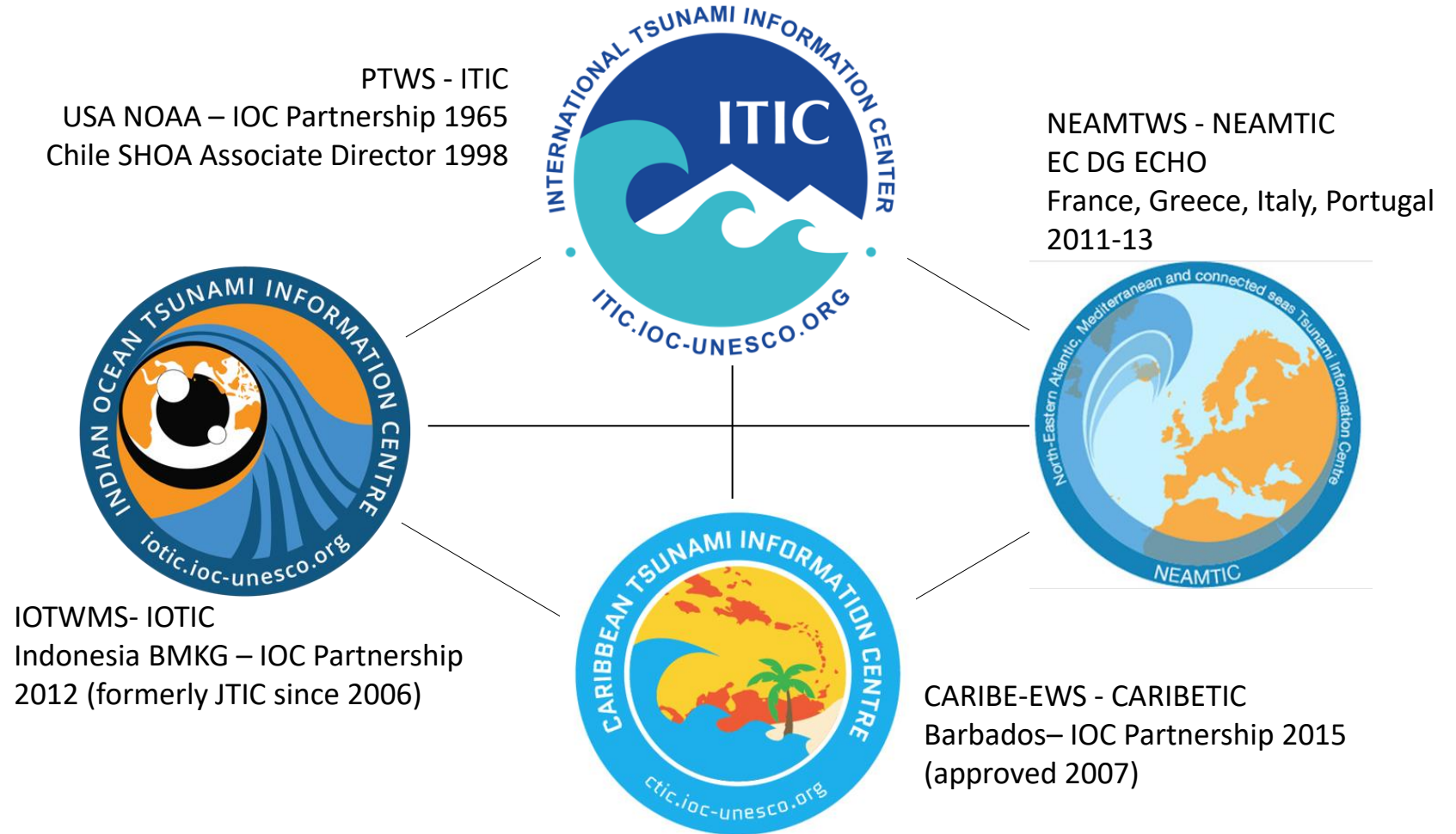
## Tsunami Ready Links



# Tsunami Ready Supports

## Tsunami Information Centers

TIC to advocate, facilitate, guide, and support the member states in the Tsunami Ready Implementation through trainings, workshops, or capacity building as needed (regional and/or national).



# Tsunami Ready Supports



## 9 Komunitas Siaga Tsunami di Indonesia Telah Diakui Sebagai Komunitas Siaga Tsunami oleh UNESCO - IOC



# Tsunami Ready Supports

## Field Verification of a Tsunami Ready Community

### Lolong Belanti Village



<b>Location</b>	Padang, West Sumatera - Indonesia
<b>Population</b>	6.515 (daytime ± 2.000)
<b>Population in Inundated Area</b>	6.515 (daytime ± 2.000)
<b>Administrative Level</b>	Village ( <u>Kelurahan</u> )
<b>Year Implement 12 Indicator</b>	2022
<b>Tsunami Ready Recognition</b>	2022
<b>Characteristics</b>	Urban
<b>Village DRR</b>	<u>KSB Langit</u>

### Challenges

- The entire village is under inundated area.
- Need to rely on Vertical Evacuation
- Limited Tsunami Evacuation Shelter.
- Education facilities with students from outside of the village

### Best Practices Interesting Development

- Door to door outreach activity for awareness and preparedness.
- Local awareness, preparedness, and education material.
- School preparedness programme.

### Key Success Factors

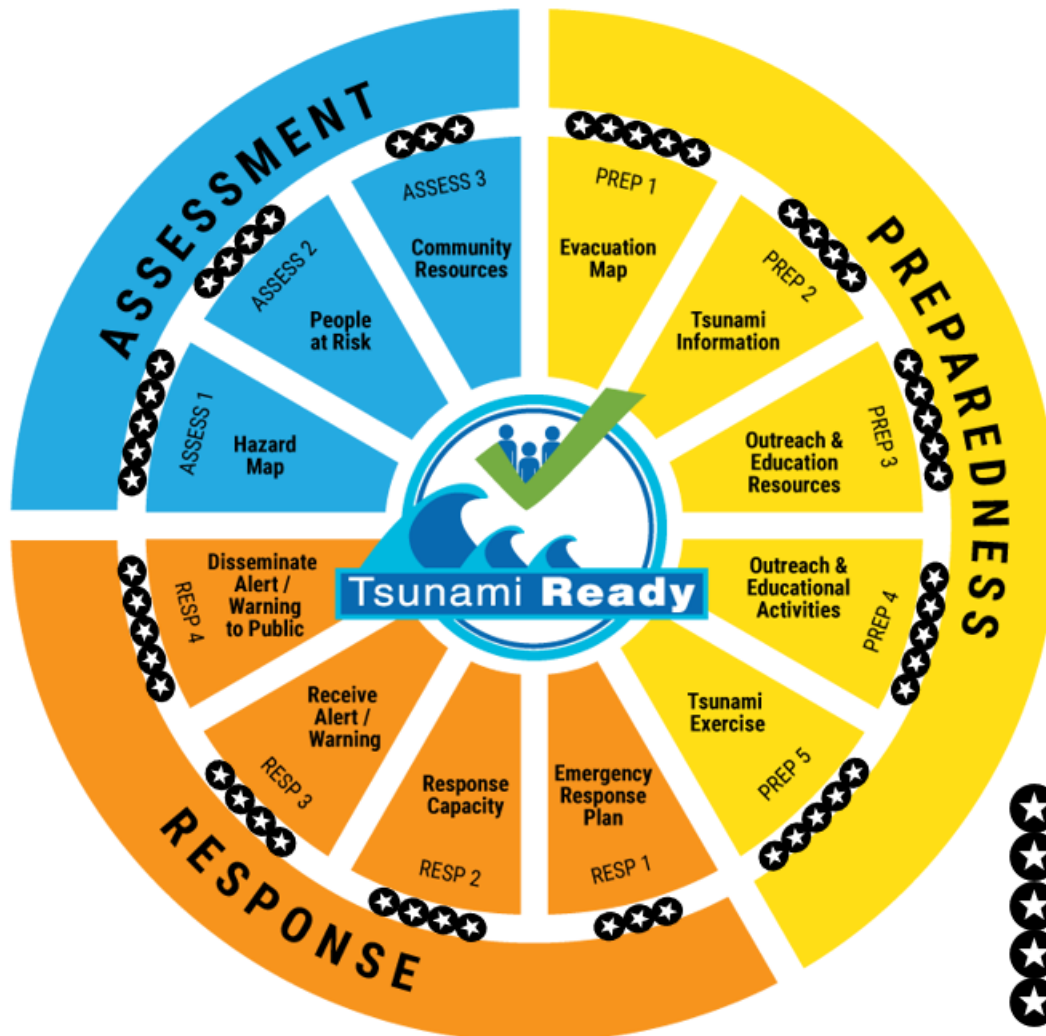
- Strong leadership (government, NGO, and Community member).
- Strong vertical support from the local government (Pemda, BPBD).
- Strong local NGO (KOGAMI) engagements.
- Strong support from BMKG (Jakarta and Station Office).
- Strong cultural (Matriarchy) influence in the community. Women participation.

### Tsunami Preparedness Background

- Local NGO, KOGAMI, who has been working on Community Tsunami Preparedness since 2006.
- Experience devastating earthquake in 2009.
- GIZ, UNESCO, DESTANA, and Sekolah Lapang Gempa activities in Padang

# Tsunami Ready Supports

## Lolong Belanti Village



### Main Recommendation

- To improve the Emergency Response Plan document to include the workflow and SOP for community self-evacuation protocol.
- To improve the response capacity especially in evacuation procedure and management.
- To identify the number of students of the educational facilities in the village.
- To increase the number and renew the tsunami route signs and tsunami information boards
- To include the agree - designated Tsunami Evacuation Shelter that is located outside the village in the tsunami evacuation plan.
- To continue outreach and education activities especially for students from outside the village studying in the schools / university located in the village

- ★ Not available
- ★★ Major Improvement
- ★★★ Improvement in 1 year
- ★★★★ Small Improvement
- ★★★★★ To Be Maintained



**unesco**

Intergovernmental  
Oceanographic  
Commission



**Please follow us on:**



[iotic.ioc-unesco.org](http://iotic.ioc-unesco.org)  
[www.iotsunami.org](http://www.iotsunami.org)



[facebook.com/iotsunami](https://facebook.com/iotsunami)



[iotsunami](https://instagram.com/iotsunami)



[@iotsunami](https://twitter.com/iotsunami)



[youtube.com/iotsunami](https://youtube.com/iotsunami)



[iotic@unesco.org](mailto:iotic@unesco.org)

***Ardito Kodijat***  
***a.kodijat@unesco.org***

*IOC/UNESCO Indian Ocean Tsunami Information Centre*  
*IOTIC-BMKG Programme Office*  
*UNESCO Office Jakarta*