



UNESCO-IOC / NOAA ITIC Training Program in Hawaii (ITP-TEWS Hawaii)  
 TSUNAMI EARLY WARNING SYSTEMS  
 AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS  
 TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME  
 15-26 September 2025, Honolulu, Hawaii

# 12.1 Implementing Tsunami Ready programs to recognize community readiness - UNESCO IOC Tsunami Ready Recognition Programme - Guidelines, Recognition Process (IOC MG 74)

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Pacific Community  
 Communauté du Pacifique

# Introduction

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## UNESCO-IOC Ocean Decade Tsunami Programme

OCEAN DECADE TSUNAMI PROGRAMME  
Seeking Major Advances in SCIENCE and PREPAREDNESS

THE MAIN SOCIAL OUTCOME

TO MAKE  
**100%**

OF COMMUNITIES AT RISK OF  
TSUNAMI PREPARED FOR AND  
RESILIENT TO TSUNAMIS

BY  
**2030**



# Introduction

The UNESCO-IOC Tsunami Ready Recognition Programme is:

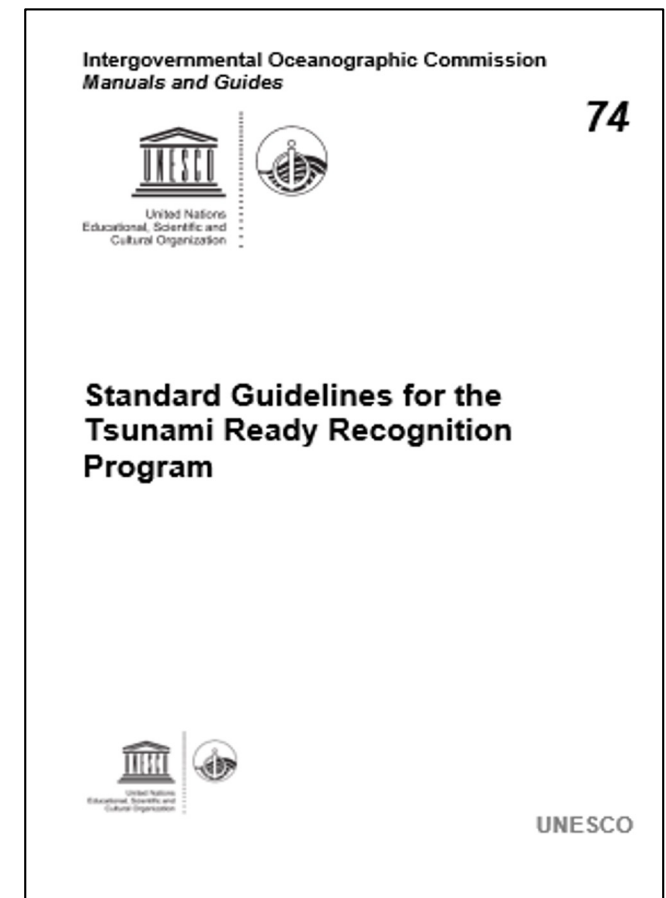
- a voluntary international performance-based community programme.
- Facilitated by UNESCO-IOC Tsunami Information Centres\* (CTIC, IOTIC, ITIC, and NEAMTIC) of each region
- a formal recognition process follows standard guidelines (UNESCO-IOC Manual and Guide 74).

\* UNESCO-IOC Tsunami Information Centres



UNESCO/IOC-NOAA SHOA

International Tsunami Information Center



# Introduction

Successful implementation is subject to a number of conditions

**Performance Based Capacity for Emergency Response.**

**Sustainable**  
Renewed every 4 years if the indicators are sustained



**Inclusive Oversight**  
A National Tsunami Ready Board (NTRB) and Tsunami Ready Local Committee (TRLIC) involvement of stakeholders

**Structured**  
Systematic and structured approach based on 12 Indicators

**Voluntary**  
Demonstrate voluntary interest to ensure ownership and participation



# Introduction

The 12 Tsunami Ready indicators cover **Assessment, Preparedness and Response.**

To be recognized as UNESCO-IOC Tsunami Ready, the community must achieve all 12 indicators.

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UNESCO IOC TSUNAMI READY INDICATORS	
<b>I</b>	<b>ASSESSMENT (ASSESS)</b>
1	ASSESS-1. Tsunami hazard zones are mapped and designated
2	ASSESS-2. The number of people at risk in the tsunami hazard zone is estimated
3	ASSESS-3. Economic, infrastructural, political, and social resources are identified
<b>II</b>	<b>PREPAREDNESS (PREP)</b>
4	PREP-1. Easily understood tsunami evacuation maps are approved
5	PREP-2. Tsunami information including signage is publicly displayed
6	PREP-3. Outreach and public awareness and education resources are available and distributed
7	PREP-4. Outreach or educational activities are held at least three times a year
8	PREP-5: A community tsunami exercise is conducted at least every two years
<b>III</b>	<b>RESPONSE (RESP)</b>
9	RESP-1. A community tsunami emergency response plan is approved
10	RESP-2. The capacity to manage emergency response operations during a tsunami is in place
11	RESP-3. Redundant and reliable means to timely receive 24-hour official tsunami alerts are in place
12	RESP-4. Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public are in place

# Introduction

## Tsunami Ready Indicator and EW4All



# Introduction



**100** (Feb 2025, IOC TSR)  
**TSUNAMI READY COMMUNITIES**  
**23** CARIBBEAN AND ADJ REGIONS  
**48** INDIAN OCEAN  
**6** NORTH-EASTERN ATLANTIC, MEDITERRANEAN AND CONNECTED SEAS  
**23** PACIFIC OCEAN

**Tsunami Ready**

Tsunami Ready Website

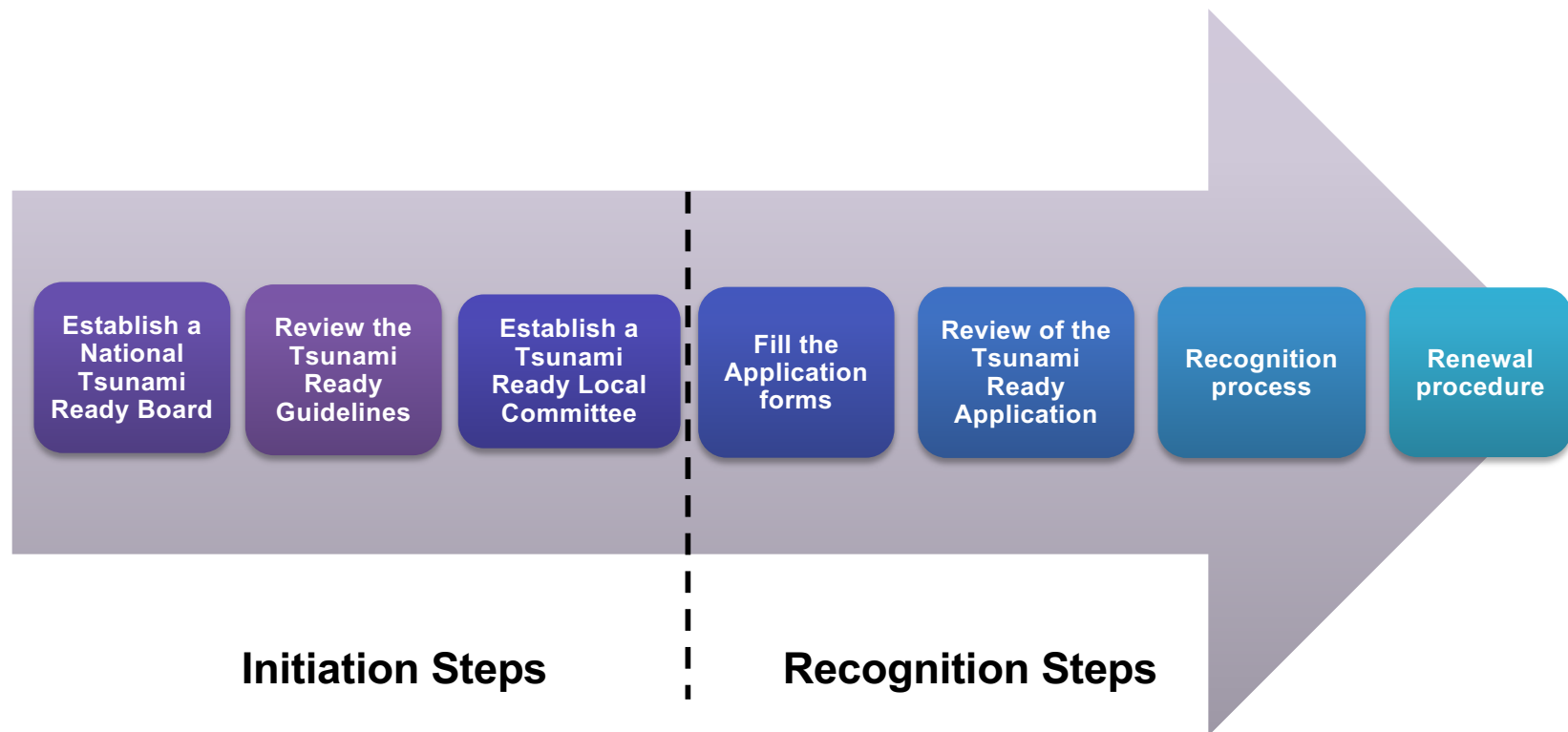
Tsunami Ready Viewer

October 2024



# Steps in the Tsunami Ready recognition process

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# National versus Regional Programme

*Tsunami Ready Recognition can be granted at the Regional or National level.*

1. National Programmes subdivide the country into a number of communities and recognize each community individually as Tsunami Ready.
  - The **Tsunami Ready Local Committee (TRLIC)** is responsible for completing the application and submitting it to the National Tsunami Ready Board (NTRB).
  - The NTRB is responsible for reviewing and approving recognition.
  - The TNC or NTRB is responsible to submit the application to UNESCO-IOC
2. Regional Programmes consider the entire country/territory as one community and recognize the country as Tsunami Ready. This situation may apply to small countries and territories.
  - The **National Tsunami Ready Board (NTRB)** is responsible for completing the application and submitting it to the Regional Tsunami Ready Board (RTRB)
  - The RTRB is responsible for reviewing and approving recognition.
  - Based on the approval of RTRB, the TNC or NTRB is responsible to submit the application to UNESCO-IOC

# The National Tsunami Ready Board (NTRB)

*The National Tsunami Ready Board is comprised of, but not limited to:*

- National Disaster Management Office (NDMO)
  - National Tsunami Warning Centre (NTWC)
  - Tsunami National Contact (TNC)
  - Other relevant national agencies.
  - Other members at the discretion of NTRB such as Regional TIC, Scientific and Technical organizations\*, Non-Governmental Organization(s), and Community Representatives.
- \* Scientific and technical organization supports:
- Hazard, inundation, and evacuation products.
  - Signage and warning infrastructure development

*Function, role, and responsibility:*

- **General oversight** of the National Programme
- **Advocate, supervise, and support** activities to implement the Programme
- **Manage resources** for the Programme
- **Maintain consistency** of the Guidelines
- **Coordinate and liaise and link** Tsunami Ready activities with other organizations\*
- **Direct and oversee** service improvements to the Tsunami Ready programme
- **Oversee** national Tsunami Ready database
- TNC or the Chair of NTRB, submits the Tsunami Ready Application to UNESCO-IOC via ICG secretariat, with copy to the TIC.
- *In the situation of entire country/territory as one Tsunami Ready application, the NTRB is responsible for completing the application and submitting it to the Regional Tsunami Ready Board (RTRB)*

*TNC informs UNESCO-IOC via the ICG secretariat, with copy to the TIC, of the establishment of the National Tsunami Ready Board*

# The Regional Tsunami Ready Board (RTRB)

In case of small countries and territories, recognition can be granted at the National/Territorial level. A Regional Tsunami Ready Board would be responsible for reviewing and approving recognition

*The Regional Tsunami Ready Board is comprised of, but not limited to, and depending on each country's settings:*

- **ICG Chair**
- **TIC Director**
- **Relevant ICG Working Group Chairs**
- **UNESCO-IOC ICG Technical Secretary**
- **Guests at the discretion of RTRB**

*Function, role, and responsibility:*

- **General oversight of Programme at ICG level.**
- Maintain guidelines.
- Review existing and proposed changes to the guidelines
- Review and approves the application of the countries
- TNC submits the Tsunami Ready Application to UNESCO-IOC via ICG secretariat, with copy to the TIC.

# The Tsunami Ready Local Committee (TRLIC)

*The Tsunami Ready Local Committee may include not be limited to, and depending on each community's setting:*

- **Local Disaster Management Office/Committee (LDMO/LDC)**
- **Other relevant local authorities**
- **Community organisations**
- **Community representative(s)**
- **NGOs and CSOs working in community-based DRR**
- **Schools, universities**
- **Private sector, e.g., hotel and business organisations**

*Functions, roles, and responsibilities include:*

- Meet regularly to plan activities and review progress
- Prepare a list of all entities that can support the Tsunami Ready programme
- Appoint representatives to oversee the implementation and maintenance of the Tsunami Ready indicators
- Develop a fully costed and resourced work plan
- Monitor implementation and review status of Tsunami Ready indicators
- Complete and submit Tsunami Ready recognition Application to the NTRB

# Recognition Steps for National Programme

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*When the community has achieved all 12 indicators and is ready to apply for recognition:*

1. TNC informs UNESCO-IOC via the ICG secretariat, with copy to the TIC, of a community's intent to be recognized as Tsunami Ready.
2. TRLC completes and submits the Application to NTRB.
3. NTRB reviews Application and sets date for site verification visit and review meeting.
4. NTRB conducts site verification and review meeting.
5. NTRB approves Application
6. TNC or the Chair of NTRB submits to UNESCO-IOC via the ICG secretariat, with copy to the TIC.

# Recognition Steps for Regional Programme

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*When the country/territory has achieved all 12 indicators and is ready to apply for recognition:*

1. TNC informs UNESCO-IOC via the ICG secretariat, with copy to the TIC, of a country/territory's intent to be recognized as Tsunami Ready.
2. The NTRB completes and submit the application to RTRB
3. RTRB reviews application and sets date for site verification visit and review meeting.
4. RTRB conduct site verification and review meeting.
5. RTRB approves Application.
6. TNC or the Chair of NTRB submits the RTRB's approved application to UNESCO-IOC via the ICG secretariat, with copy to the TIC.

# Recognition Steps for Regional Programme

Community Contact Information			
Country	Locality/City/Town	Total amount of population	Amount of population to be evacuated
Primary Point of Contact		Secondary Point of Contact	
Full Name		Full Name	
Office / Institution		Office / Institution	
Title		Title	
Mailing Address		Mailing Address	
City		City	
State, ZIP		State, ZIP	
Phone		Phone	
Email		Email	
1. Please add any important information as contact details.			
2. Information regarding the Tsunami Ready Local Committee can be added in this box: (members' titles, date of its establishment, institutions represented, key stakeholders, donors, etc.).			

National Tsunami Ready Board - NTRB		
Country	Total amount of population of the country	Date of establishment of the NTRB
Contact information of the NTRB Chair		
Full Name		
Office / Institution		
Title		
Mailing Address		
City		
State, ZIP		
Phone		
Email		
List of members of the NTRB <sup>7</sup> (please indicate: name, institution and title)		
1.		
2.		
3.		
4.		
5.		
UNESCO/IOC ICG Technical Secretary contacted:		
Please add any important information:		

III. Preparation Indicators (PREP)	
PREP 1	Produce easily understood tsunami evacuation maps as determined to be appropriate by local authorities. <input type="checkbox"/> Verified <input type="checkbox"/> Print <input type="checkbox"/> Digital media <input type="checkbox"/> Other
PREP 2	Develop and distribute outreach and public education materials. Distribution should use <b>three or more wide-reaching diverse methods</b> . <input type="checkbox"/> Verified <input type="checkbox"/> Brochures/flyers distributed at public venues <input type="checkbox"/> Websites/social media <input type="checkbox"/> Local faith-based and civic organization bulletins/mailings <input type="checkbox"/> Billboard, roadside, highway, or educational signs <input type="checkbox"/> Local radio and television <input type="checkbox"/> Public utility/service industry bill safety notices <input type="checkbox"/> Bulk email <input type="checkbox"/> Historical markers and interpretive signs <input type="checkbox"/> Newspaper Inserts <input type="checkbox"/> Other
PREP 3	<b>Annually</b> hold at least three tsunami outreach or education activities. <input type="checkbox"/> Verified <input type="checkbox"/> Leverage of national, state, or regional campaigns through use of social media <input type="checkbox"/> Multi-hazard events or presentations <input type="checkbox"/> Booth at community events and/or fairs <input type="checkbox"/> Community tsunami safety workshops, town hall, or similar public/private meetings <input type="checkbox"/> Media workshops <input type="checkbox"/> Door to door safety campaigns targeted to people leaving or working in the tsunami hazard zone <input type="checkbox"/> Other
PREP 4	Conduct a biennial tsunami community exercise with its subsequent evaluation. <input type="checkbox"/> Verified

Annex 2 page 1 - 9

# Steps for International Recognition by UNESCO-IOC

*If the NTRB/RTRB approves the community's Tsunami Ready application, the TNC or the Chair of NTRB informs UNESCO-IOC via the ICG Technical Secretary for the region and the TIC*

1. Application verification by Tsunami Information Centre.
2. UNESCO-IOC sends signed Tsunami Ready Recognition and Appreciation certificates to the TNC.
3. A Tsunami Ready recognition ceremony may be held to celebrate the accomplishment and recognise local stakeholders.







Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)

# *Certificate of Recognition*

## **Kuta Mandalika Village West Nusa Tenggara, INDONESIA**

For successfully implementing the UNESCO IOC Tsunami Ready Programme  
In Kuta Mandalika Village, West Nusa Tenggara – Indonesia  
12 December 2022

Vladimir Ryabinin, PhD  
Asistant Director General and Executive Secretary  
UNESCO

Prof. Dr. Dwikorita Karnawati  
Chair  
Indonesian National Tsunami Ready Board

Prof. Dr. Dwikorita Karnawati  
Chair  
UNESCO-IOC Intergovernmental Coordination  
Group for Indian Ocean Tsunami Warning and  
Mitigation System

Annex 3





Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)

# *Certificate of Appreciation*

## **Ade Malizar, S.Sos.**

### **Head of Disaster Prevention and Preparedness for LDMO Padang**

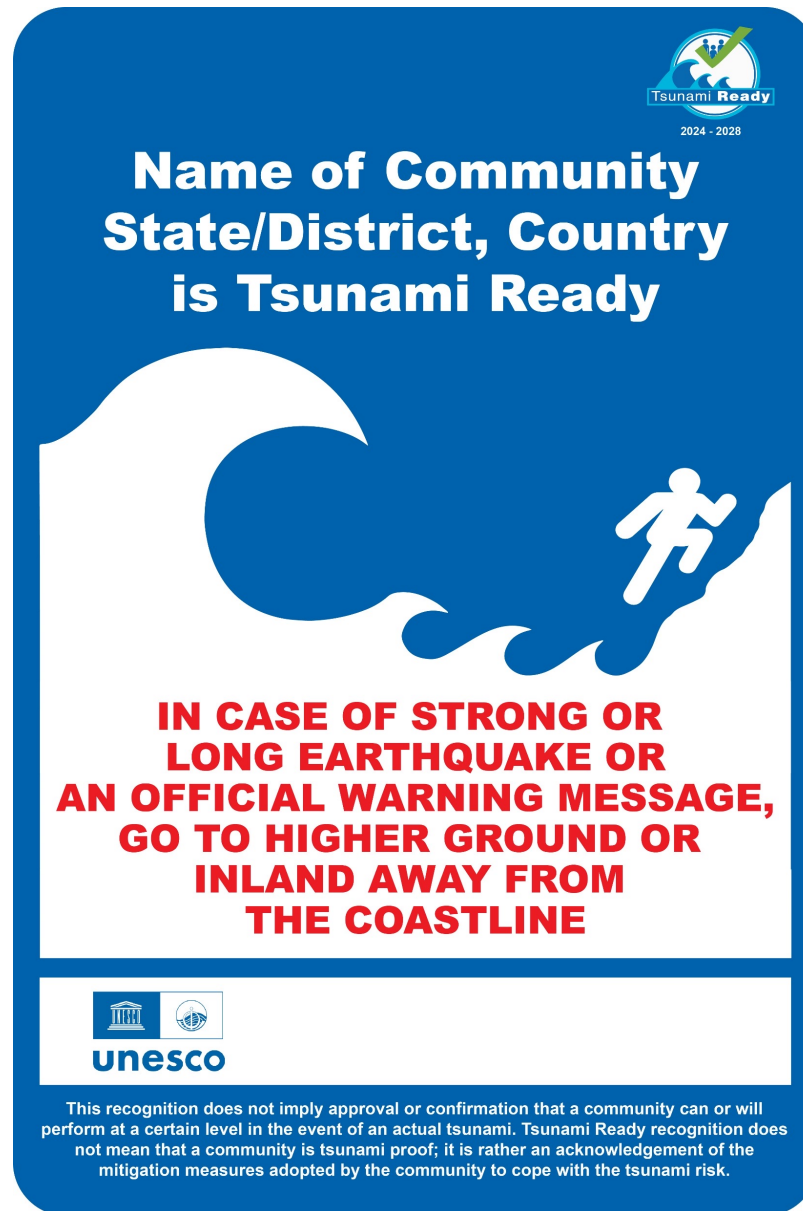
For his support as facilitator in implementing the UNESCO IOC Tsunami Ready Programme in Kelurahan Purus, Padang West Sumatera - Indonesia  
20 December 2022

Vladimir Ryabinin, PhD  
Asistant Director General and Executive Secretary  
UNESCO

Prof. Dr. Dwikorita Karnawati  
Chair  
Indonesian National Tsunami Ready Board

Prof. Dr. Dwikorita Karnawati  
Chair  
UNESCO-IOC Intergovernmental Coordination  
Group for Indian Ocean Tsunami Warning and  
Mitigation System

# Tsunami Signage Standard (Option 1)



## Annex 4



# Tsunami Signage Standard

## Types of Tsunami Ready Community Evacuation Strategy

<b>Local Tsunami</b> Where the community feels the earthquake	<b>The safe place is on higher ground and further inland</b>	<b>IN CASE OF STRONG OR LONG EARTHQUAKE OR AN OFFICIAL TSUNAMI WARNING, GO TO HIGHER GROUND OR INLAND</b>
	<b>There is no higher ground, only further inland.</b>	<b>IN CASE OF STRONG OR LONG EARTHQUAKE OR AN OFFICIAL TSUNAMI WARNING, GO FURTHER INLAND</b>
	<b>The evacuation strategy is only vertical evacuation.</b>	<b>IN CASE OF STRONG OR LONG EARTHQUAKE OR AN OFFICIAL TSUNAMI WARNING, GO TO THE (number) FLOOR OR ABOVE OF THE NEAREST CONCRETE BUILDING / GO TO (Name of Building)</b>
<b>Distant Tsunami</b> Where the community do not feel the earthquake	<b>The safe place is on higher ground or further inland</b>	<b>IN CASE OF AN OFFICIAL TSUNAMI WARNING, GO TO HIGHER GROUND OR INLAND</b>
	<b>There is no higher ground, only further inland.</b>	<b>IN CASE OF AN OFFICIAL TSUNAMI WARNING, GO FURTHER INLAND</b>
	<b>The evacuation strategy is only vertical evacuation.</b>	<b>IN CASE OF AN OFFICIAL TSUNAMI WARNING, GO TO THE (number) FLOOR OR ABOVE OF THE NEAREST CONCRETE BUILDING / GO TO (Name of Building)</b>



# Tsunami Signage Standard

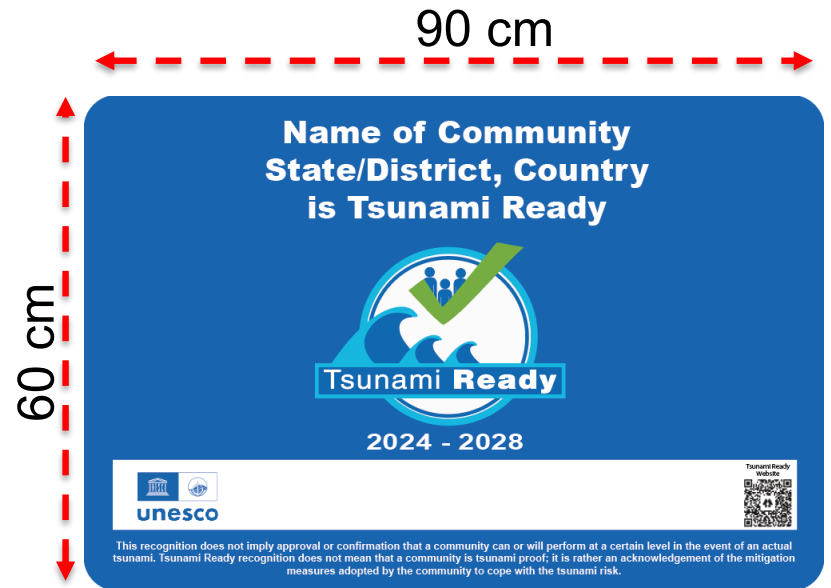




Vertical



Square



Horizontal



# Examples of Tsunami Ready Recognition Ceremony



# Renewal procedure

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*Although not mandatory, renewal of recognition is encouraged to maintain a high level of preparedness in the community and the initial selection process should make this clear.*

- Tsunami Ready recognition is valid 4 years and can be renewed.
- Over the 4-year period, maintenance, advancement, and improvements should be recorded and reported to NTRB/RTRB. The community is encouraged to participate in the biennial regional IOC WAVE exercises.
- TRLC submits renewal Application and updated information to NTRB.
- In the situation of the entire county/territory, the NTRB submits the renewal application and updated information to RTRB.
- The same application form and steps will be conducted as for initial recognition.



# Resource requirements

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*The resources required for implementing Tsunami Ready will vary from country to country and community to community. For example, a community with hazard maps and alert systems will require less resources than a community without these. Implementing cost could vary from few thousand to over USD100,000.*

*Typically Tsunami Ready can be implemented in one year.*

When implementing the following resources (human and funding) may be needed:

1. Organization and coordination of Tsunami Ready
2. Production and update of maps, plans, signage and educational and awareness materials
3. Tsunami Ready deliverables and activities

# Challenges

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*Implementing Tsunami Ready involves many actors at regional, national, and local level, some of the challenges are:*

- Convincing community and all stakeholders to implement Tsunami Ready.
- Lack of resources for community capacity building.
- Other hazards deemed to be higher priority
- Limited time of staff for oversight and implementation
- UNESCO-IOC Tsunami Ready viewed as being redundant to other National Programme.
- Need to build ownership within the community - disaster is often viewed as the responsibility of the authorities not the community.



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# Thank You

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