



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-Hawaii)
 TSUNAMI EARLY WARNING SYSTEMS
 AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
 TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
 7-18 August 2023, Honolulu, Hawaii USA

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

Ardito Kodijat

IOC/UNESCO - Indian Ocean Tsunami Information Centre
 UNESCO Office Jakarta
 a.kodijat@unesco.org



Introduction

The UNESCO-IOC Tsunami Ready Recognition Programme is:

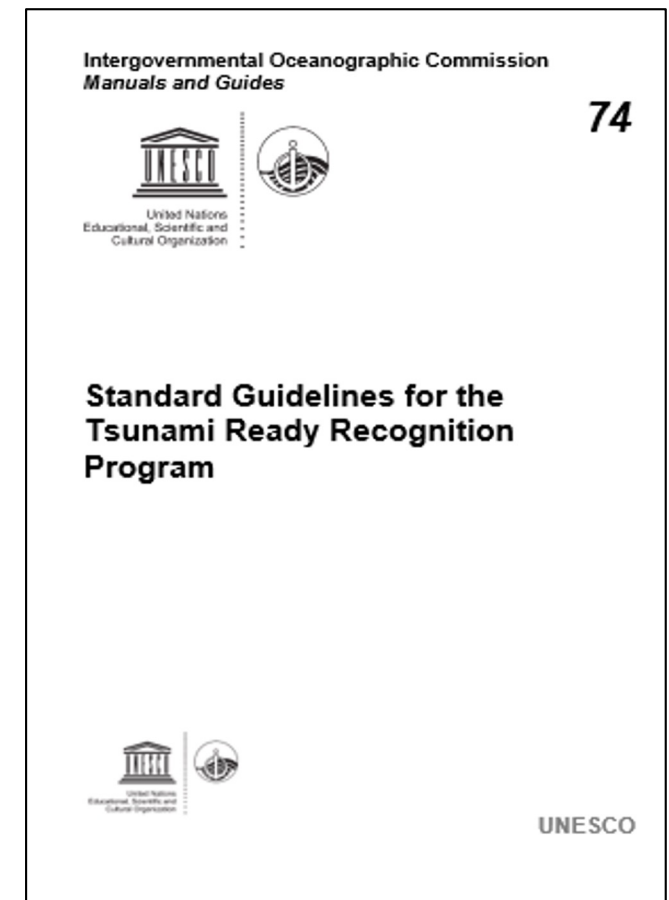
- a voluntary international performance-based community programme.
- Facilitated by UNESCO-IOC Tsunami Information Centres* (CTIC, IOTIC, ITIC, and NEAMTIC) of each region
- a formal recognition process follows standard guidelines (UNESCO-IOC Manual and Guide 74).

* UNESCO-IOC Tsunami Information Centres



UNESCO/IOC-NOAA SPOA

International Tsunami Information Center



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.

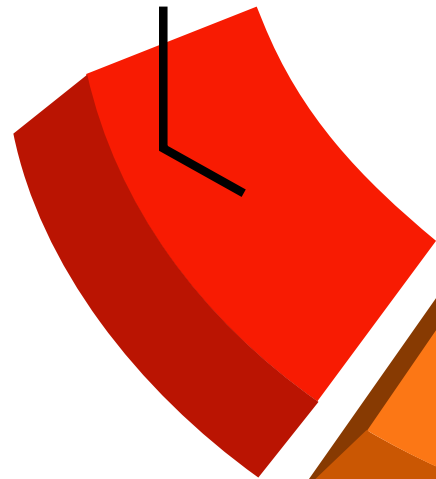
UNESCO IOC TSUNAMI READY INDICATORS	
I	ASSESSMENT (ASSESS)
1	ASSESS-1. Tsunami hazard zones are mapped and designated
2	ASSESS-2. The number of people at risk in the tsunami hazard zone is estimated
3	ASSESS-3. Economic, infrastructural, political, and social resources are identified
II	PREPAREDNESS (PREP)
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
III	RESPONSE (RESP)
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

Successful implementation is subject to a number of conditions

Inclusive Oversight

A National Tsunami Ready Board (NTRB) established.



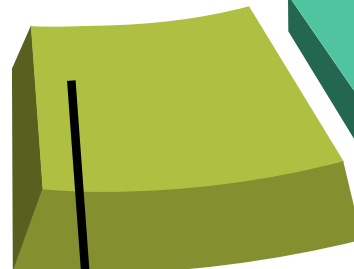
Inclusive Oversight

A Tsunami Ready Local Committee (TRLIC) involvement of stakeholders



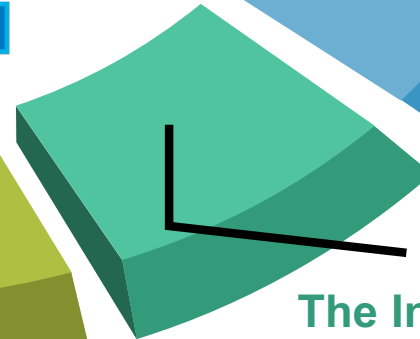
Voluntary

Demonstrate voluntary interest to ensure ownership and participation



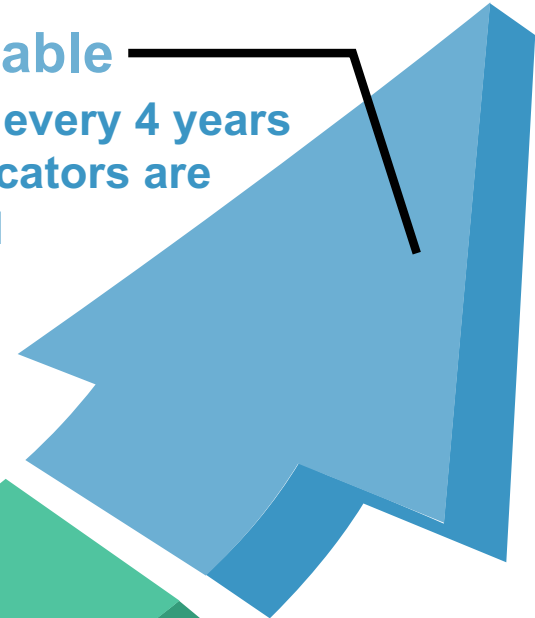
Sustainable

The Indicators should be sustained at least for 4 years

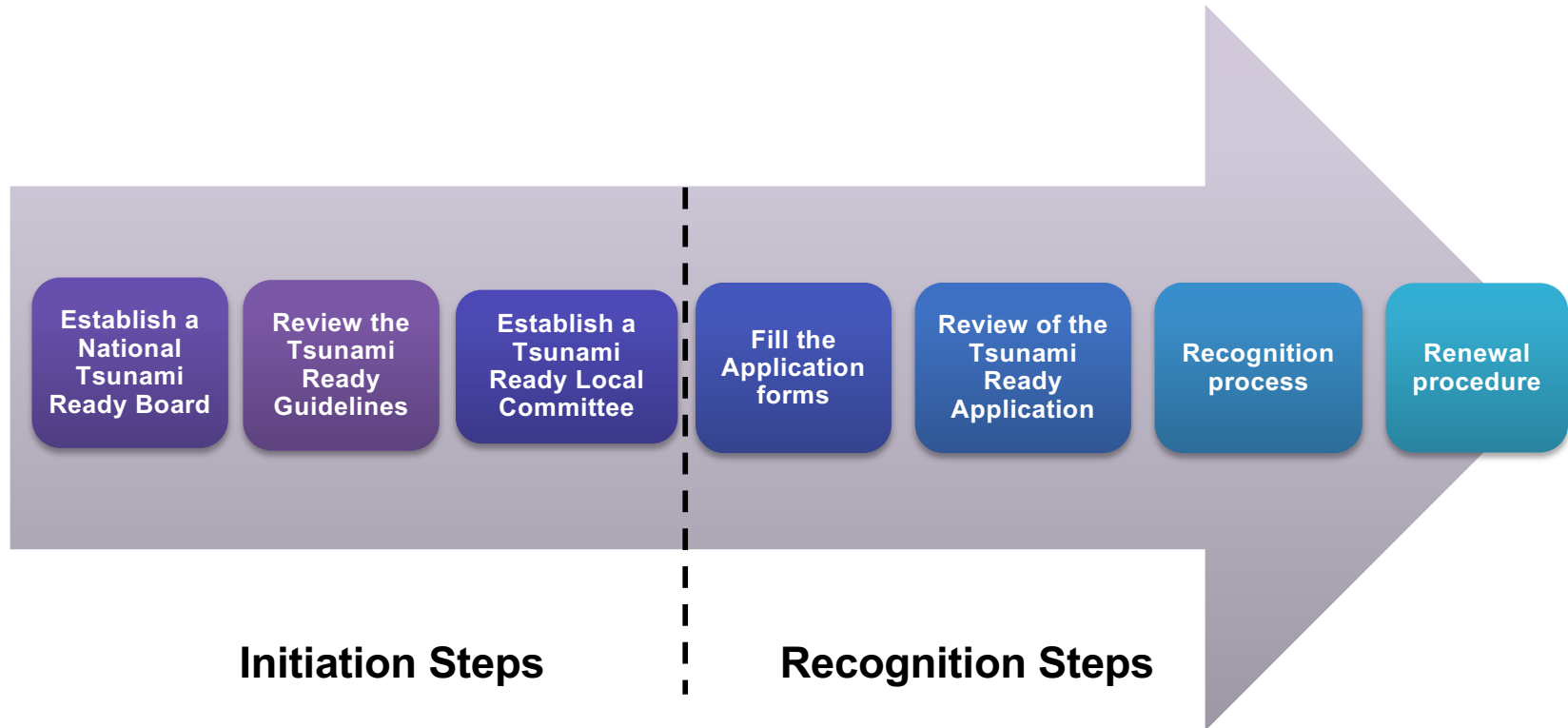


Renewable

Renewed every 4 years if the indicators are sustained



Steps in the Tsunami Ready recognition process



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

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.

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			
National Tsunami Ready Board - NTRB			
Mainline Address	Country	Total amount of population of the country	Date of establishment of the NTRB
City			
State, Z	Contact information of the NTRB Chair		
Phone	Full Name		
Email	Office / Institution		
1. Please establish	Title		
2. Info	Mailing Address		
City			
State, Z			
III. Preparation Indicators (PREP)			
Phone	PREP 1	Produce easily understood tsunami evacuation maps as determined to be appropriate by local authorities.	<input type="checkbox"/> Verified
Email	<input type="checkbox"/> Print <input type="checkbox"/> Digital media <input type="checkbox"/> Other		
List of:	PREP 2	Develop and distribute outreach and public education materials. Distribution should use three or more wide-reaching diverse methods .	<input type="checkbox"/> Verified
1.	<input type="checkbox"/> Brochures/flyers distributed at public venues <input type="checkbox"/> Websites/social media		
2.	<input type="checkbox"/> Local faith-based and civic organization bulletins/mailings <input type="checkbox"/> Billboard, roadside, highway, or educational signs		
3.	<input type="checkbox"/> Local radio and television <input type="checkbox"/> Public utility/service industry bill safety notices		
4.	<input type="checkbox"/> Bulk email <input type="checkbox"/> Historical markers and interpretive signs		
5.	<input type="checkbox"/> Newspaper Inserts <input type="checkbox"/> Other		
UNESCO Secretariat	PREP 3	Annually hold at least three tsunami outreach or education activities.	<input type="checkbox"/> Verified
Please ac	<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

Recognition Steps for Regional Programme

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.

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	

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		

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 <u>three or more wide-reaching diverse methods</u> . <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 <input type="checkbox"/> Billboard, roadside, highway, or educational bulletins/mailings <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	<u>Annually</u> 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

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.



Examples of Tsunami Ready Recognition Ceremony



Renewal procedure

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

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

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.



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-Hawaii)
 TSUNAMI EARLY WARNING SYSTEMS
 AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
 TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
 7-18 August 2023, Honolulu, Hawaii USA

Thank You

Ardito Kodijat

IOC/UNESCO - Indian Ocean Tsunami Information Centre
 UNESCO Office Jakarta
 a.kodijat@unesco.org

