



unesco

Intergovernmental
Oceanographic
Commission

UNESCO-IOC Tsunami Ready Recognition Programme In Indian Ocean

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*

UNESCO/IOC Tsunami Ready and the Global Frameworks



SAFE OCEAN

Not oceans and shores that do not have coastal hazards (i.e- *Tsunami*).

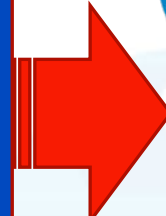
..... is coastal area and ocean that is understood, observed, can be predicted, and where the people can continue to interact with the sea and oceans for their livelihood and lifestyle without having the fear of coastal hazards (*tsunamis*), as they already have the awareness, knowledge, preparedness,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



Sustainable Development Goals 2015-2030



UN Decade of Ocean Science for Sustainable Development 2021-2030



13 OCTOBER
INTERNATIONAL DAY FOR DISASTER RISK REDUCTION

Sendai Framework for DRR 2015 - 2030



World Tsunami Awareness Day



Tsunami Ready and UN Ocean Decade



Statement and decision on Tsunami Ready

Implementation Plan for the UN Decade Tsunami Programme (TOWS WG 2021)

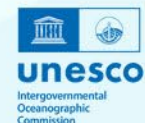
Contribute to achieving the societal outcome of A Safe Ocean with the aim of **making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO/IOC Tsunami Ready Programme**

Tsunami Ready in Indian Ocean

The ICG/IOTWMS **encourages member states to commit to implement the UNESCO-IOC Tsunami Ready guideline and indicators** and promote open access to high-resolution near shore bathymetry and topography data for accurate inundation and evacuation mapping in support of Tsunami Ready communities (ICG/IOTWMS Chair at the 53rd IOC EC)

UNESCO/IOC Tsunami Ready Recognition Programme / UNESCO/IOC Tsunami Ready (TOWS WG 2022)

- Recommended that the IOC Executive Council at its 55th session consider approving the **establishment of the UNESCO/IOC Tsunami Ready Recognition Programme (UNESCO/IOC Tsunami Ready)**
- To advise countries that are currently in the process of **implementing Tsunami Ready, to now follow the MG74** when submitting/applying for Tsunami Recognition, and that MG74 will apply for all future applications.
- Establishment of the **Tsunami Ready Coalition**.
- ICG **Tsunami Information Centres (TICs) to facilitate the UNESCO/IOC Tsunami Ready Recognition Programme** in each region.



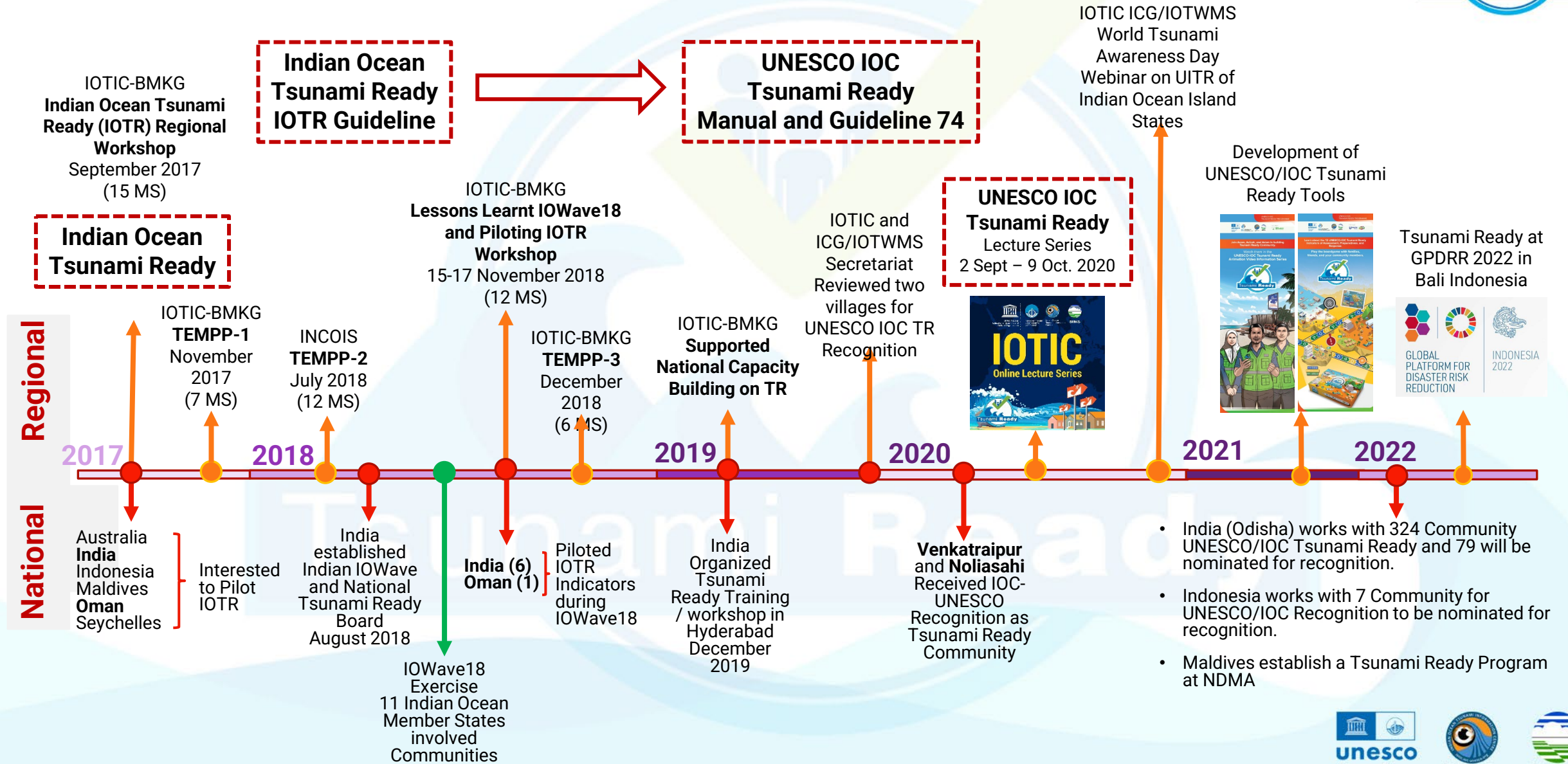
Why Tsunami Ready ?



- An advance tsunami early warning system will not save life if the **community at risk does not have the knowledge and capacity to respond** to the early warning.
 - High risk of loss of life and property in coastal community with weak or no **community preparedness** for tsunami emergencies.
 - In **near field tsunami**, the community need to react and take action without official warning or guidance
 - Weak or **broken warning chain** to community.
 - Lack or **limited focus in community preparedness** for tsunami.



IOTIC-BMKG Tsunami Ready Programme



IOC-UNESCO Tsunami Ready Recognition Programme



The Tsunami Ready Recognition Programme is a **voluntary international community-based** recognition programme developed by UNESCO/IOC.



It aims to **build resilient communities through awareness and preparedness strategies** that will protect life, livelihoods and property from tsunamis in different regions



Caribbean

- St. Kitts and Nevis
- Anguilla
- British Virgin Islands
- Grenada
- Haiti
- Antigua and Barbuda

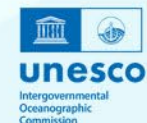
Pacific

- Barbados
- St. Vincent and the Grenadines
- Trinidad and Tobago
- Honduras
- Nicaragua

- Honduras
- Costa Rica
- Samoa
- El Salvador

Indian Ocean

- Venkatraipur and Noliasahi, Bali
- Tanjung Bena, Indonesia



IOC-UNESCO Tsunami Ready Recognition Programme



promotes the **concept of readiness through actions**
→ **Process and Capacity** → to meet **12 key indicators** that serve as the standard for reducing tsunami risk at the community level.



A strong end-to-end tsunami early warning and mitigation system with a particular **focus on community awareness and preparedness**.

Facilitates **tsunami preparedness as an active collaboration** of the public (community), community leaders, local and national emergency management agencies.



IOC UNESCO Tsunami Ready Approach



- Bringing the **ownership of preparedness to the community** → Voluntary and Bottom Up.
- To ensures **structural and systematic approach** in building community preparedness
- A **collaborative effort** to meet a level of tsunami preparedness through the achievement of fulfilling a set of established best practice guidelines and indicators.



Tsunami Ready

IOC-UNESCO Tsunami Ready Recognition Programme



COMMUNITY-BASED

Based on community performance-based programme.



SUSTAINABLE IMPROVEMENTS

Risk assessments, early warning system, public awareness, exercises, pre-planning, preparedness actions

SYSTEMATIC PREPAREDNESS

Aims to improve coastal community preparedness and ensures structural, systematic, and sustainable approach.

MULTI STAKEHOLDER INVOLVEMENT

Community, Community Leaders, NTWC, NDMO, LDMO, Universities, NGOs and CSOs

CREATE OWNERSHIP

Best practice guidelines and recognition as tsunami prepared community



April 2022

Indian Ocean Tsunami Information Centre



Benefit of Tsunami Ready Program



- Strengthens tsunami preparedness of coastal communities
 - Improved **assessments of Hazards**, Risk, Inundation, and Evacuation
 - Improved **early warning systems/warning chain**, EOP, and EOC
 - Improved/Increases **public awareness, understanding of tsunami threat, build preparedness, and ensures exercises.**
- Strengthen **preparedness for other hazards**
- Improves community pre-planning
 - Encourages a consistent and sustainable approach
 - Contributes to the aims of the SFDRR and SDGs
 - Received **Recognition** from IOC UNESCO as Tsunami Ready Community

Tsunami Ready “Community”



Community → an ecosystem of society



UNESCO/IOC Tsunami Ready Indicators



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

Understanding the
Hazard and Risk

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 3 times a year.
- 8 **PREP-5:** A community tsunami exercise is conducted at least every two years

Community
Awareness

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.

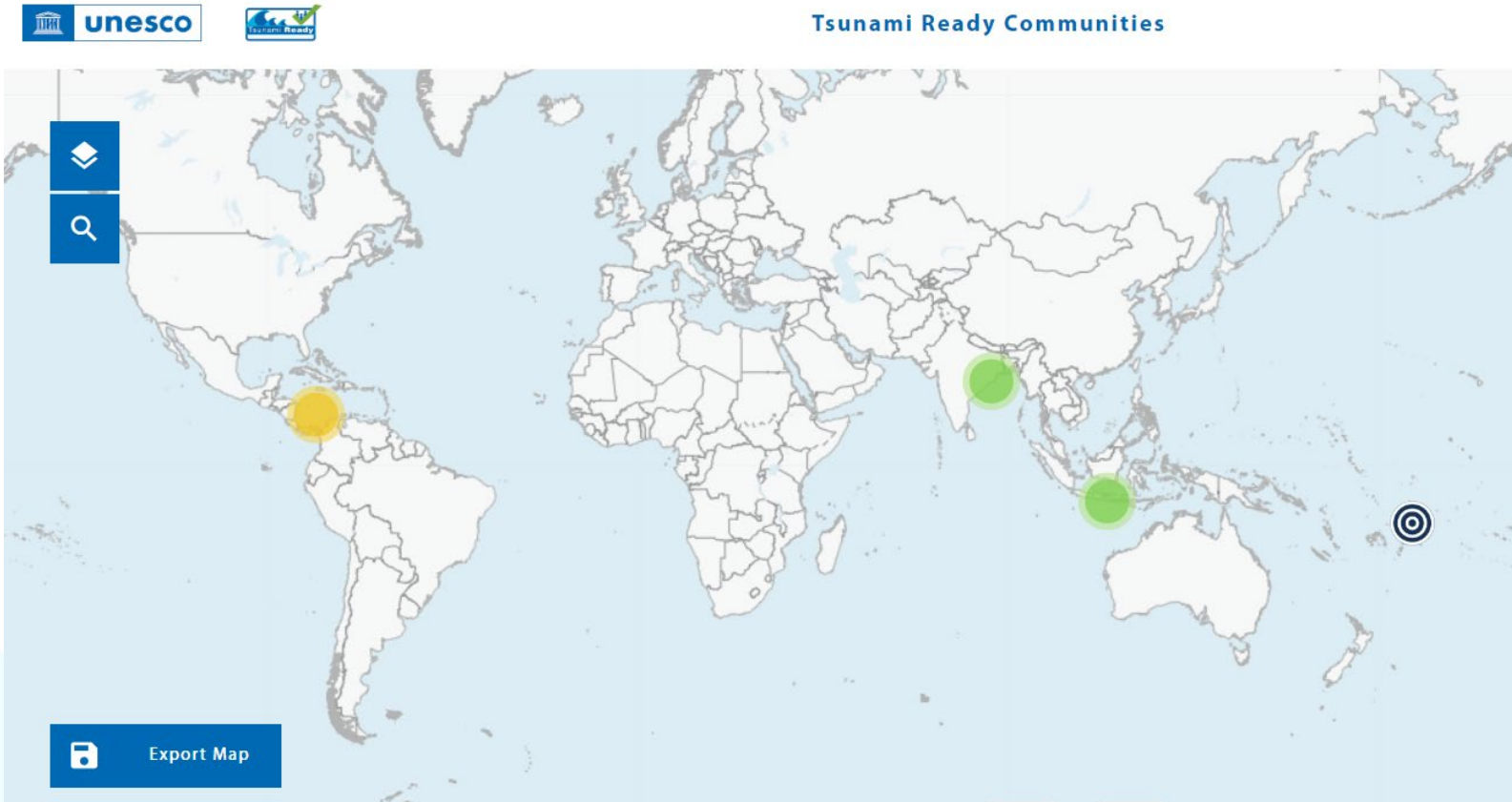
Planning and
Capacity

UNESCO/IOC Tsunami Ready Tools



UNESCO/IOC Tsunami Ready Viewer

Showing UNESCO/IOC Tsunami Ready Recognized Community Globally



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



UNESCO/IOC Tsunami Ready Tools

UNESCO/IOC Tsunami Ready Website



UNESCO IOC IOC Tsunami NOAA US Tsunami NOAA Tsunami

ITIC International Tsunami Information Center

You are here: Home > Intergovernmental > UNESCO/IOC Tsunami Ready Programme

Search... **Search** Advanced

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



unesco Intergovernmental Oceanographic Commission
UNESCO IOC NOAA

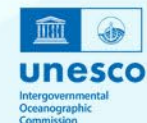
IOC Tsunami Information Centres

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



UNESCO/IOC Tsunami Ready Tools



Manual and Guide No 74

Intergovernmental Oceanographic Commission
Manuals and Guides



unesco
Intergovernmental
Oceanographic
Commission

74

Standard Guidelines for the Tsunami
Ready Recognition Programme

UNESCO

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

Manual and Guide No 82



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



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

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



UNESCO/IOC Tsunami Ready Tools

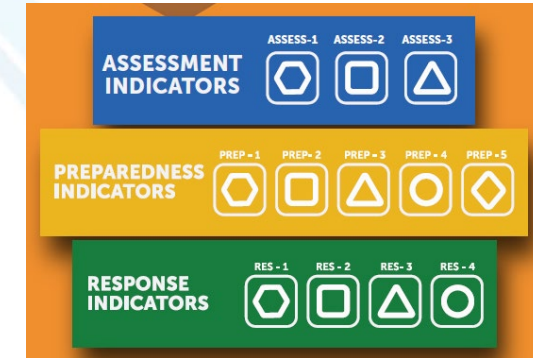


Tsunami Ready Boardgame

To introduce the 12 Tsunami Ready Indicators to the stakeholders



(12 + years)



Cards 375 (\pm 300 questions, 75 instructions)

- Assessment : 3 Indicators x 25 question cards
- Preparedness : 5 Indicators x 25 question cards
- Response : 4 Indicators x 25 question cards
- Threat Cards : 25 Cards
- Opportunity Cards: 25 Cards
- Capacity Building Cards: 25 Cards

Could be played in different levels

1. Beginner (\pm 1 hour)
2. Middle (\pm 2 hours)
3. Advanced (\geq 2 hours)



UNESCO/IOC Tsunami Ready Tools



Tsunami Ready Short Animation Video Series



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



- 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**

UNESCO/IOC Tsunami Ready Tools



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>





Ardito M. KODIJAT
a.kodijat@unesco.org

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

Disaster Risk Reduction and Tsunami Information Unit
UNESCO Jakarta Office

Follow us



iotic.ioc-unesco.org
www.iotsunami.org



facebook.com/iotsunami



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



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



youtube.com/iotsunami



iotic@unesco.org

