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***Tsunami Ready
In
Indian Ocean***



**Ardito M Kodijat
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Making Indian Ocean Coastal Community Tsunami Ready

Brief Introduction to UNESCO-IOC Tsunami Ready

Tsunami Ready

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



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BMKG



Tsunami Ready



Background

The UN Decade of Ocean Science for Sustainable Development

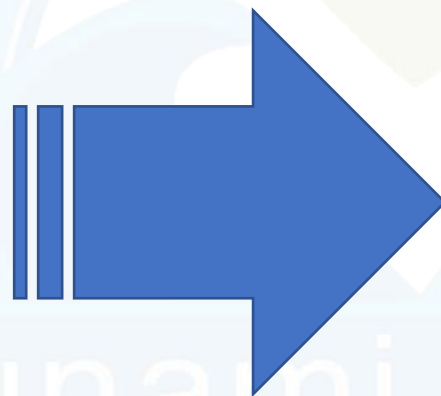
SAFE OCEAN

**Is not an ocean and shores that do not have coastal hazards
(e.g. *Tsunami*)**

A Safe Ocean is where the people can continue to interact with the sea and oceans for their livelihood and lifestyle without having the fear of coastal hazards (e.g., tsunamis), as the hazards are well understood, observed, the potential impact is predicted timely and accurately, and where the people already equipped with awareness, knowledge, preparedness, skills, and abilities to safeguard themselves in the case of an emergency such as tsunami.



Making Coastal Community Tsunami Ready

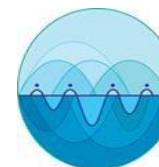


2021-2030 United Nations Decade of Ocean Science for Sustainable Development



13 OCTOBER INTERNATIONAL DAY FOR DISASTER RISK REDUCTION

Sendai Framework for DRR 2015 - 2030



ISLAND VOICES GLOBAL CHOICES SAMOA Pathway Midterm Review

WORLD TSUNAMI AWARENESS DAY



Global Frameworks

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.
 - Due to tsunami is an **in-frequent event**, Tsunami Preparedness need to be sustained within the community across generations
 - 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.



What is IOC-UNESCO Tsunami Ready ?

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



A **community performance-based programme** that facilitates tsunami preparedness as an active collaboration of the public (community), community leaders, local and national emergency management agencies.



Caribbean

- St. Kitts and Nevis
- Anguilla
- British Virgin Islands
- Grenada
- Haiti
- Antigua and Barbuda
- Barbados
- St. Vincent and the Grenadines
- Trinidad and Tobago
- Honduras
- Nicaragua

Pacific

- Honduras
- Costa Rica
- Samoa
- El Salvador

Indian Ocean

- India – Odisha (Venkatraipur and Noliasahi)

26/18

IOC UNESCO Tsunami Ready Approach

- Bringing the **ownership of preparedness to the community**
→ Voluntary and Bottom Up.
- To ensures **structural, systematic, and Participatory 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.



IOC-UNESCO Tsunami Ready Indicators

TSUNAMI READY INDICATORS

Stage of achievement

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 3 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.

Tsunami Ready “Community”

Community → an ecosystem of society



Tsunami Ready In Indian Ocean

IOTWMS - Regional

Member States

UNESCO-IOC
BMKG
Programme



Indian Ocean
Tsunami Information
Centre



Tsunami Ready
Guideline and
Implementation Plan

Advocacy on TR to
Indian Ocean
Member States

Training on Tsunami
Evacuation Map, Plans
and Procedures (TEMPP)

Advocates UNESCO-IOC
Tsunami Ready Indicators

Training of facilitator of
Piloting UNESCO-IOC
Tsunami Ready

Develop Resources and
tools for UNESCO-IOC
Tsunami Ready

Establish
National Tsunami
Ready Board

Capacity Building on
Strengthening Community
Preparedness for Piloting
Tsunami Ready → Guidelines
and Indicators

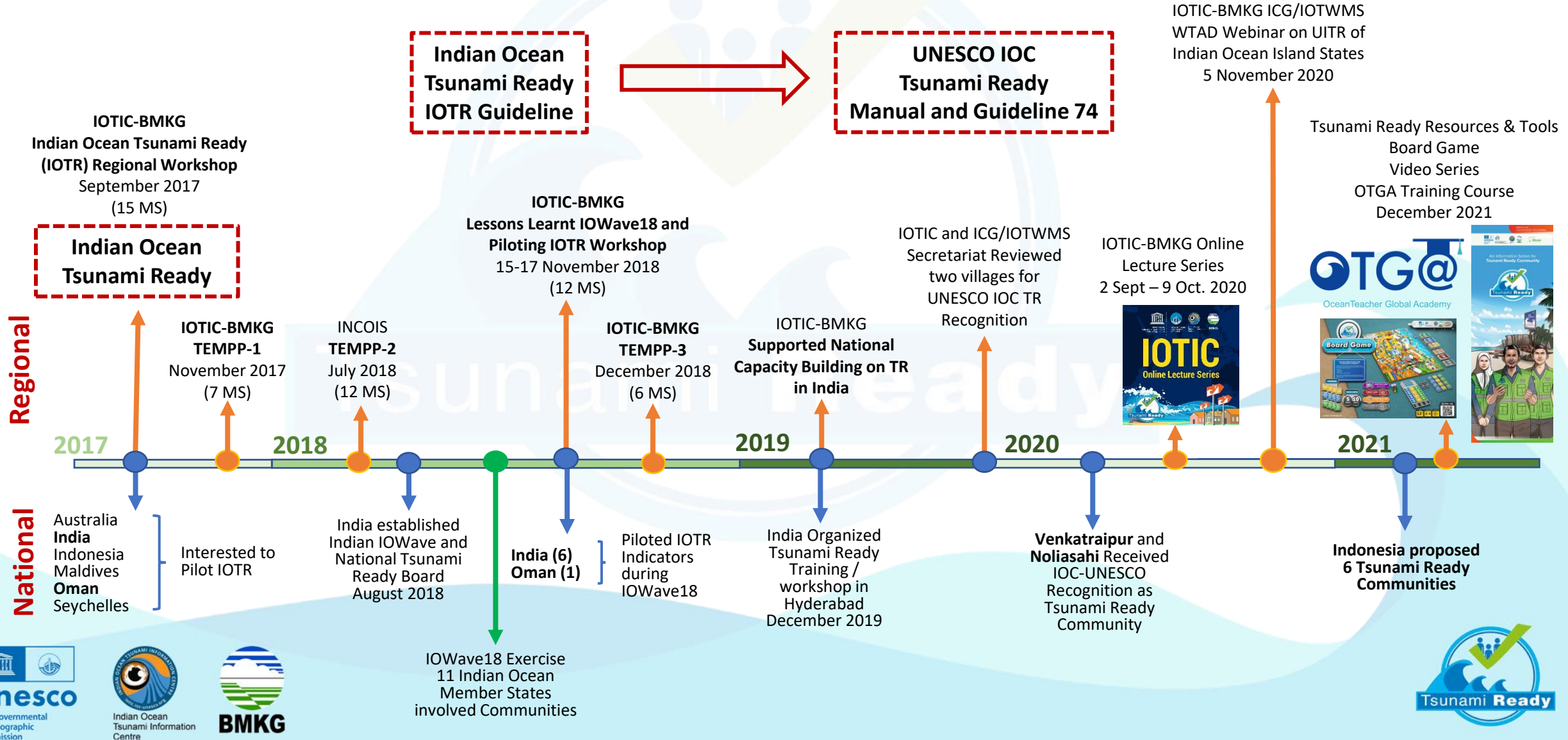
Tsunami Ready Communities

Apply for UNESCO-IOC
Tsunami Ready Recognition



Tsunami Ready in Indian Ocean

IOTIC was also invited to presents Tsunami Ready in several workshop and webinar on in India, Iran, and Indonesia



Tsunami Ready Community in Indian Ocean

Two Communities in India Recognized as Tsunami Ready Community by UNESCO-IOC



Venkatraipur
Ganjam District, Odisha
is Tsunami Ready

IN CASE OF STRONG OR LONG EARTHQUAKE, OR ANY OFFICIAL TSUNAMI WARNING, GO TO HIGH GROUND OR INLAND

This recognition does not imply promise that a community can or will perform at a certain level in case of tsunami. Tsunami Ready recognition does not mean that a community is tsunami proof, it is rather the acknowledgement of the mitigation measures adopted by the

1. Noliasahi, Jagatsinghpur District, Odisha
2. Venkatraipur, Ganjam District, Odisha

United Nations Educational, Scientific and Cultural Organization
Intergovernmental Oceanographic Commission

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

Certificate of Recognition
The Community of Venkatraipur
Ganjam District, Odisha, India

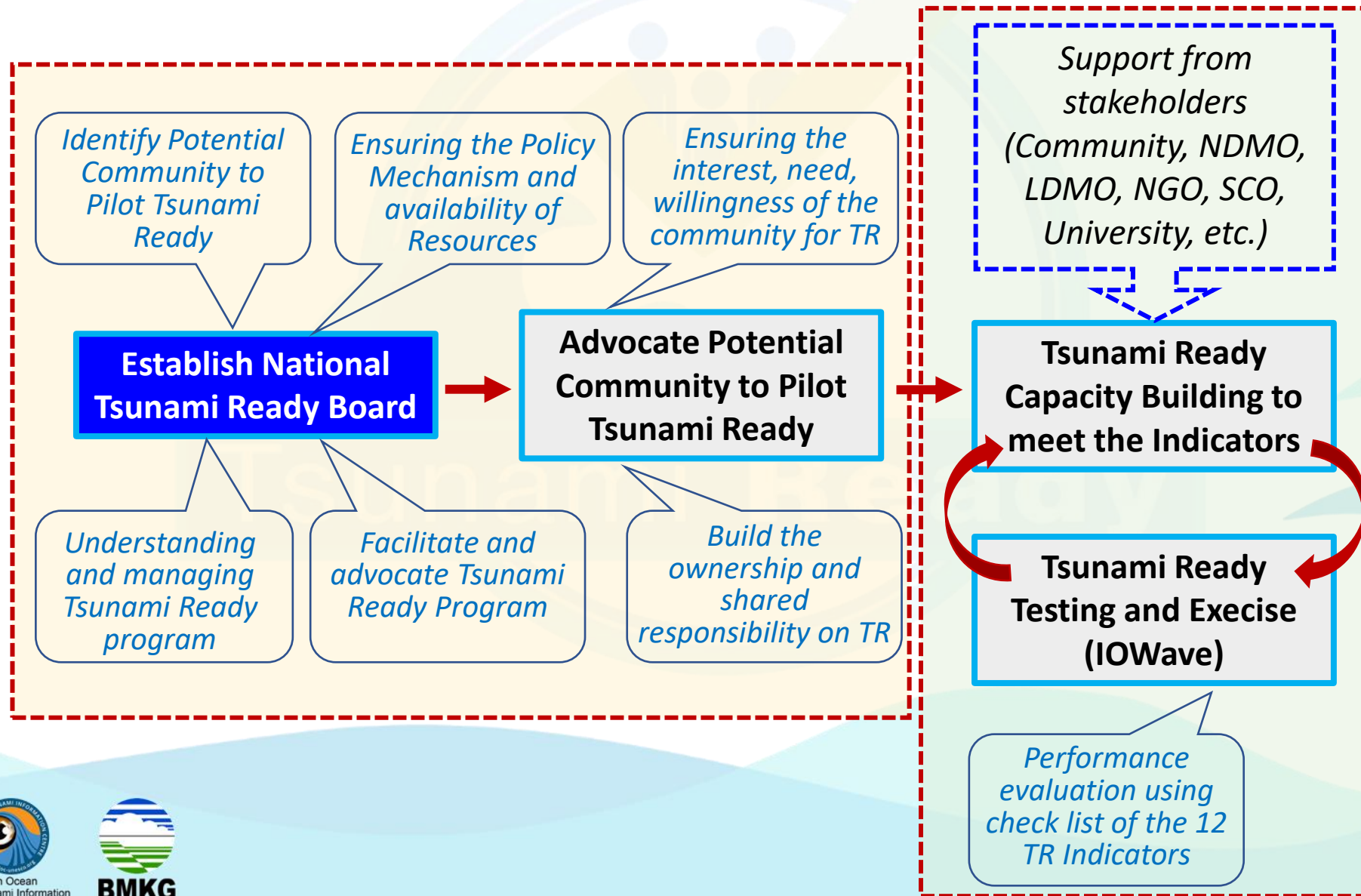
For successfully piloting the UNESCO-IOC Tsunami Ready Initiative in Venkatraipur, Ganjam District, India
28 May 2020

Vladimir Ryabinin, PhD
Assistant Director General and Executive Secretary
UNESCO

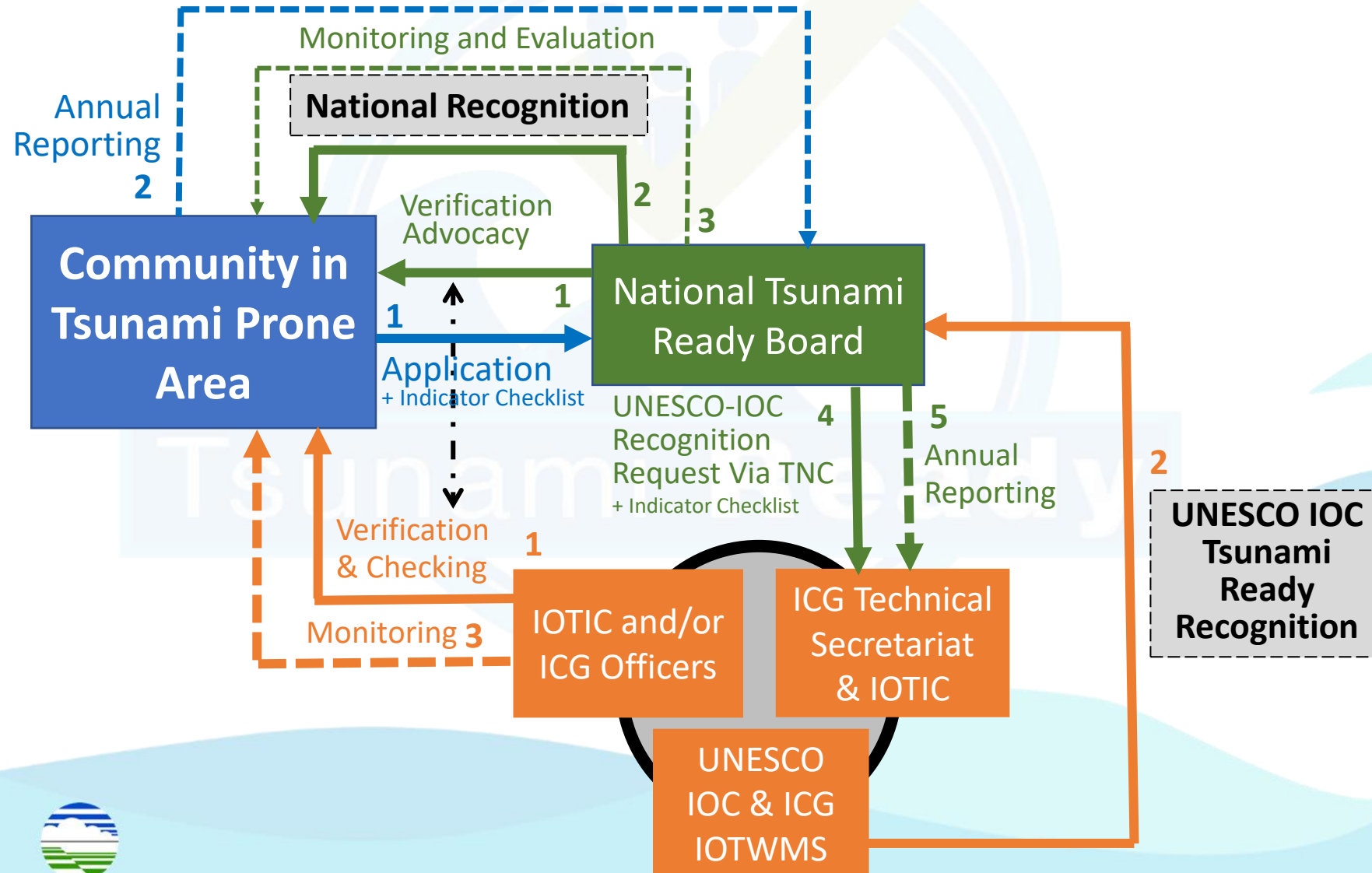
Dr. Sarbesh Sheest, PhD
Chair
National Tsunami Ready Board of India

Prof. Dvickorita Karawati, PhD
Chairwoman
UNESCO-IOC/IOI/TWMS

Implementing Tsunami Ready at National Level



UNESCO-IOC Tsunami Ready Recognition Process



Lessons Learnt from TR in India

Reasons for Strong engagement of Odisha in implementation of TR

1. Strong advocacy by the UNESCO-IOC through IOTIC and IOTWMS
2. INCOIS - the NTWC taking the lead in creating the right framework conditions for implementing TR by setting up of the NTRB
3. Background work already undertaken in Odisha and other coastal provinces in the past 10 years
4. Strong involvement of the provincial DMO and the political leadership in Odisha
5. Strong community ownership of DRR activities in Odisha
6. Opportunity to leverage financial resources

Challenges

Challenges in Implementing Tsunami Ready in Indian Ocean

- Establishment of National Tsunami Ready Board.
- Aligning with national tsunami preparedness programme and activities.
- National Priorities on Disaster Risk Reduction → Multi-hazards and Disasters events.
- Resources needed at regional and national level for capacity building to pilot and implementation Tsunami Ready.
- Convincing the community on the importance of tsunami ready especially in transferring the shared ownership and responsibility with the community.

Challenges in Managing Tsunami Ready in Indian Ocean

- Management of recognition and renewal process → maintaining the due diligence and verification process.
- Monitoring the Sustainability

Steering Group to develop draft ToRs for a Tsunami Ready Working Group of the ICG/IOTWMS to lead and coordinate the implementation of the Tsunami Ready Programme in the Indian Ocean.

The Tsunami Ready Working Group shall work in conjunction and take technical advice from the other working groups and task teams of the ICG/IOTWMS. Member States to nominate representatives from DMOs to the Tsunami Ready Working Group to promote increased participation of disaster managers in the work of the ICG/IOTWMS

Steering Group,
Secretariat,
IOTIC

May
2022
(ICG XIII)

Thank you



Ardito M. KODIJAT

a.kodijat@unesco.org

IOC/UNESCO Indian Ocean Tsunami Information Centre

IOTIC-BMKG Programme Office

Disaster Risk Reduction and Tsunami Information Unit

UNESCO Jakarta Office

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