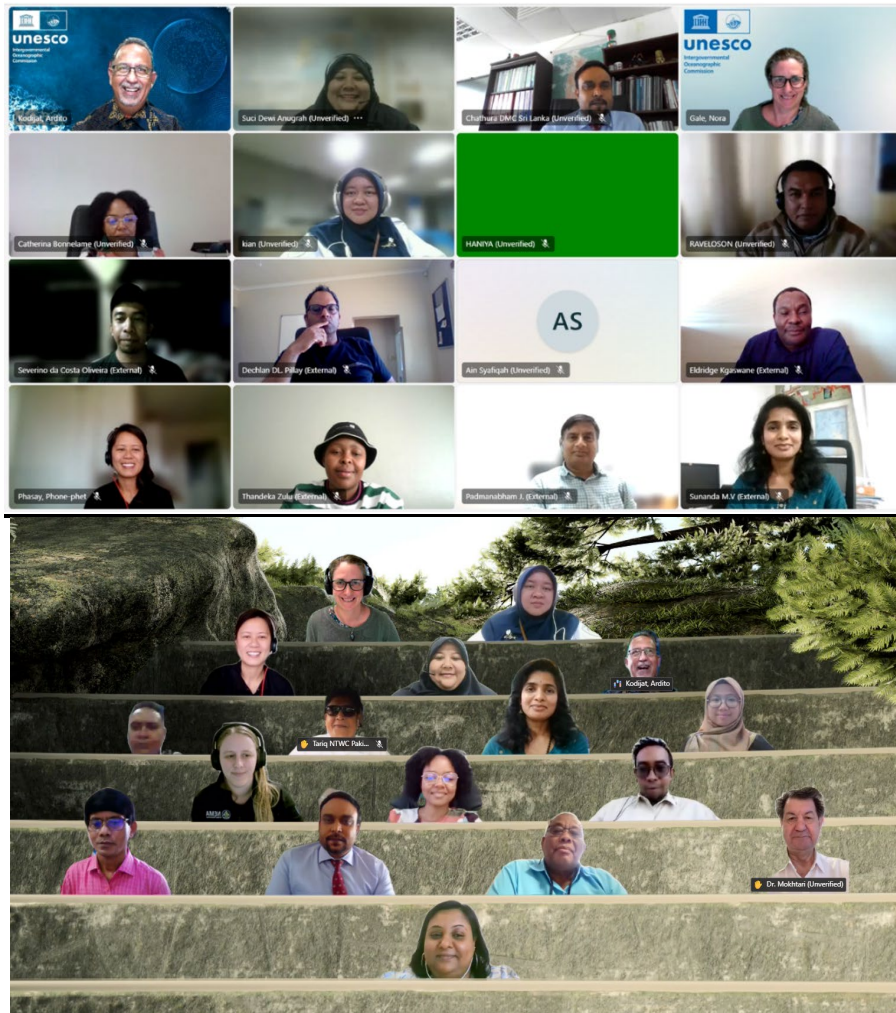




**INTERGOVERNMENTAL COORDINATION GROUP (ICG)  
INDIAN OCEAN TSUNAMI WARNING & MITIGATION SYSTEM (IOTWMS)**

**Working Group 3 on Tsunami Ready Implementation**

**21 August 2024**



*Figure 1: Participants at the intersessional meeting of ICG/IOTWMS Working Group 3, 21 August 2024.*

## **Members**

Ms Suci Dewi Anugrah (Indonesia),  
Chair of Working Group 3

Mr Jijjavarapu Padmanabham (India),  
WG-2 Chair

Dr Mohammad Mokhtari (Iran),  
WG-NWIO Chair

Mr Netai Chandra Dey Sarker (Bangladesh),  
Tsunami Ready Focal Point

Ms Haniya Abdoukarim Said (Comoros),  
Tsunami Ready Focal Point

Mr Adriamiranto Raveloson (Madagascar),  
Tsunami Ready Focal Point

Ms Siti Mariam Binti Abu (Malaysia),  
Tsunami Ready Focal Point

Ms Aishath Shiuna (Maldives),  
Tsunami Ready Focal Point

Ms Shivane Appadoo (Mauritius),  
Tsunami Ready Focal Point

Dr Yin Myo Min Htwe (Myanmar),  
Tsunami Ready Focal Point

Mr Tariq Ibrahim (Pakistan),  
Tsunami Ready Focal Point

Mr Robert Ernesta (Seychelles),  
Tsunami Ready Focal Point

Mr Dechlan Pillay (South Africa),  
Tsunami Ready Focal Point

Mr Chathura Liyanaarachchige (Sri Lanka),  
Tsunami Ready Focal Point

## **Invited Experts**

Ms V Sunanda Manneela (India)

Ms Kian Purna Sinki (Indonesia)

Ms Ashleigh Fromont (New Zealand)

Ms Catherina Bonnelame (Seychelles)

Mr Severino da Costa Oliveira (Timor Leste)

## **UNESCO-IOC**

Ms Nora Gale (ICG/IOTWMS Secretariat)

Mr Ardito M Kodijat (Indian Ocean Tsunami  
Information Centre, UNESCO Jakarta)

Ms Phone-Phet Phasay (Tsunami Resilience  
Section)

## **1. OPENING**

### **1.1 Welcome and Opening Remarks**

Ms Suci Dewi Anugrah, Chair of ICG/IOTWMS Working Group 3 (WG-3) on Tsunami Ready Implementation, opened the intersessional meeting. She addressed the distinguished colleagues including Head of the UNESCO-IOC Tsunami Resilience Section, Mr Bernardo Aliaga, the ICG/IOTWMS Working Group Chairs, Mr Jijjavarapu Padmanabham (WG-2) and Dr Mohammad Mokhtari (WG-NWIO), members and invited experts. She expressed her thanks to the ICG/IOTWMS Secretariat for organising this meeting.

In the Indian Ocean region, twelve (12) communities in India and Indonesia have received Tsunami Ready recognition with many more in the pipeline. UNESCO has declared the Safe Ocean goal of 100% of communities at risk to tsunami to be prepared for and resilient to tsunami by the 2030 through the implementation of the UNESCO-IOC Tsunami Ready programme. The intersessional meeting of WG-3 will identify progress and challenges in implementation of the Tsunami Ready programme through presentations and discussion. Ms Anugrah declared the meeting open at 06:45 UTC.

### **1.2 Adoption of Agenda**

Ms Suci Anugrah reviewed the provisional agenda, which was adopted by the Working Group without modification (refer to Annex 1).

### **1.3 Terms of Reference and Membership**

The terms of reference and membership for the WG-3 were presented (as below).

Liaise with other working group(s) and task team(s) within the ICG/IOTWMS and with working groups from the other ocean basins through the TOWS-WG to:

- 1 Monitor and evaluate the implementation UNESCO-IOC Tsunami Ready Recognition Programme (TRRP), National Warning Chains, and related activities to deliver tsunami resilient and prepared communities for the Indian Ocean
- 2 Provide guidance on tsunami hazard and risk assessment, including for tsunamis generated by non-seismic and complex sources.
- 3 Provide guidance to Member States on reviewing and enhancing national tsunami warning chains.
- 4 Provide guidance on how to nationally initiate IOC-UNESCO Tsunami Ready Recognition Programme (TRRP) and similar initiatives.
- 5 Facilitate sharing of experiences between Member State Tsunami Ready Focal Points (TRFPs)
- 6 Update Member States on IOC-UNESCO TRRP developments and other related initiatives.
- 7 Develop exercise tools and coordinate implementation of IOWAVE Exercises and other drills as required.
- 8 In collaboration with IOC-UNESCO IOTIC and IOC-UNESCO Secretariat for ICG/IOTWMS, identify capacity development and resource needs of Member States to implement TRRP, national tsunami warning chains, and related activities.
- 9 Assist with training programmes of Member States implemented by IOC-UNESCO IOTIC and coordinated by IOC-UNESCO ICG/IOTWMS Secretariat to facilitate enhanced national tsunami warning chains and at-risk communities becoming resilient and prepared for tsunamis.
- 10 Provide an annual report on Tsunami Ready implementation to the Steering Group

The Working Group members will be composed of WG1 WG2 and RWG-NWIO chairs, WG1 and WG2 tsunami warning chain relevant experts, ICG/IOTWMS TRRP and exercise experts, Member State Tsunami Ready Focal Points (TRFP), invited experts, IOTIC, Secretariat.

The participant list for the intersessional meeting of Working Group is contained in Annex 2.

#### **1.4 Meeting Logistics**

Ms Nora Gale of the ICG/IOTWMS Secretariat provided the participants with logistical information for the meeting. Meeting documents and presentations are available on the event website at <https://oceanexpert.net/event/4435>.

## **2. BRIEFING ON TSUNAMI READY RECOGNITION PROGRAMME**

### **2.1 Report of the Chair**

Ms Suci Anugrah, Chair of ICG/IOTWMS WG-3 on Tsunami Ready Implementation, provided the Chair's report for the intersessional period of 2023-2024. She shared the recommendations arising during the 13<sup>th</sup> Session of the ICG/IOTWMS (Bali, November 2024) related to Working Group 3. This is the 3<sup>rd</sup> Working Group 3 meeting with previous meetings conducted in August 2023 (online) and February 2024 (Hyderabad). To date, national Tsunami Ready training has been conducted in Maldives, Seychelles, and Timor Leste.

Ms Anugrah briefed on the upcoming 2<sup>nd</sup> UNESCO-IOC Global Tsunami Symposium to be held in Banda Aceh, Indonesia during 11-14 November 2004. The Symposium aims to reflect on the two decades after the 2004 Indian Ocean Tsunami and the way forward through sharing of learning and application among countries. During the symposium communities will be recognised as Tsunami Ready. For more information visit [globalsunamisymposium@bmkg.go.id](mailto:globalsunamisymposium@bmkg.go.id).

Ms Anugrah noted the WG-3 Vice-Chair position is currently vacant and that a nomination for this position would be sought at 14<sup>th</sup> session of ICG/IOTWMS (Jakarta, 16-19 November 2024).

## **2.2 ICG/IOTWMS Governance and Structure**

Ms Nora Gale presented the governance and structure of the ICG/IOTWMS. The UNESCO-IOC global tsunami warning system is comprised of four Intergovernmental Coordination Groups responsible for the Pacific Ocean (PTWS), Indian Ocean (IOTWMS), Caribbean and Adjacent Seas (CARIBE-EWS) and Northeast Atlantic and Mediterranean Seas (NEAMS-TWS). The Working Group for Tsunami and Other sea level Warning and Mitigation System (TOWS-WG) and its two Task Teams on (i) Disaster Management and Preparedness and (ii) Tsunami Watch Operations provide global coordination.

The ICG/IOTWMS currently has four Working Groups and one Task Team to carry out the intersessional workplans. ICG/IOTWMS is chaired by Prof Dwikorita Karnawati of Indonesia. Secretariat support for UNESCO-IOC's Indian Ocean programme is provided by two full time project appointments who report to the Head of the Tsunami Resilience Section and coordinate work with the Head of the Indian Ocean Tsunami Information Center (IOTIC).

## **2.3 TOWS-WG Decisions on Tsunami Ready**

Mr Ardito Kodijat reported on the decisions on Tsunami Ready arising during the 17<sup>th</sup> meeting of the Working Group on Tsunamis and Other Hazards related to sea Level Warning and Mitigation Systems (TOWS-WG-XVII, Sendai, 22-23 February 2024). The recommendations relevant to Tsunami Ready were highlighted (as below) with the full recommendation available at <https://oceanexpert.org/document/34310>.

The WG encourages synergy with Making Cities Resilient (2030) and recommended ICGs advocate for member states implementing Tsunami Ready to link with this (such as agency representation on NTRB).

The WG recommended text for signage for locations that will not feel the earthquake, such as *'In case of any official tsunami message, go to high ground or inland'*. (Also to consider signage for locations that do not have high ground or inland)

ICG/IOTWMS have established National Tsunami Ready Focal Points to facilitate coordination and communication.

TT-DMP has been asked to consider the introduction of a Tsunami Ready Evaluation Form, which is currently run in ICG/CARIBE.

There is an ISO 22328-3 which targets the large-scale private sector to be Tsunami Ready.

Progress on Tsunami Ready implementation was presented at the TOWS TT-DMP and TOWS-WG-XVII.

The Group noted "the progress made by ICG/PTWS concerning exploring mechanisms of how to include national tsunami preparedness and readiness programmes and initiatives in the UN Ocean Decade Programme, and that the Tsunami Ready Equivalency Approach framed under similar initiatives seeks to enable reporting on tsunami preparedness in a manner compatible with the TRRP"

And recommended that ICG/PTWS Task Team Tsunami Ready share the ICG/PTWS guidance on Tsunami Ready Equivalency for further consideration by TT-DMP, as a potential mechanism for reporting toward this goal;

The Groups also requested that the Secretariat, led by TICs, develop and share a Tsunami Ready Toolkit to assist Member States with implementation, such as the standard procedure for applying, and clarification on the definition of 'community'.

Mr Kodijat explained that the Tsunami Ready toolkit is being developed by the Tsunami Information Centres (TICs). It includes (i) Tsunami Ready Application and Nation Tsunami Ready Board approval process, (ii) How to start Tsunami Ready and the sequence activities, (iii) Tsunami Ready workflow between country and IOC Secretariat, and (iv) Signage guidelines. Standardized trainings on Tsunami Ready are in development by the IOC Ocean Teacher Global Academy (OTGA).

## 2.4 Introduction to Tsunami Ready Recognition Programme

Mr Ardito Kodijat introduced the Tsunami Ready Recognition Programme (TRRP) and the associated tools. The TRRP contributes to the UN Ocean Decade for Sustainable Development (2021-2030) goal for a Safe Ocean. The programme also contributes to the Sustainable Development goals (2015-2030), Sendai Framework for Disaster Risk Reduction (2015-2030), and World Tsunami Awareness Day (5 November).

The programme was initiated in 2011 and in 2021, UNESCO-IOC decided that the indicators (12) are the benchmark of defining a Tsunami Ready community. The indicators are categorised as assessment (3), preparedness (5) and response (4) (refer to Figure 2).

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

**Figure 2:** UNESCO-IOC Tsunami Ready Indicators

By implementing Tsunami Ready, communities become prepared to tsunami threats through a systematic and sustainable approach. The key aspects of TRRP are community-based, multi-stakeholder involvement, community ownership, systematic preparedness, and sustainable improvements. Recognition is given for four years and communities can then reapply.

Mr Kodijat drew attention to the UNESCO-IOC Manuals and Guides (58: How to Plan, Conduct and Evaluate UNESCO/IOC Tsunami Wave Exercises; 74: Standard Guidelines for the Tsunami Ready Recognition Programme; 76: Plans and Procedures for Tsunami Warning and Emergency Management; 82: Preparing for Community Tsunami Evacuations; 86 Multi-annual community tsunami exercise programme), which are available on the meeting website (<https://oceanexpert.net/event/4435>).

## 3. IMPLEMENTATION OF TSUNAMI READY

### 3.1 Tsunami Ready in the Indian Ocean

Ms Suci Anugrah updated on Tsunami Ready implementation in the Indian Ocean region. Twelve (12) communities have been recognised by UNESCO-IOC as Tsunami Ready including two from India (Venkatraipur; Noliasahi) and ten from Indonesia (Tanjung Benoa; Glagah; Kemadang; Panggarangan; Desa Tambakrejo, Kuta Mandalika; Purus; Lolong Belanti, and Tapakih villages). There are plans for further communities in Indonesia, India, Maldives, Seychelles, and Timor Leste to participate in the programme.

The National Tsunami Ready Board (NTRB) serves a key role in coordination, advocacy, promotion, and socialisation of the Tsunami Ready community. Additionally, the NTRB recommends the community for UNESCO-IOC Tsunami Ready recognition.

### **3.2 Tsunami Ready Focal Point Roles**

Ms Nora Gale presented the roles of Tsunami Ready Focal Points (TRFPs). The ICG/IOTWMS at its 13<sup>th</sup> Session in Bali, Indonesia (28 November–1 December 2022), decided to establish a Tsunami Ready Focal Point (TRFP) for each Member State to enhance communication, coordination, and implementation of the UNESCO-IOC TRRP or similar initiatives across the Indian Ocean.

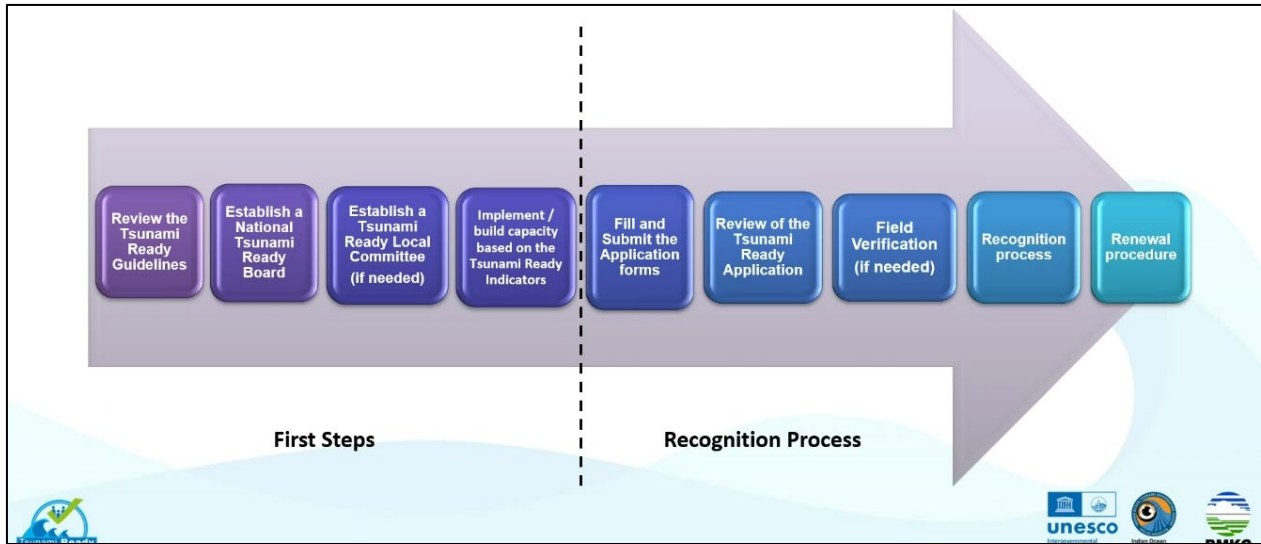
The role of a Tsunami Ready Focal point includes:

- a) Act as a national advocate for national implementation of the TRRP or a recognised similar initiative to help make at-risk communities prepared and resilient to any tsunami threat within their Member State.
- b) Actively contribute to the national implementation of the TRRP or a recognised similar initiative.
- c) Routinely update the UNESCO-IOC ICG/IOTWMS on the status of the national implementation of the TRRP or a recognised similar initiative.
- d) Inform relevant national authorities and organisations involved in the implementation of the TRRP or a recognised similar initiative on any information and/or updates provided by UNESCO-IOC on activities related to making at-risk communities Tsunami Ready.

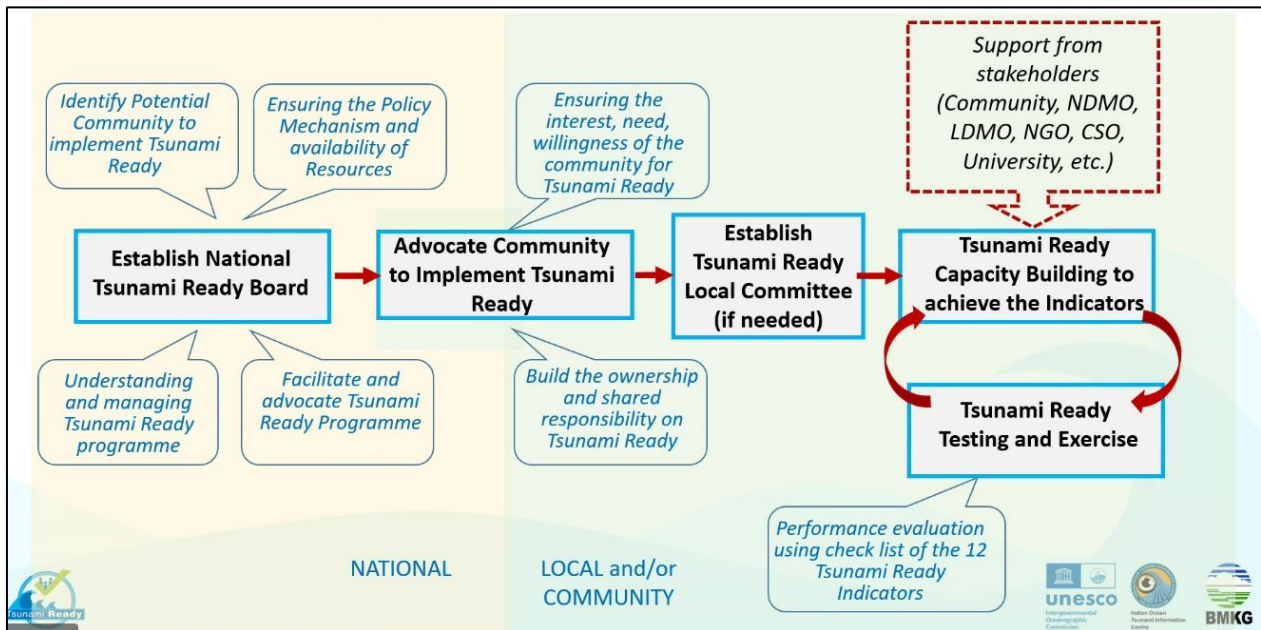
In response to IOC Circular Letter No 2978 issued on 18 December 2023, eighteen (18) Member States have nominated TRFPs including Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Myanmar, Pakistan, Seychelles, South Africa, Sri Lanka, Timor Leste, and United Arab Emirates.

### **3.3 National Tsunami Ready Board**

Mr Ardito Kodijat reviewed the role of the National Tsunami Ready Board. He noted the success of Tsunami Ready implementation is subject to several conditions including oversight, which is the role of the National Tsunami Ready Board. The initial steps toward Tsunami Ready and its recognition process were discussed (refer to Figures 3 and 4).



**Figure 3:** Key steps in the UNESCO-IOC Tsunami Ready Recognition Programme.



**Figure 4:** Steps in the Tsunami Ready process at national and community levels.

The main function of the National Tsunami Ready Board is to identify the potential communities to implement Tsunami Ready.

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, and other relevant agencies. It was noted that any existing coordination mechanisms or bodies within the country can adopt the function of the national Tsunami Ready Board.

#### 4. GROUP DISCUSSION

The Group discussed opportunities for capacity building in Member States that need support for specific indicators. The Indian Ocean Tsunami Information Centre (IOTIC) offers online support, national trainings (typically for SIDs), and regional trainings to accommodate the needs of Member States.

#### 5. TRRP EQUIVALENCY

Ms Ashleigh Fromont, Co-Chair of ICG/PTWS Task Team on Tsunami Ready, provided an overview of the TRRP equivalency approach undertaken in the PTWS. At the 30<sup>th</sup> session of the ICG/PTWS (September 2023) the Task Team on Tsunami Ready was established under its Working Group 3 to coordinate developments of the Tsunami Ready Programme within the ICG/PTWS including developing formal guidance of a Tsunami Ready equivalency approach.

The purpose of the equivalency approach is to ensure that every country will contribute to the UN Ocean Decade Goal of 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO-IOC TRRP or other initiative. For the proposed equivalency concept, the twelve (12) TRRP indicators are taken as the definition of ‘prepared and resilient’. This process does not require application to UNESCO-IOC for formal Tsunami Ready recognition but will support ICG reporting.

The proposed TRRP equivalency approach has the steps:

1. Identify or establish national governance (National Tsunami Ready Board or equivalent)
2. Assess tsunami preparedness and resiliency against TRRP indicators
3. Report progress toward UNOD Goal to ICG

Ms Fromont provided an example of how TRRP equivalency is being applied in New Zealand. An existing tsunami governance group called the National Tsunami Reference Group consists of national and local NDMO offices, the national tsunami warning centre, and the science community. The Group’s Terms of Reference will be modified to include (i) verification of an analysis of tsunami preparedness, in the context of the Tsunami Ready Framework, and (ii) to act as a National Tsunami Ready Board for formal recognition, if required. The Board could also approve formal Tsunami Ready Recognition should a community.

#### 6. NATIONAL TSUNAMI READY REPORTS

The Tsunami Ready Focal Points (TRFPs) were invited to share their national reports on Tsunami Ready. These included the (i) ongoing community tsunami preparedness programme, (ii) plan for Tsunami Ready implementation, and (iii) technical support requirements for implementation.

**Bangladesh:** Mr Netai Chandra Dey Sarker of the Department of Disaster Management reported that there are tsunami projects underway including partnerships for strengthening school preparedness for tsunamis, multi-hazard risk vulnerability assessment modelling and mapping, and tsunami hazard zoning. The Cyclone Preparedness Program, which is expansive along the coast of Bangladesh, is the preferred mechanism for coordination of the TRRP. Technical support requirements were identified.

India offered to support Bangladesh with the tsunami early warning guidelines and in-person capacity building training for ocean related hazards at INCOIS in Hyderabad.

**Comoros:** Ms Haniya Abdoukarim Said of the National Agency of Civil Aviation and Meteorology reported that at the community level [unfortunately] nothing has been done yet, but progress is underway. Comoros is currently in the preparation phase of identifying pilot communities for the implementation of Tsunami Ready, however, they require additional support. In terms of technical support, they need to



translate existing procedures and tools at the national level to the local level, generalise existing pilot studies in select cities, and support for the integration of data from buoys and tide gauges once installed.

**India:** Ms Sunanda Manneela reported of the Indian National Centre for Ocean Information Services (INCOIS) reported that India began their Tsunami Ready programme in 2019 with two communities recognised in 2020. They have established a national Tsunami Ready Board. Gujarat State has proposed two (2) villages for the programme with meetings and workshops underway. In Kerela, nine (9) villages are proposed for Tsunami Ready implementation with the tsunami evacuation plan in progress. In Odisha State, twenty-four (24) villages are proposed for implementation. In the Andaman and Nicobar Islands two (2) villages are proposed with an orientation workshop planned. There is a plan to recognise these villages at the 2<sup>nd</sup> UNESCO-IOC Global Tsunami Symposium in November.

**Indonesia:** Ms Kian Purna Sinki of the Agency for Meteorology, Geophysics and Climatology (BMKG) reported that ten communities have been recognised as Tsunami Ready. In 2024, five more communities will be inaugurated at the 2<sup>nd</sup> UNESCO-IOC Global Tsunami Symposium. Additionally, seven more communities are in the pipeline. Technical support requirements have been identified for individual villages.

The BMKG earthquake field school has been conducted for 148 communities. During the field school, the hazard map was created and displayed for the community in collaboration with the National Disaster Management Organisation. A table-top exercise was conducted to examine their standard operating procedures. Once communities complete the earthquake field school they can apply for Tsunami Ready recognition.

**Madagascar:** Mr Adriamiranto Raveloson of the Institute and Observatory of Geophysics of Antananarivo (IOGA) reported that they are running a tsunami training programme at the village level. For the commemoration of the 2004 tsunami there are plans to build a convention center to be used for conferences and training. Preparation of tsunami inundation and evacuation maps for vulnerable coastal cities and villages are underway. Technical support requirements against the assessment, preparedness and response indicators were outlined.

**Malaysia:** Ms Ain Syafiqah binti Abd. Haris of the National Disaster Management Agency reported on Malaysia's community tsunami preparedness programme. Community-based disaster risk reduction initiatives in Malaysia include tsunami drills and the disaster-prepared community roadshow for Kudat District. Technical support for developing educational materials, capacity building, and training has been identified.

**Maldives:** Ms Aishath Shiuna of the National Disaster Management Authority provided the Tsunami Ready report of Maldives. Tsunami is one of the hazards addressed within the community-based disaster risk management program. Maldives hosted its inaugural workshop on tsunami preparedness and emergency response on 4 August 2024. In the future, they hope to establish a specialized task force or subcommittee dedicated to tsunami preparedness. Technical support for implementation of Tsunami Ready is required in the areas of technical infrastructure, communication tools, and public awareness campaigns.

**Mauritius:** Ms Shivane Appadoo joined from the National Disaster Risk Reduction and Management Centre. Mauritius and Rodrigues have a lead-time of 5-7 hours before tsunami waves are likely to reach their coasts from either the Sumatra or Makran sources. Mauritius has conducted sensitisation programmes on community disaster response including tsunami. They have participated in the IOWave exercises and in 2023 evacuations were conducted.

Mr Kodijat explained that under the UNESCO-IOC and BMKG partnership there is a focus on tsunami ready training in Small Island Developing States (SIDs). IOTIC will consider Mauritius for the 2025 training workplan.

**Seychelles:** Ms Catherina Boonelame of the Department of Risk and Disaster Management reported that limited activity has occurred since the Tsunami Ready training in November 2023. Seychelles does not presently have a community tsunami preparedness programme and are in the process of developing the implementation plan for TRRP. Seychelles plans to use the existing stakeholders for the NTRB and formalise by the end of 2024. They require technical support with the assessment particularly with the tsunami hazard mapping, drafting standard operating procedures, capacity building, and technical equipment advice. The assistance will help in development of evacuation plans.

Mr Kodijat responded that he will get in touch in the coming weeks to follow up on the training conducted in Seychelles in 2023.

**South Africa:** Mr Dechlan Pillay of the National Disaster Management Centre reported that there are other hazards with greater focus than tsunami in South Africa. They have undertaken hazard mapping and updated their standard operating procedures accordingly. In 2024, tsunami hazard was introduced as part of their coastal discussions for South Africa within the information forum for disaster managers. Five (5) coastal schools have registered to participate in tsunami education programmes. The governance process for Tsunami Ready will be through the coastal forum. In terms of technical support, South Africa requires input on governance outside of a formal board and a hazard profile for the South Indian Ocean.

**Sri Lanka:** Mr Chathura Liyanaarachchige of the Disaster Management Center noted there have been many activities in community tsunami preparedness including school preparedness planning and drills during Exercise IOWave23. The role of the National Tsunami Ready Board will be assigned to the Technical Advisory Committee on Tsunami Early Warning as defined in the National Disaster Management Act (2005). Sri Lanka has assessed their actions against each Tsunami Ready indicator. In IOWave23 community evacuations were conducted in three villages and two schools. The villages evaluated the Tsunami Ready indicators. Technical support is required for hazard map development, sharing of knowledge and lessons learned, and standard operating procedures for near-field tsunamis.

**Timor Leste:** Mr Severino da Costa Oliveira of the National Disaster Management Directorate reported that the Civil Protection Agency (CPA) is conducting tsunami preparedness programme is currently underway. This year the focus is on the schools and next year the focus will be on the villages. The programme has been conducted in five (5) schools with eleven (11) additional schools to be trained in 2024 including a drill. In collaboration with UNDP, schools with risks to tsunami have been identified. Timor Leste will continue the dissemination of earthquake and tsunami information to mitigate the treats at the local level. In 2022, tsunami exercises were conducted in two primary schools in the Atabae Administrative Post of Bobonaro Municipality. Technical support is required in Global Information System (GIS) training for tsunami hazard zones and evacuation maps, plans, and procedures for CPA and other agencies.

## **7. WORKPLAN AND DISCUSSION**

Working Group 3 discussed the workplan for the remainder of the intersessional period. The actions include:

**Action 1:** *Tsunami Ready Focal Points to update on the National Tsunami Ready Board or adoption of the NRTB function by end of September.*

**Action 2:** *Tsunami Ready Focal Points to update on the identification of potential communities to Pilot the 12 Tsunami Ready indicators, by mid-October 2024.*

## 8. RECOMMENDATIONS

Ms Suci Anugrah presented the recommendation for Working Group 3, which was agreed by the members.

**Recommendation 1:** *To request the Tsunami Ready Focal Points to:*

1. *Familiarize yourself with the Tsunami Ready Manual and Guide No. 74: <https://unesdoc.unesco.org/ark:/48223/pf0000381353>*
2. *Assess and review existing Tsunami Ready communication materials, considering the need to translate them into national and local languages.*
3. *Evaluate the role, responsibilities, and functions of the National Tsunami Response Board (NTRB) to determine if a new coordination body is needed or if the existing disaster management mechanism should be expanded to include these functions.*
4. *Review the national tsunami preparedness program (if any) to ensure it aligns with the 12 Tsunami Ready indicators.*
5. *Identify potential communities as pilot sites for implementing the Tsunami Ready Recognition program.*
6. *Assess and review the level and definition of a community to determine its suitability for the Tsunami Ready Recognition program.*
7. *Review and evaluate the national capacity to implement the 12 Tsunami Ready indicators and identify the support needed.*

## 9. CLOSING REMARKS

Ms Suci Anugrah thanked the distinguished experts, especially Mr Ardito Kodijat and Dr Mohammad Mokhtari, Working Group members including the Tsunami Ready Focal Points, and the Secretariat for their participation and contributions to the intersessional meeting of Working Group 3 on Tsunami Ready Implementation. Ms Anugrah thanked everyone for their kindness, participation, and valuable inputs throughout the meeting. She hopes the results of this meeting will be followed with concrete actions. Ms Anugrah closed the meeting at 11:30 UTC.

## ANNEX 1: AGENDA

**Intergovernmental Coordination Group (ICG)**  
**Indian Ocean Tsunami Warning & Mitigation System (IOTWMS)**  
**Working Group 3 on Tsunami Ready Implementation**

21 August 2024

Chair: Ms Suci Dewi Anugrah

Time (UTC)	Agenda	Topic	Speaker
<b>06:30 – 07:00</b>	<b>1</b>	<b>Opening</b>	
	1.1	Welcome and Opening Remarks	Ms Suci Dewi Anugrah
	1.2	Adoption of Agenda	Ms Suci Dewi Anugrah
	1.3	Terms of Reference and Membership of WG3	Ms Nora Gale
	1.4	Meeting Logistics	Ms Nora Gale
<b>07:00 – 07:45</b>	<b>2</b>	<b>Briefing on Tsunami Ready Recognition Programme (TRRP)</b>	
	2.1	Report of the Chair (10 min) <i>Includes promotion of Tsunami Ready at the UNESCO-IOC 2<sup>nd</sup> Global Tsunami Symposium</i>	Ms Suci Dewi Anugrah
	2.2	ICG/IOTWMS Governance and Structure (5 min)	Ms Nora Gale
	2.3	TOWS-WG Decisions on Tsunami Ready (10 min)	Mr Ardito M Kodijat
	2.4	Introduction to Tsunami Ready Recognition Programme (20 min) <i>Includes Tsunami Ready Tools</i>	Mr Ardito M Kodijat
<b>07:45-08:15</b>	<b>3</b>	<b>Implementation of Tsunami Ready</b>	
	3.1	Tsunami Ready in the Indian Ocean (10 min)	Ms Suci Dewi Anugrah
	3.2	Tsunami Ready Focal Point Roles (10 min)	Ms Nora Gale
	3.3	National Tsunami Ready Board (10 min)	Mr Ardito M Kodijat
<b>08:15-08:30</b>	<b>4</b>	<b>Group Discussion</b>	All
08:30 – 08:45	Break		
<b>08:45-08:55</b>	<b>5</b>	<b>TRRP Equivalency</b>	
	5.1	Pacific Ocean Initiative (10 min)	Ms Ashleigh Fromont
<b>08:55-09:55</b>	<b>6</b>	<b>National Tsunami Ready Reports from the Tsunami Ready Focal Points (TRFPs; 5 min each)</b> Slides for presentation to include: 1) What is your ongoing community tsunami preparedness programme? 2) What is your plan for Tsunami Ready implementation? <i>Including establishment of a National Tsunami Ready Board</i> 3) What kind of technical support is required to implement TRRP?	

	6.1	Bangladesh	<i>Mr. Netai Chandra Dey Sarker</i>
	6.2	Comoros	<i>Ms. Haniya Abdoukarim Said</i>
	6.3	India	<i>Ms Sunanda Manneela</i>
	6.4	Indonesia	<i>Ms Kian Purna Sinki</i>
	6.5	Madagascar	<i>Mr Adriamiranto Raveloson</i>
	6.6	Malaysia	<i>Ms Ain Syafiqah binti Abd. Haris</i>
	6.7	Maldives	<i>Ms Aishath Shiuna</i>
	6.8	Mauritius	<i>Ms Shivane Appadoo</i>
	6.9	Seychelles	<i>Ms Catherina Boonelame</i>
	6.10	South Africa	<i>Mr Dechlan Pillay</i>
	6.11	Sri Lanka	<i>Mr Chathura Liyanaarachchige</i>
	6.12	Timor Leste	<i>Mr Severino da Costa Oliveira</i>
09:55 -10:10	<b>7</b>	Workplan and Discussion	All
10:10 – 10:25	<b>8</b>	Recommendations	All
10:25 – 10:30	<b>9</b>	Closing Remarks	Ms Suci Dewi Anugrah

Meeting documents and presentations are available at: <https://oceanexpert.net/event/4435>

## ANNEX 2: PARTICIPANT LIST

### **Intergovernmental Coordination Group (ICG) Indian Ocean Tsunami Warning & Mitigation System (IOTWMS) Working Group 3 on Tsunami Ready Implementation**

21 August 2024

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