

Intergovernmental Oceanographic Commission

# Report of The Indian Ocean Tsunami Information Centre

ICG/IOTWMS SG Meeting 14-15 July 2022

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# **IOTIC Term of Reference (2012)**





### **IOTIC's Roles**

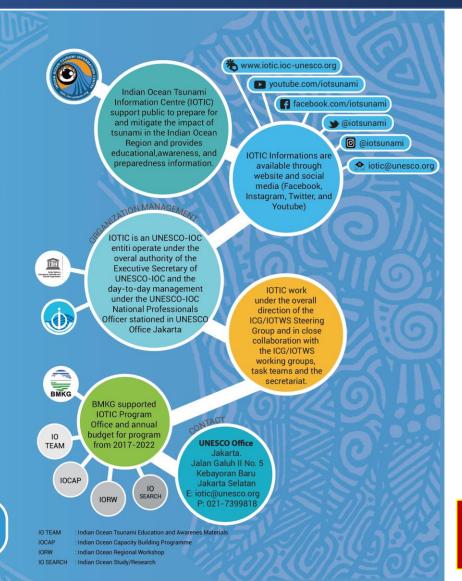
Work with the Tsunami Service Providers (TSPs), the National Tsunami Warning Centres (NTWCs), and the National **Disaster Management Offices (NDMOs) in** the Indian Ocean Region to promote and sensitize information on tsunami early warning system and the understanding of the warning process and products.

Supports Indian Ocean member states at national and community level to strengthen awareness and preparedness for an effective emergency response to a tsunami early warning system through i.e UNESCO IOC Tsunami Ready.

Capacity building and develop education, awareness, and preparedness materials for an **effective tsunami early warning and Mitigation** System.

Manage post-event performance surveys and compilation of reports in close collaboration with the ICG/IOTWS Secretariat under the overall direction of the ICG/IOTWS Steering Group, assisted by teams of experts nominated by the ICG/IOTWS Steering Group as required.

Coordinate activities, exchange materials and information with other Tsunami Information Centres (TICs) from other ocean basins.



- Support, as needed, the operations and needs of the Indian Ocean Tsunami Warning and Mitigation System working closely with the TSPs, NTWCs and NDMOs.
- Support ICG/IOTWMS on training programs, workshops, and seminars in coordination with the ICG/IOTWS Secretariat and the working groups.
- 3. Manage Post-event Performance Surveys and the International Tsunami Survey Team and the compilation of reports in close collaboration with the ICG/IOTWMS Secretariat under the overall direction of the ICG/IOTWS Steering Group.
- 4. Develop educational, preparedness, and other awareness materials for Indian Ocean member states required for an effective tsunami warning and mitigation system.
- 5. Develop, manage and maintain the IOTIC Website and strategic and long term plans for sustaining the IOTIC in consultation with the ICG/IOTWMS Steering Group.

More detailed TOR could be found at:

http://www.ioc-

tsunami.org/index.php?option=com\_content&view=article&id=77&Itemid=75&lang=en

**IOTIC Proposes to Revise the TOR** 

### **IOTIC Achievement in a Flash (~ 2021)**



Oceanographic

Commission

**Work with Indian Ocean Member States** 





- UNESCO IOC Tsunami Unit
- ICG/IOTWMS Secretariat
- ICG/IOTWMS SG / WGs / TTs
- TOWS Task Team for Tsunami Disaster Management and Preparedness

IOTIC

ICG/IOTWMS Secretariat

- UNESCO IOC Tsunami Information Centers (CTIC, ITIC, NEAMTIC)
- Ocean Teacher Global Academy Secretariat



- **BMKG Geophysics**
- **BMKG InaTEWS**
- **BMKG Training Centre** (STC OTGA)



Australia Bangladesh Comoros French Reunion

India Indonesia Iran Kenya

Madagascar Malaysia **Maldives** Mauritius

(Active IOTWMS Member States)

Mozambique Mvanmar Oman **Pakistan** 

Seychelles Singapore South Arfica Sri Lanka

Tanzania Thailand **Timor Leste United Arab Emirates** Yemen

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#### Nork with Tsunami Service Providers

- Bureau of Meteorology (BOM), Australia
- **Indian National Centre for Ocean Information** Services (INCOIS), India
- Agency for Meteorology, Climatology, and Geophysics (BMKG), Indonesia

2011

2014

2018

2020

### **Past Tsunamis**

#### Information preserved

- 1945 Makran Tsunami
- 1950 Ambon Tsunami
- Central Sulawesi Tsunamis (1938, 1968, and 2018)
- 1992 Flores Tsunami
- 1994 Banyuwangi Tsunami
- 1996 Biak Tsunami
- 2000 Banggai Tsunami (On Going)

Past Tsunamis Eyewitness Stories

**Projects** 

(2012-2020)IFIT (1); MFIT (1); UNESCAP (4): **Charles Englehart Foundation (1)** 



Support 2009 Indian Ocean Tsunami Wave **Exercises** (IOWave)

iowave.org

(2017-2021) Indian Ocean **Regional Workshop** 

### **Facilitate and support Tsunami Ready Community**

2 communities in Odisha State India (Noliasahi and Venkatraipur) and 1 community in Bali, Indonesia (Tanjung Benoa) recognized at UNESCO-IOC Tsunami Ready Community

# Webinars)

(2017-2021) Indian Ocean **Capacity Building Training** 

(2020) Indian Ocean Lecture Series during COVID-19

**Indian Ocean Youth Video Competition** 

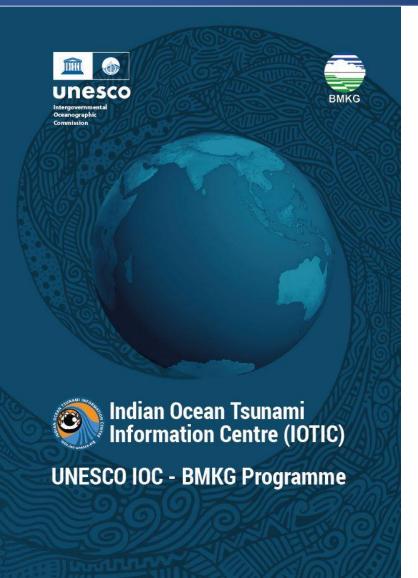
### **Tsunami Ready Communication Tools**

- 1 TR Boardgame
- 21 TR E-Posters
- 14 Short Animation Videos





1. UNESCO-IOC and BMKG Partnership Agreement "Support to IOTIC-BMKG Programme"



UNESCO-IOC and BMKG Partnership Agreement end on 30 June 2022, a new partnership agreement is in process for signing.

**IOTIC prepared the IOTIC-BMKG Programme Review (2017-2021)** 

2017 - 2022

2023 - 2027

### **Objectives**

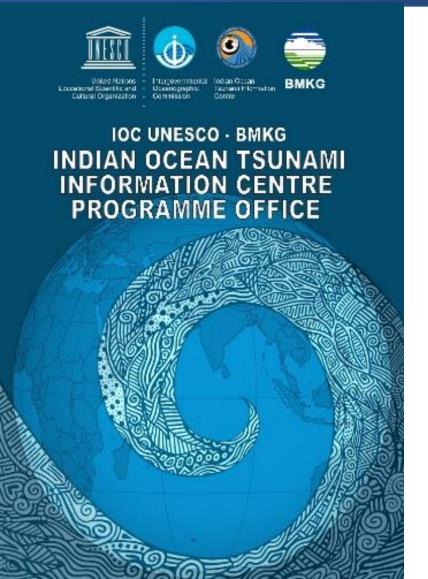
- Ensure sustainability of the Indian Ocean Tsunami Information Centre.
- Support IOTIC programs and activities for the Indian Ocean Member States in coordination with the ICG/IOTMWS Secretariat.
- Strengthen, enhance, empower BMKG's role in IOTWMS.
- Support capacity building of BMKG staff in international platform, collaboration, and cooperation.

- Ensure the sustainability and continuation of service of the Indian Ocean Tsunami Information Centre to the Indian Ocean Member States of the ICG/IOTWMS.
- Support IOTIC programmes and activities in coordination with UNESCO-IOC Tsunami Unit, the UNESCO-IOC ICG/IOTWMS Governance, and the UNESCO-IOC ICG/IOTMWS Secretariat.
- Enhance BMKG's role in the Indian Ocean Tsunami Warning and Mitigation System.
- Support capacity building of BMKG's staff assigned to IOTIC-BMKG in international cooperation.





1. UNESCO-IOC and BMKG Partnership Agreement "Support to IOTIC-BMKG Programme"



2017 -2022

2023 - 2027

### **Programme and activities**

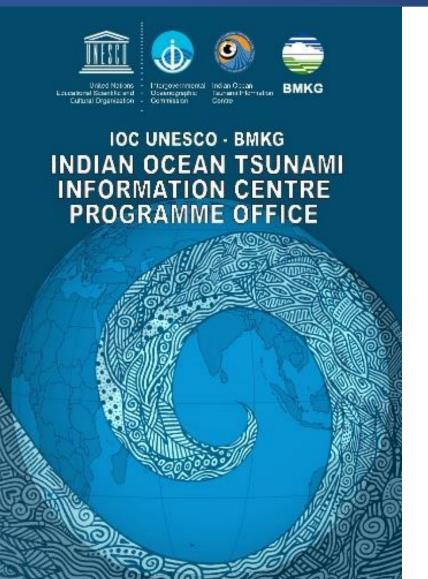
- Indian Ocean Regional Workshops (IORW)
- Indian Ocean Capacity Building (IOCAP)
- Studies and Researches (IOSEARCH)
- Tsunami Education, Awareness and Preparedness Materials (TEAMIO)
- Documenting and Communicating IOWaves and World Tsunami Awareness Day

- Indian Ocean Regional Workshops (IORW);
- Indian Ocean Capacity Building (IOCAP); and
- Indian Ocean Studies, Assessments, and Projects (IOSAP).
- Management of IOTIC website and social media at BMKG Server: for the IOTIC-BMKG programme and activities; Tsunami Education, Awareness and Preparedness resources; IOWave Tsunami Exercise; World Tsunami Awareness Day (WTAD); and other IOTIC activities and project results.





1. UNESCO-IOC and BMKG Partnership Agreement "Support to IOTIC-BMKG Programme"



2017 - 2022

#### **Budget**

- Annual BMKG budget of approximately of USD 80.000
- Annual UNESCO-IOC budget of approximately of USD 20.000 to support additional international participants

#### **Office Logistics**

 Office space and equipment and Office Supplies (paper, toner, etc.) and Utilities (electricity, water, local and international communication, internet).

#### **Staffing**

 BMKG assigned 3 staffs to support the administrative, coordination and organization of activities under BMKG Budget. 2023 - 2027

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#### Staffing

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IOTIC prepares a draft IOTIC- BMKG Workplan on Programme and Activities Under the Partnership Agreement of UNESCO-IOC and BMKG (2023 – 2027) for performance monitoring and review.





2. Coordinate, Organize Events and Activities in WTAD 2021

#### 4 WTAD Videos

- Odisha Tsunami Ready Community
- New Jogjakarta Tsunami Ready Airport
- Tsunami Ready Activity in Lebak
- Tsunami Ready Boardgame

1 WTAD video on InaTEWS as Tsunami Service Provider



Organized WTAD webinar on the theme SFDRR Target F on International Cooperation: A Strategic Pathway for the Indian Ocean Tsunami Warning and Mitigation System within the Context of UN Decade for Ocean Science. Wednesday, 10 November 2021



Event website for the Indian Ocean WTAD webinar: https://oceanexpert.org/event/3302





2. Coordinate, Organize Events and Activities in WTAD (2021)



A total of 79 videos were successfully submitted by participants from 9 countries:

- Bangladesh 3,
- India 5,
- Indonesia 24,
- Kenya 4
- Malaysia 12,
- Maldives 2,
- Pakistan 25,
- Seychelles 3, and
- Tanzania 2.



#### **GROUP 1: Eastern Indian Ocean Region**

1st Winner: Little Sea in Tompe by Sarah Adilah (Indonesia)

https://drive.google.com/open?id=1Hi0SUE030j1vNNifBA-8gmHbXfDA0BWG

2nd Winner: Living with the Sea by Vania Qanita Damayanti, Adrian Muhammad Fikri Suni & Nur Amri Firmansyah (Indonesia)

https://drive.google.com/open?id=1gGDLdL8D-g6eo\_JX54lkwP47r6y3UNsg

3rd Winner: Atypical Tsunami and Solution by Muhyddin Aprizandy, Bobby Tegar Sanjaya & Muna Fauziah (Indonesia)

https://drive.google.com/open?id=1Xb-m2xfbTKN0QfEOyc2PWWyUNtQjWK-2

#### **Group2 - Indian Ocean Small Island States**

1st Winner: We Are Aware by Darius Ashvine Commettant, Shainarah Chandell Manisha Ragain & Ruth Abigail Nicole Henrie (Seychelles)

https://drive.google.com/open?id=1RXKsj43e3iXIfEAGtrIISCuuQqEikRkH

2nd Winner: Public Tsunami Awareness by Ahmed Yaeesh Shaheem (Maldives)

https://drive.google.com/open?id=1e0-aJ4ztLH1aO-Te81kO1U0LPZ3Oc7Pf

3rd Winner: Tsunami the Incoming Threat by Melchizedek Solin (Seychelles) https://drive.google.com/open?id=1vdHHMP\_CKvcZ-zEpOLsMLXRdSGm2dYwM

#### Group3 - North Western Indian Ocean

1st Winner: Surviving Tsunami by Vandita Sariya (India)

https://drive.google.com/open?id=1rKqrguYpKtqBUfi5D7jvlDXYzlWny8Uk

2nd Winner: Let's Buck Against the Wave by Aneeqa Bibi, Humera Khan & Sania Mehmood (Pakistan)

 $\underline{https://drive.google.com/open?id=1qttIdLuNJBkXq\_yrDFe1ugwJR55w1J3l}$ 

3rd Winner: Make Them Aware if You Care by Ayesha Nadeem (Pakistan)

https://drive.google.com/open?id=1CZmUKsPVPBbwlDPoPlmCEIv-V3F4SsiT

#### Group4 - Western Indian Ocean region

1st Winner: Good Wave Intentions by Mahfudh Khamisi Omar (Kenya)

https://drive.google.com/open?id=1w3YbJeHpLd4KHMclqdR2exBpxdDysXiZ

2nd Winner: Tsunami Exercise by Neema Tayai Mollel (Tanzania)

https://drive.google.com/open?id=1f0elL-wfWvAkFNmRg9iOarvABzdb5TbP

3rd Winner: Do We Communicate Hazard and Risk of Tsunami by Yasin Ramadhan (Tanzania) https://drive.google.com/open?id=1oR17PnAm2e-dpibot9UQQxgE-BeQR\_Mc

Temporary Link in Google Drive, videos will be moved to IOTIC Youtube Channel



Tsunami Hazard - Webinar

lead of the Indonesian Disaster Expert Association ecturer from Bandung Institute of Technology (ITB)

Tsunami Early Warning & Mitigation Expert - Pakistan

Dr. Harkunti Pertiwi Rahayu





3. Develop UNESCO-IOC Tsunami Ready Communication Tools



# Tsunami Ready Boardgame

to introduce the 12 Tsunami Ready Indicators to the stakeholders (12 + years)

300 questions Cards

- Assessment
- Preparedness
- Response



### **14 Animation Tsunami Ready Videos**

Following the journey of Azam, Azizah, and Adam in building their Village "Nami" to be a Tsunami Ready Community based on UNESCO-IOC Tsunami Ready Indicators

- Video 1: Tsunami Ready (an introduction) + 7:10 mins
- Video 2: Tsunami Hazard for Tsunami Ready Community + 8:02 mins
- Video 3: Knowing people at risk of tsunami + 4:48 mins
- Video 4: Resource and capacity for Tsunami Ready Community + 6:57 mins
- Video 5: Public Tsunami Information in Community + 5:32 mins
- Video 6: Tsunami Evacuation Map for the community + 5:15 mins
- Video 7: Public Awareness and Education Resources + 5:07 mins
- Video 8: Outreach Activities in Tsunami Ready Community + 4:39 mins
- Video 9: Community Tsunami Exercise + 6:49 mins
- Video 10: Community Tsunami Emergency Operation Plan + 5:28 mins
- Video 11: Building Capacity in community for Emergency Response + 7:50 mins
- Video 12: Linking the Community to the Tsunami Warning Chain + 4:40 mins
- Video 13: Providing warning to the community + 5:27 mins
- Video 14: Getting Tsunami Ready Recognition + 6:50 mins

**UNESCO-IOC Tsunami Ready** Animation Video Information Series Tsunami Ready

IOTIC YouTube Channel: <a href="https://www.youtube.com/channel/UCFSPN4dJXOvFrMlkmlQdumQ">https://www.youtube.com/channel/UCFSPN4dJXOvFrMlkmlQdumQ</a>
Playlist: <a href="https://www.youtube.com/playlist?list=PLDzuUvIHTe3BLFcgDGXOAkwcCdTQ6VngH">https://www.youtube.com/playlist?list=PLDzuUvIHTe3BLFcgDGXOAkwcCdTQ6VngH</a>

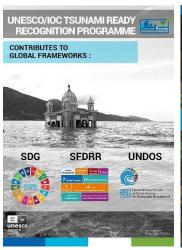
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3. Develop UNESCO-IOC Tsunami Ready Communication Tools



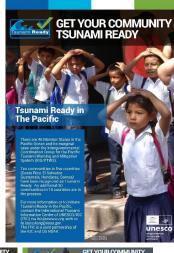


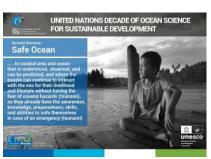






































21 E-Posters Tsunami Ready





- 4. Engagement in 2022 Global Platform for Disaster Risk Reduction in Bali
- 1. Interaction, Promotion, and Engaging with GPDRR participants on UNESCO-IOC Tsunami Ready Recognition Programme.
- 2. Launching of the Tsunami Ready
  Communication Tools (Tsunami Ready
  Boardgame and 14 Tsunami Ready Series
  Animation Videos).
- 3. Inauguration of Tanjung Benoa Community as UNESCO-IOC Recognized Tsunami Ready Community
- 4. Tsunami Ready Boardgame playing session
- 5. Consultation on Implementing Tsunami Ready Recognition Programme







4. Engagement in 2022 Global Platform for Disaster Risk Reduction in Bali

- 1. What is UNESCO/IOC Tsunami Ready
- 2. Tsunami Ready under UN Ocean Decade
- 3. Tsunami Ready in the Caribbean region,
- 4. Tsunami Ready in the Indian Ocean region,
- 5. Tsunami Ready in the NEAMS region,
- 6. Tsunami Ready in the Pacific region,
- 7. UNESCO/IOC Tsunami Ready —— Communication Tools
- 8. Tsunami Ready Implementations

e-Poster—— VR Tools

- a) 14 Tsunami Ready Animation Video Series
- b) UNESCO/IOC Tsunami Ready Viewer
- c) Tsunami Ready Boardgames

**Consultation on Implementing Tsunami Ready Recognition Programme** 







Ms. Amina J. Mohammed, UN Deputy Secretary-General and Ms. Mami Mizutori, Special Representative of the Secretary-General for DRR and Head of UN Office for Disaster Risk Reduction (UNDRR)





### 5. Development of OTGA TR Training Course

#### 3 Course breakdown

		Introduction to Tsunami Ready and the Indicators	Implementing Tsunami Ready	Facilitating Tsunami Ready
	Tsunami Ready for Officials and Programme Implementors	4 x lectures 4 x 45 minutes		
	Tsunami Ready for Community	4 x lectures 4 x 45 minutes	2 x lectures 2 x 45 minutes	
	Tsunami Ready for Facilitators	4 x lectures 4 x 45 minutes	2 x lectures 2 x 45 minutes	4 x lectures 4 x 60 minutes

Course 1
Introduction to
Tsunami Ready
& the Indicators

3 Types of modules

Course 2
Implementing
Tsunami Ready

Course 3
Facilitating
Tsunami Ready

- What is Tsunami Ready
- Why is it important
- What is the benefit of implementing TR
- What are the indicators
- Why are these indicators
- What do community do to start to implement TR
- Who are the stakeholder and the technical organization
- How to approach the organizations

 What does each of these indicator means and the relation of each indicators

· How to work on each of the Indicators

Module 1 Tsunami Ready for Officials and Programme Implementors (1 Course)

Module 2
Tsunami Ready for
Community
(2 Courses)

Module 3
Tsunami Ready for
Facilitators
(3 Courses)

The training is targeted for Government Officials (i.e. from National or Local Disaster Management Offices, National Tsunami Warning Centres, Gov Institutions) and Programme / Project planner and implementor (Donors, Funding agencies), etc.

The training is targeted for Community leaders, Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), Academics and Scientists, Community members, Private, Business, etc.

The training is targeted for Disaster Risk Reduction Facilitators for Disaster risk reduction workers and volunteers who are interested in assisting the community in capacity building for tsunami preparedness, etc.









Jointly with the ICG/IOTWMS Secretariat implement the UNESCAP Project (Proposal development, Implementation, Project administrative, and Reporting

2019 - 2021

### **UNESCAP Project, Phase-1:**

Strengthening tsunami early warning in the North West Indian Ocean region through regional cooperation

Objective 1: Better understanding of the risk knowledge based on scientific research

Objective 2: Improvement of warning services at NTWC level and the organization of the national warning chains to assure timely warnings and rapid response with due emphasis on self-protection for near source events

2022

### **UNESCAP Project, Phase-2:**

Strengthening tsunami early warning in the North West Indian Ocean region through regional cooperation

Objective 3: Finalization of Phase-1 remaining activities in tsunami risk knowledge and strengthening of national tsunami warning chains.

Objective 4: Gap analysis and development of guidance on tsunami inundation mapping and evacuation planning in the NWIO region

### 2. Summary of Summary of Challenges and Gaps



- 1. Working mechanism and procedure within IOTWMS for IOTIC program and activities, i.e. engagement with TNC, NTWC, and DMO, WG, TT, etc.
- 2. Role of IOTIC in:
  - 1. UNESCO-IOC Tsunami Ready Recognition Programme
  - 2. UN Ocean Decade Tsunami Program in Indian Ocean
  - 3. Capacity building, workshops/webinars, and training,
  - 4. Project implementation and coordination
- 3. Participation of MS in IOTIC programme and activities and the follow up and sustainability post implementation.
- 4. Engagement and involvement of MS' Youth and Young Professionals → Re-generation of TWMS champions in MS.
- 5. Resources (funding and man-power) for IOTICs to provide information, facilitate, and process MS' UNESCO IOC Tsunami Ready Recognition Programme (i.e. implementation, verification process).
- 6. Communication and information, management, maintenance, and update and sustaining the IOTIC website and social Media.
- 7. Sustainability of IOTIC → Re-generation staff

### 3. Moving Forward





- 1. Strengthen IOTIC's role and working mechanism in IOTWMS:
  - 1. Revise IOTIC's Term of Reference
  - 2. Re-new / extend the Partnership Agreement between UNESCO-IOC and the Government of Indonesia (through BMKG) to continue to support the IOTIC- BMKG Program for another 5 years (2023 2027).
  - 3. Develop a 5 years workplan / program of IOTIC- BMKG Program to align with the strategic pathway and UN Decade, especially on tsunami ready.
  - 4. Clear role, working mechanism, and ensure visibility of IOTIC in IOTWMS programme and activities.
  - 5. Ensure IOTIC's role and visibility in activities and engagements within the IOTWMS strategic pathway and implementation plan within the context of the UN Ocean Decade Tsunami Program in Indian Ocean.
- 2. IOTIC's role and responsibility in the UNESCO-IOC Tsunami Ready Implementation in Indian Ocean:
  - 1. Advocate, facilitate, and support the implementation of UNESCO-IOC Tsunami Ready Recognition Programme of the MS through capacity building activity (workshops and training) and resources (materials and tools).
  - 2. Support UNESCO-IOC in coordination, management, registration, verify, record, and monitor the development of tsunami ready community in MS and its recognition.
  - 3. Seek additional support from Donors and Member States to support the implementation of UNESCO-IOC Tsunami Ready Recognition Programme in Indian Ocean.

### 3. Recommendation to the ICG





- 1. To note the extension / renewal of the Partnership Agreement between UNESCO-IOC and the Government of Indonesia (through BMKG) to continue to support the IOTIC-BMKG Program for 2023 2027 and endorse the 5 years workplan under the IOTIC-BMKG Programme.
- 2. To endorse the renewed IOTIC Term of Reference.
- To note the role of IOTIC to facilitate, guide, and support MS in the implementation of UNESCO-IOC Tsunami Ready Recognition Programme

# Thank you







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

Disaster Risk Reduction and Tsunami Information Unit
UNESCO Jakarta Office

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