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Intergovernmental Oceanographic Commission

### 6 New Projects Tsunami Ready Training

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TOWS WG Task Team on Disaster Management and Preparedness

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### UNESCAP TTF-29 Project, Phase-2: Strengthening tsunami early warning in the North West Indian Ocean region through regional cooperation

Participating Member States: India, Iran, Pakistan, Oman & UAE Target Groups: NTWCs, DMOs, Media, Communities, Response Agencies Project Duration: 12 Months: December 2021 - November 2022 Approved Budget: USD 280K

## 1. UNESCAP Project Objectives



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#### Phase 1:

- *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*

## Phase 2

- Finalization of Phase-1 remaining activities in tsunami risk knowledge and strengthening of national tsunami warning chains.
  - 1. Exchange of latest scientific results and regional/international studies on the tsunami hazard in the Makran subduction zone (deferred from Phase-1)
  - 2. Final regional NTWC-DMO (National/Local) and Media workshop to share experiences and provide mechanism to involve media in tsunami warning dissemination and outline requirements for related SOP development
- Gap analysis and development of guidance on tsunami inundation mapping and evacuation planning in the NWIO region
  - 1. Regional working group meetings on tsunami modelling and inundation mapping with the aim to undertake a gap analysis and develop specifications for a unified approach for tsunami modelling in the region, including the provision of inputs from international expertise
  - 2. Information package on existing approaches, standards, methodologies and best practices for tsunami evacuation planning as well as tailored recommendations for the NWIO countries including concrete steps for the development of context-specific policies, standards and approaches.

**Finalisation of Phase-1 Activity:** 

#### Activity

- Share the PTHA model (V1.0) with the region for adoption
- Report on the latest regional/international studies on the ٠ tsunami hazard in the Makran subduction zone

Outputs

- A unified regional tsunami hazard map
- Availability of latest scientific insights on the tsunami hazard Additional Activity from the MSZ as an input for risk assessment activities in the countries

#### Activity

- Hybrid = regional virtual & national face-to-face
- Involve media in tsunami warning dissemination ٠
- Outline requirements for related SOP development ٠
- Share experiences ٠

Outputs

- Revised SOPs along the warning chain
- Policies and SOPs for Public Media developed for warning dissemination

Activity

 Table-top exercise NWIO region

#### Output

 Test and refine national tsunami warning chains established during Phase-1 of project.



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Regional NTWC, N/L **DMO &** Media Workshop

Online

scientific

meeting



### Tsunami inundation mapping and evacuation planning

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Gap analysis and
development of
guidance
(Tsunami
Inundation)

Activity

- Included in WG-NWIO activities
- Underpinned by PTHA model of Phase-1
- Cooperation and exchange of knowledge on tsunami modelling and inundation mapping
- Gap analysis of tsunami inundation capabilities in the region
- Development of a regional unified method for tsunami modelling

#### Output

• Specifications for a unified approach for tsunami modelling and inundation mapping for the NWIO region.

Gap analysis and development of guidance (Tsunami Evacuation)

#### Activity

- Synthesise existing information on tsunami evacuation planning: approaches, standards, methodologies & best practices
- Guide development of national evacuation planning policies, standards and approaches
- Support establishment of national working groups on evacuation planning to facilitate implementation in each participating country

#### Output

 Set of national policies, standards and approaches for evacuation planning in participating countries



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### 1. UNESCAP Project Timetable



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2021 2022 **UNESCAP Project TTF-29, Phase-2: Activity Timetable** Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov 3. Finalisation of Phase-1 remaining Objectives in tsunami risk knowledge and strengthening of national tsunami warning chains 3.1 Exchange of latest scientific results and studies from international studies on the tsunami hazard in the MSZ 1 Virtual coordination and meetings with Regional and National Working Groups 2 Preparation for Scientific Exchange meeting 3 Scientific exchange meeting in Muscat - Oman 3.2 Regional NTWC-DMO-Media SOP workshop and 3.3 Backstopping to National Working Groups 1 Virtual coordination and meetings with National Working Group 2 Engagement with Technical expert 3 Backstopping to National Working Groups 4 Preparation for Regional NTWC-DMO-Media SOP workshop 5 Regional Workshop on Standard Operating Procedure for NTWC-DMO-Media 3.3 NWIO Regional Tsunami Exercise 1 Planning 2 Exercise

UNESCAP Project TTF-29, Phase-2: Activity Timetable		2021	2022											
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
4. Gap	4. Gap analysis and development of guidance on tsunami inundation mapping and evacuation planning in the NWIO region													
4.1	Gap analysis and develop specifications for a unified approach for tsunami modelling and inundation mapping in the region													
1	Virtual coordination and meetings with Regional and National Working Groups													
2	Engagement with Technical expert													
3	Preparation for meeting on developing unified approach to inundation modelling													
4	Regional meeting on unified approach to inundation modelling													
5	Exhange of Experts for Enhancement of Source model for Inundation Mapping													
4.2	2 Tsunami evacuation planning recommendations for the NWIO countries													
1	Virtual coordination and meetings with National Working Group													
2	Engagement with Technical expert													
3	Preparation for meeting on agreeing best practices													
4	Regional meeting on best practices for evacuation planning in Muscat - Oman													

### 2. IOTIC BMKG Programme Activity in 2022



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#### IOC UNESCO - BMKG INDIAN OCEAN TSUNAMI INFORMATION CENTRE PROGRAMME OFFICE



- Indian Ocean Regional Workshop (proposed):
  1. Indian Ocean Tsunami Ready Implementation Workshop
  2. Side event and Innovation Platform at GPDRR 2022 in Bali, In May

Development of Tsunami Ready Tools (proposed):

- UNESCO-IOC Tsunami Ready Recognition Online Application
   Tsunami Ready Community Walkthrough Video in Bali

IOTIC and IOWave Website (proposed): Migration and improvement of IOTIC and IOWave website to BMKG server **Preserving Past Tsunamis Information in Indian Ocean** 

Banvuwangi

Tsunami

46 videos



1945 Makran Tsunami 38 videos



Tsunami

45 videos

1950 Ambon Tsunami 28 videos





Tsunami Biak 1996 Tsunami Banggai 2000



Central Sulawesi Tsunamis (1927, 1938, 1968, 1996, 2018) 30 videos

### 2. IOTIC BMKG Programme UNESCO-IOC Tsunami Ready Recognition Online Application



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*Complete data and information of the nominated village* 

### Complete Indicators Checklist and Attachments

- A. Assessment
  - 1. Indicator 1
  - 2. Indicator 2
  - 3. Indicator 3
- B. Preparedness
  - 1. Indicator 4
  - 2. Indicator 5
  - 3. Indicator 6
  - 4. Indicator 7
  - 5. Indicator 8
- C. Response
  - 1. Indicator 9
  - 2. Indicator 10
  - 3. Indicator 11
  - 4. Indicator 12

Automatically inform by email to UNESCO IOC Secretariat TIC of the Region ICG Secretariat of the Region

All files and information saved according to the region



Select Regions

NEAMS

4. Pacific

3.

Caribbean

Indian Ocean

## 2. IOTIC BMKG Programme Partnership Agreement UNESCO-IOC and GOI (BMKG)



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Renew Partnership Agreement UNESCO-IOC and GOI (BMKG) "Support to IOTIC-BMKG Programme" (2022 - 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 through capacity building of BMKG staff in international platform, collaboration, and cooperation

#### Program and activities

Regional Support focusing on Tsunami Ready Implementation in Indian Ocean:

- Indian Ocean Regional Workshops and Capacity Building (IORW)
- Hosting, Improving, Manage, and Maintaining IOTIC and IOWave Website
- Studies and coordination on Tsunami Ready in Indian Ocean
- Tsunami Awareness, Education, Preparedness Resources and/or Tsunami Ready Resources and Tools

#### Budget

- Annual BMKG budget of approximately of USD (To be determined)
- Annual UNESCO-IOC Regular Program budget of approximately of USD (To be determined

#### **Office Logistics**

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

#### Staffing

• Three (3) staffs BMKG will be assigned to support the administrative, coordination, and organization of activities under BMKG Budget.



Indian Ocean Tsunami Information Centre (IOTIC)

UNESCO IOC - BMKG Programme

# Thank you



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Disaster Risk Reduction and Tsunami Information Unit UNESCO Jakarta Office

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