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# Strengthening tsunami early warning in the North-west Indian Ocean region through regional cooperation

## Phase 2c

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

## *Phase 1:*

Project Cost US\$ 147,470  
(2019-2021)

- 1) Better understanding of the tsunami risk knowledge to inform and underpin warning and mitigation systems in the NWIO to enable appropriate and effective community responses to the tsunami threat.
- 2) Improvement of warning services at NTWC level and the organization of the national warning chains to assure timely warnings.

## *Phase-2a:*

Project Cost US\$ 280.442,-  
(2022)

1. Finalisation of some Phase-1 remaining activities in tsunami risk knowledge and strengthening of national tsunami warning chains

## *Phase-2b:*

2. Gap analysis and development of guidance on tsunami inundation mapping and evacuation planning in the NWIO region

## *Phase-2c:*

Project Cost US\$ 298.834,-  
(2024)

Training in development of 1) tsunami inundation maps and 2) Tsunami evacuation plans to facilitate effective community responses to the threat from near-field and far-field tsunamis.

## *Phase-3: To be proposed*

Implement Tsunami Ready Recognition Programme (or similar national initiative) in NWIO countries.

# Goals of Phase 2c

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1. Development of hazard and inundation mapping capabilities by enhancing capacities in tsunami modelling.
2. Development of evacuation planning capabilities in line with the requirement for communities to effectively respond to the threat from near-field and far-field tsunamis.

# Objective Phase 2c

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Training in development of tsunami inundation maps and evacuation plans to facilitate effective community responses to the threat from near-field and far-field tsunamis.

# Expected Outcomes Phase 2c

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- **Increased capacities and knowledge on tsunami and inundation modelling and mapping** in the participating countries
- **Improved databases for tsunami forecasting** at NTCWC level
- **Increased coverage of areas with scientifically robust inundation maps for the threat of tsunami**, as well as information for risk-sensitive planning
- **Tested and approved tsunami evacuation plans in selected pilot areas** providing references for further up-scaling
- **National mechanism and capability to support the development of evacuation plans at community level** in remaining tsunami prone areas in line with the requirements of the UNESCO/IOC Tsunami Ready Programme

# Outputs of Phase 2c

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- 1. Regional training workshop for members of the NWIO Regional Working Group on Tsunami Inundation Modelling and Mapping (RWG-TIMM).**
- 2. Regional training workshop for selected participants from the National Working Groups on Tsunami Evacuation Planning (NWG-TEPs) of the member countries to build the required capacities to facilitate and provide technical expertise for evacuation planning processes at local level**
- 3. Implementation and backstopping during the evacuation planning and implementation processes in pilot communities to help strengthen capacities of the national facilitators, and to assure quality in the processes and outputs.**

# Performance Indicators for Phase 2c

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- 1. Detailed reports on training provided on inundation mapping and evacuation planning, including community inundation and evacuation maps**
- 2. Detailed reports on the testing of the developed evacuation plans (one pilot community per country) in a tsunami drill for each community**

# Activity Output 5.1 Regional training workshop on inundation mapping

*Capacity development utilising NWIO Regional Working Group Tsunami Inundation Modelling and Mapping (NWIO RWG-TIMM) to utilise unified approach developed in Phase 2a to develop inundation maps for identified pilot areas.*

## Three (3) days regional training workshop in Oman 21-23 April 2024

- IOC Facilitator/Coordinator/Technical Assistant: 1 Person
- Representatives of the NWIO RWG-TIMM: 2 from each country = 6 Persons
- Representatives of the NWIO RWG Chair or Task Team MSZ: 1 Person
- Representative of the ICG/IOTWMS WG1 or WG3 Chair: 1 Person
- Trainer / Facilitator: 1 Person
- Facilitation for Regional SOP Workshop (Venue and Meeting Package)

## International Consultant

- External Facilitator/Consultant/Technical Assistant
- Travel to Workshop

## National Consultant (India, Iran, Pakistan)

- National Facilitator/Consultant/Technical Assistant : 3 persons
- Travel to Workshop (1 person each country)



# Activity Output 5.2 Regional face-to-face training workshop on evacuation planning

*Regional training workshop to build the required capacities to facilitate and provide technical expertise for evacuation planning processes at local level.*

## Four (4) days regional training workshop in Oman 22-25 April 2024

- IOC Facilitators/Coordinators/Technical Assistants: 2 Persons
- Representatives of the National Working Groups Tsunami Evacuation Planning: 5 from each country = 15 Persons
- Representative of the NWIO WG Chair: 1 Person
- Representative of the ICG/IOTWMS WG3 Chair: 1 Person
- Facilitator and Translator (Farsi): 2 Persons
- Facilitation for Regional SOP Workshop (Venue and Meeting Package)

## International Consultant

- External Facilitator/Consultant/Technical Assistant
- Travel to Workshop

## National Consultants (India, Iran, Pakistan)

- National Facilitator/Consultant/Technical Assistant (1 person each country = 3 persons)
- Travel to Workshop (1 person each country = 3 persons)

# Activity Output 5.3 National Implementation and backstopping during the evacuation planning processes in pilot communities

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*Backstopping support during the national evacuation planning processes in pilot communities and systematization of experiences feedback for possible adaptations of the methodology.*

## International Consultants

- International Consultant backstop national inundation mapping
- International Consultant backstop national evacuation planning

## National Consultants (3 - India, Iran, Pakistan)

- National Facilitator/Consultant/Technical Assistant
- In country travel and organisation 1 national meeting each.

Translation of MG 74 (Tsunami Ready) to Farsi:

Translation of MG 82 (Preparing For Community Tsunami Evacuation) to Farsi and Urdu

# Activity Output 6

## Project Monitoring and Evaluation

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*External Consultant for final project evaluation.*

### **Activities**

#### International Consultant

- External Facilitator/Consultant/Technical Assistant
- Travel to Perth 3 days.

# Schedule

## Implementation Plan Schedule NWIO UNESCO Project Phase 2c Activities

Objectives	2023			2024								
	Oct	Nov	Dec	Jan	Feb	March	April	May	Jun	Jul	Aug	Sept
<b>5. Training in development of tsunami inundation maps and evacuation plans to facilitate effective community responses to the threat from near-field tsunamis.</b>												
<b>5.0. Engage International and National Consultants:</b>												
Engage International: Inundation Modeling					3rd week							
Engage National Consultants: Inundation Modeling					3rd week							
Engage International: evacuation planning					3rd week							
Engage National Consultants: evacuation planning					3rd week							
<b>5.1. Regional training workshop on Tsunami Inundation Modelling and Inundation Mapping</b>												
Virtual coordination and meetings with Regional Working Group TIMM (RWG-TIMM)												
Regional Workshop on Tsunami Inundation Modelling and Mapping in UAE or Oman							1st week					
Prepare inundation maps for Pilot Areas												
<b>5.2. Regional training workshop for evacuation planning processes at local level</b>												
Virtual coordination and meetings with National Working Groups Tsunami Evacuation Planning (NWG-TEP)												
Regional training workshop on evacuation planning in Oman							1st week					
<b>5.3 National implementation and backstopping during evacuation planning processes in pilot communities</b>												
Engage Consultant for translation MG74 (Tsunami Ready) and MG 82 Tsunami Evacuation					3rd week							
Contracting for translation layout and printing of MG74 and MG82								3rd week				
Evacuation plans prepared for Pilot Communities												
Tsunami drills for Pilot Communities (To be discussed and agreed with National Stakeholders)											Drill	
<b>6. Project Evaluation</b>												
Engage consultants									1st week			
Complete NWIO Project Phase 2a 2b 2c evaluation report												
<b>Project Reporting</b>												
6 month reporting to ESCAP												

Project work and preparation activities	
Virtual Coordination Meeting with National Working Group	
Preparation for Consultant solicitation	
Contractual engagement with Consultant	
Consultant working period	
Workshop Preparation	
Events: Workshops (Date to be decided)	
Backstopping Period	
Project Reporting	

## Status of Phase 2c

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- LoA and amendment have been signed.
- Disbursement of the first instalment -1 received.  
Waiting for 2<sup>nd</sup> part of the first instalment.
- TOR for Consultants (2 Internationals, 3 Nationals, 2 Translators) finalized, consultant to be recruited in February.
- Preparation for 2 workshops back-to-back in April in Oman, in process.

# THANK YOU

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