

# **CONCEPT NOTE**

## NORTH-WEST INDIAN OCEAN REGIONAL WORKSHOPS: 1) TSUNAMI INUNDATION MAPPING and 2) TSUNAMI EVACUATION PLANNING

### UNESCAP funded Project TTF31: "Strengthening Tsunami Warning in the North-West Indian Ocean through Regional Cooperation – Phase 2c"

21 – 25 April 2024

Muscat, Oman

### BACKGROUND

Tsunami inundation mapping and evacuation planning has been identified as one of the priority topics to be addressed in the five partner Member States in the NWIO region (India, Iran, Pakistan, Oman, UAE) of the UNESCO-IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami and Mitigation System (ICG/IOTWMS) to improve tsunami preparedness at the community level. They are key steps towards making at-risk communities Tsunami Ready. In this respect, the current UNESCAP funded Project TTF31 *"Strengthening Tsunami Warning in the North-West Indian Ocean Through Regional Cooperation - Phase 2c"* supports its partners to strengthen their capacities for tsunami inundation mapping and evacuation planning. This is being achieved in a two-step approach.

The first step was Phase-2b of the project, which included a gap analysis of regional capabilities in inundation modelling and a gap analysis of national capabilities and the development of guidance on evacuation planning across the NWIO region. The project established a Regional Working Group on Tsunami Inundation Modelling and Mapping (RWG-TIMM) to help undertake a gap analysis on existing capabilities and coordinate efforts in the NWIO region and develop guidance on using the outcomes and outputs from Phase 1 and Phase 2a of the project, including an improved understanding of the risk and the development of a Probabilistic Tsunami Hazard Assessment (PTHA). Phase 2b also undertook a gap analysis on the regional capabilities in for tsunami evacuation planning and provided information on existing global approaches, standards, methodologies, and best practices. To facilitate joint learning and national implementation, the project supported the establishment of National Working Groups on Tsunami Evacuation Planning and conducted participatory capacity and gap analysis in each of the five Member States participating in the project (India, Iran, and Pakistan with funding from the project; Oman and United Arab Emirates (UAE) through self-funding). It then provided recommendations to the NWIO Member States about what fits best and how to proceed regarding the development of a set of individual national evacuation plans.

The second step now includes coordination and training in the development of inundation maps and training in the development of tsunami evacuation plans for the identified Pilot Areas. This will help facilitate effective community responses to any tsunami threat, but especially from near-field tsunamis. With the successful implementation of these two steps, participating countries can work towards implementing the UNESCO-IOC Tsunami Ready Recognition Programme (TRRP), or similar national initiatives, to develop a solid foundation that will help achieve the goals of the UN Ocean Decade Tsunami Programme to make 100% of at-risk communities prepared and resilient to tsunamis by 2030.

#### **OBJECTIVES OF THE WORKSHOPS**

The two workshops will kick-off joint working processes between and within the five partner Member States and the project team to develop inundation maps and evacuation plans for Pilot Areas of each Member State. During the two workshops the following shall be achieved:

- Providing background information on Phases 1, 2a and 2b of the project and related initiatives, such as the UN Ocean Decade Tsunami Programme and the UNESCO-IOC Tsunami Ready Recognition Programme (TRRP).
- Getting to know each other and further develop regional and national partnership arrangements utilising the RWG-TIMM and NWG-TEPs.
- Discussion and further sharing of knowledge on principal concepts and approaches for tsunami inundation mapping from Phase 2b in order to build a common understanding among the participants.
- Review of existing tsunami inundation maps for the Pilot Areas
- Planning for development of new and updated tsunami inundation maps for the Pilot Areas where needed.
- Site visit to a community with existing tsunami inundation maps.
- Training in tsunami evacuation mapping for the Pilot Areas using existing global approaches, standards, methodologies, and best practices outlined in Phase 2b.
- Outlook on further activities to be undertaken under the framework of the project and agreements on next steps.

### **OVERALL SCHEDULE**

The two workshops will be run as hybrid events (combination of in-person and online participation) over a total of 5 days, with a two-day overlap incorporating a joint field visit and a joint session.

### ORGANISERS

The organisation of these workshops will be undertaken by the UNESCO-IOC Indian Ocean Tsunami Information Centre (IOTIC), UNESCO-IOC Secretariat of the Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), Project Team for the project, and the Directorate General of Oman Meteorology of the Civil Aviation Authority with the support of the UNESCO-IOC Tsunami National Contacts (TNCs) from India, Iran, Oman, Pakistan, and UAE.

#### PARTICIPANTS

The joint working process on tsunami evacuation planning in the UNESCAP funded TTF-31 project utilises the RWG-TIMM and the NWG-TEPs established in the five partner countries. The members of these working groups are the main target group of these workshops. These working groups are composed of representatives from the relevant science agencies, National Tsunami Warning Centres (NTWCs), National Disaster Management Organisations (NDMOs), as well as from the Provincial Disaster Management Organisations (PDMOs) and/or Local Disaster Management Organisations (LDMOs) for the designated community Pilot Areas. They also include other representatives in the countries interested or involved in the topics. Representatives of ICG/IOTWMS NWIO-WG and ICG-IOTWMS WG 3 on Tsunami Ready Implementation, UNESCO and UNESCAP will also participate.

#### TIMETABLE

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
(20-Apr)	(21-Apr)	(22-Apr)	(23-Apr)	(24-Apr)	(25-Apr)	(26-Apr)
Inundation Mapping Workshop participants arrive	Inundation Mapping Workshop	Inundation Mapping Workshop	Inundation Mapping Workshop	Inundation Mapping Workshop participants depart		
		Joint workshop session	Joint field trip (half day)			
	Evacuation Planning Workshop participants arrive	Evacuation Planning Workshop	Evacuation Planning Workshop	Evacuation Planning Workshop	Evacuation Planning Workshop	Evacuation Planning Workshop participants depart
		Tour of Muttrah Joint Dinner				

#### For further information visit the event webpages:

Workshop on Tsunami Inundation Mapping: https://oceanexpert.org/event/3999

Workshop on Tsunami Evacuation Planning

https://oceanexpert.org/event/4000