
# IOC-UNESCO DG ECHO CoastWAVE Project

## IOC-UNESCO Tsunami Ready Recognition Programme (TRRP) Workshop

## Online, February 16-17, 2023

**Workshop Summary Report**

## Background

The project on "Strengthening the Resilience of Coastal Communities in the Northeast Atlantic, Mediterranean Region to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards' was awarded to IOC-UNESCO by the European Civil Protection and Humanitarian Aid Operations (DG ECHO). The project officially started on 1 September 2021. It is targeting seven communities in Turkiye, Spain, Morocco, Malta, Egypt, Cyprus, and Greece and is scheduled to end on 29 February 2024.

The project aims to implement Tsunami Ready Recognition Programme (Annex1) at selected communities in Malta, Egypt, Morocco, Turkiye, Spain, Cyprus and Greece. By the end of the project, the TRRP certificates will be presented to the partners who successfully completed all requirements of 12 indicators of TRRP.

Under the framework of the project, IOC-UNESCO CoastWAVE project management unit organized a two-day online TRRP workshop with the participation of the project partners in North-eastern Atlantic, the Mediterranean and Connected Seas (NEAM) region with the support of the experts of Indian Ocean Tsunami Information Center (IOTIC) and project partners between the dates of 16-17 February 2023.

The workshop provided an overview of the Tsunami Ready Recognition Programme, detailed information on the process and requirements for recognizing a community as Tsunami Ready, and available community awareness and education resources of IOC-UNESCO. This report provides a summary of the workshop.

**Key Points Discussed in the Workshop are as follows:**

- Tsunami Ready Implementation Workflow has been introduced for Recognition of communities by IOC
- IOC-UNESCO Tsunami Ready Indicators and their requirements have been presented by the project partners and experts from IOTIC in detail
- TRRP communication tools and the supporting IOC awareness and educational materials have been reviewed
- IOTIC shared the regional examples and experience in the implementation of TRRP

**Sessions of the Workshop:**

The said online 2 days online TRRP workshop consisted of seven main sessions (5 sessions in Day 1, 2 sessions in Day 2).

The first session featured opening and introductory remarks by Denis Chang Seng, the Programme Specialist, supervisor of CoastWAVE project and the Technical Secretary of the IOC UNESCO NEAMTWS followed by Bernardo Aliaga Rossel, the head of IOC UNESCO Tsunami Unit. The second session consisted of three presentations on the Tsunami Ready Assessment Indicators and an open floor discussion. The third session consisted of five presentations on the Tsunami Ready Preparedness Indicators and an open floor discussion. The fourth session consisted of four presentations on the Tsunami Ready Response Indicators and an open floor discussion. The fifth session is dedicated to TR Workflow and Certification Process of IOC-UNESCO and ITIC Tsunami Ready Website and Viewer. The sixth and last sessions cover a summary of experiences on implementation of TR from Head of IOTIC, Ardito Kodijat of the said Workshop, discussion and summary and closure by Denis Chang Seng.

**Day 1**

**Overview of the CoastWAVE Project and TRRP Workshop**

On Day 1, the project partners, and experts from Indian Ocean (IO) and North-eastern Atlantic, the Mediterranean and Connected Seas (NEAM) regions presented the requirements of 12 TR indicators of the TRRP with their experience in these regions. Participants had engaging discussions concerning the regulations, frameworks, and challenges of TR.

Derya Vennin, PhD, Assoc. Project Officer of IOC-UNESCO served as a moderator of the workshop. She firstly went over the workshop agenda and the timeline. Denis Chang Seng, PhD, Technical Secretary of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS) then welcomed the participants. Bernardo Aliaga Rossel, Head of Tsunami Unit of IOC-UNESCO gave an overview and summarized the goals and benefits of the TRRP.

Alessandro Amato, PhD, the head of the National Institute of Geophysics and Volcanology Tsunami Warning Center (Italy) gave the fist presentation of the workshop for the 'Assess-1 Indicator: Tsunami hazard zones are mapped and designated'. He summarized the requirement of MG 74 of IOC-UNESCO and the probabilistic hazard assessment studies performed at coastal regions of Italy. He recommended to use probabilistic hazard analysis as a primary source for mapping potential tsunami hazard zones and preparing inundation maps.

His presentation followed up with the presentation of Alfath Abu Bakar who is a scientist at the Badan Meteorogi, Klimatologi, Dan Geofisika (BMKG-Indonesia). His presentation focused on Indicator 2: 'Assess-2: The number of people at risk in the tsunami hazard zone is estimated'. Different sources and methods of estimating the number of people at risk in the tsunami hazard zone have been presented comprehensively with the good examples of implementation in the villages of Indonesia. Then, Ahmet C. Yalciner, PhD, professor at Middle East Technical University, Turkiye, highlighted some key points on 'Assess-3: Economic, infrastructural, political, and social resources are identified'. Session 2 was closed with the discussion moderated by Denis Chang Seng.

Session 3 involved the presentations of the partners and technical advisors of the project on the 'Preparedness Indicators' of TRRP. Ignacio Aguirre Ayerbe, the researcher at the Environmental Hydraulics Institute and the chair of Task Team on TR summarized the requirements of 'Prep-1: Easily understood tsunami evacuation maps are approved'. He highlighted the importance of creating minimum requirements for the maps and signages. He suggested that standardizing these maps would be useful for the project communities.

Musavver Didem Cambaz (the manager of Regional Tsunami Monitoring Center of Kandilli Observatory and Earthquake Research Institute) talked about the 'Prep-2: Tsunami information including signage is publicly displayed' and shared examples of signages installed in Buyukcekmece, Istanbul. Her presentation has been followed with Prep-3: Outreach and public awareness and education resources are available and distributed' presentation of Derya Vennin, PhD. Elena Daskalaki, MSc, scientist at the National Observatory of Athens and the chair of Task team on TR. She shared the outreach and public awareness and education activities that can be performed under the indicator Prep-4. The repository of existing communication materials and tools were highlighted both by Ms. Daskalaki and Ms. Vennin.

Mr. Matthieu Péroche, the technical advisor of the project, the lecturer in Geography at the Paul Valery Montpellier 3 University described his activities performed in Canes, in relation with the indicator Prep-5.

Session 4 included presentations on the 'Response Indicators'. Herald Spahn, UNESCAP project consultant started with the Resp-1. He emphasized that the community must have a community TRP in place that addresses responding to a tsunami incident. He added that this can be part of a multi-hazard emergency response plan if it covers a specific plan for tsunamis. His presentation has been followed

up with the presentation of Ardito Kodijat, the head of Indian Ocean Tsunami Information Center. He explained the minimum requirements of Resp-2 such that community should have the means to ensure that community officials can execute tsunami warning functions (public notifications) and response functions (evacuation) based on predetermined procedures related to tsunami warning information and tsunami emergency response operations during a tsunami incident. Mr. Kodijat also gave examples from IO in the implementation of this indicator.

Nikos Kalligeris, PhD marked in his presentation following the presentation of Mr. Kodijat that the community should be able to receive tsunami threat notifications at any time (24-hour) from the NTWCs and/or the Emergency or Disaster Management Office, or other officially recognized alerting authorities such as local emergency management agencies. He mentioned the system existing in Greece for threat notifications. The key message of his presentation was notifications must be able to reach the 24-hour receipt point by at least three methods. Derya Vennin, PhD continues the same topic by giving a summary of dissemination methods of alerting systems.

The workshop has been finalized with the presentations of Mr. Seng concerning the steps to form the NTRB and Ms. Vennin concerning the usage of IOC-UNESCO TRRP logo should be used.

A total of 48 participants attended the workshop.

**Conclusion/ Recommendations**

It was noted that the minimum requirements expected from the communities should be clearly indicated. The population of the community should also be considered while expecting the implementation of TR. The participants had engaging discussions concerning TR guidelines. We will ccontinue discussions with partners in implementation of TR.

**Follow-up**

A regional Tsunami Ready Recognition Programme Training workshop in NEAM region will be organized by the end of the project in 2024.

The workshop documents can be reached through the link given below:

https://oceanexpert.org/document/31442

# Annex 1

**IOC-UNESCO Tsunami Ready Recognition Programme (TRRP)**

The IOC Assembly approved the establishment of the IOC Ocean Decade Tsunami Programme in 2021, with the aim of making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the IOC-UNESCO Tsunami Ready Recognition Programme and other initiatives. The implementation of the IOC-UNESCO Tsunami Ready Recognition Programme will be a key contribution to achieving the societal outcome ‘A Safe Ocean’ of the Ocean Decade.

The Tsunami Ready Recognition Programme contributes to several SDGs, but most specifically addresses Goal 11: “Make cities and human settlements inclusive, safe, resilient and sustainable”. Communities recognized as Tsunami Ready contribute to increasing the number of settlements adopting strategies to become disasters resilient. The IOC-UNESCO Tsunami Ready Recognition Programme is achieved through a collaborative effort to meet a standard level of tsunami preparedness through the fulfilment of a set of established indicators. It is implemented as a voluntary, performance-based

community recognition programme that promotes an understanding of the concept of readiness as an active collaboration and shared responsibilities among national and local warning and emergency management agencies, and government authorities, scientists, community leaders and the public.

The tsunami ready indicators were developed based on decades experience of the experts on tsunami awareness, preparedness, education, and early warning. Implementing the twelve IOC-UNESCO tsunami ready indicators will advance the community of their awareness and preparedness. Working on the twelve indicators, that are based on a consistent standard of assessment of the risk, preparedness and respond to tsunamis, should be done in a participatory approach. The process itself will be a learning process for and by the community. The TRRP is considered as a creative approach as it brings the ownership of preparedness and sense of belonging to the community.