

## 7.3 Other Global Initiatives



- GTM
- ICG/IOTMWS - NWIO Regional workshop in Tsunami Inundation Modeling and Mapping and Tsunami Evacuation Planning

Ignacio Aguirre Ayerbe

*ICG/NEAMTWS Steering Committee and Information Session  
May 2024 - online*

# GTM – background for the initiative:

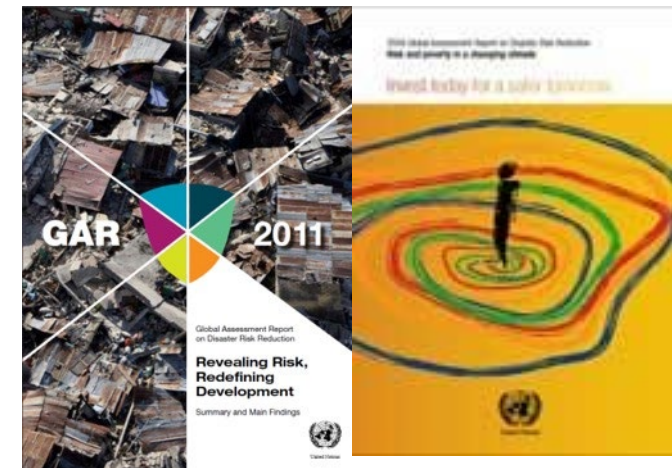
- ✓ Multi-institutional work on hazard and risk for the UN-ISDR (Global Assessment Report, GAR 2015)

**Idea:** Need for a *Collective effort for improved understanding of global tsunami hazard and risk*

- Provide reference maps
- Improve methods, develop guidelines and standards
- Ensure relevance towards stakeholders

- ✓ *Initiative from the tsunami community itself*

- ✓ *Presently a research network*





# GTM Path forward - the AGITHAR networking initiative




- ✓ AGITHAR – Accelerating Global Science in Tsunami Hazard and Risk Analysis
- ✓ European networking project – funds meetings – facilitates discussions
- ✓ Goal - facilitate the formation of GTM
- ✓ Gather scientific community to document
  - Scientific state of the art
  - Science GAPS
  - Pose challenges and directions for future tsunami practitioners
- ✓ Duration 2019-2023
- ✓ Additional year funded for 2024 – COST Innovators Grant (CiG)
  - ***Focussed on forming the GTM entity***
  - ***Presently the main arena for shaping GTM***
  - ***A key ambition is to engage more non-European partners***





### Probabilistic Tsunami Hazard Analysis (PTHA): multiple sources and global applications<sup>1</sup>

Anita Grezio , Andrey Babeyko, Maria Ana Baptista, Jörn Behrens, Antonio Costa, Gareth Davies, Eric L. Geist, Sylfest Glimsdal, Frank I. González, Jonathan Griffin, Carl B. Harbitz, Randall J. LeVeque, Stefano Lorito, Finn Løvholt, Rachid Omira, Christof Mueller, Raphaël Paris, Tom Parsons, Jascha Polet, William Power, Jacopo Sel, Mathilde B. Sørensen, Hong Kie Thio

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### The Making of the NEAM Tsunami Hazard Model 2018 (NEAMTHM18)

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### Probabilistic Tsunami Hazard and Risk Analysis: A Review of Research Gaps

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### Probabilistic Tsunami Hazard Analysis: High Performance Computing for Massive Scale Inundation Simulations

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### Tsunami risk communication and management: Contemporary gaps and challenges

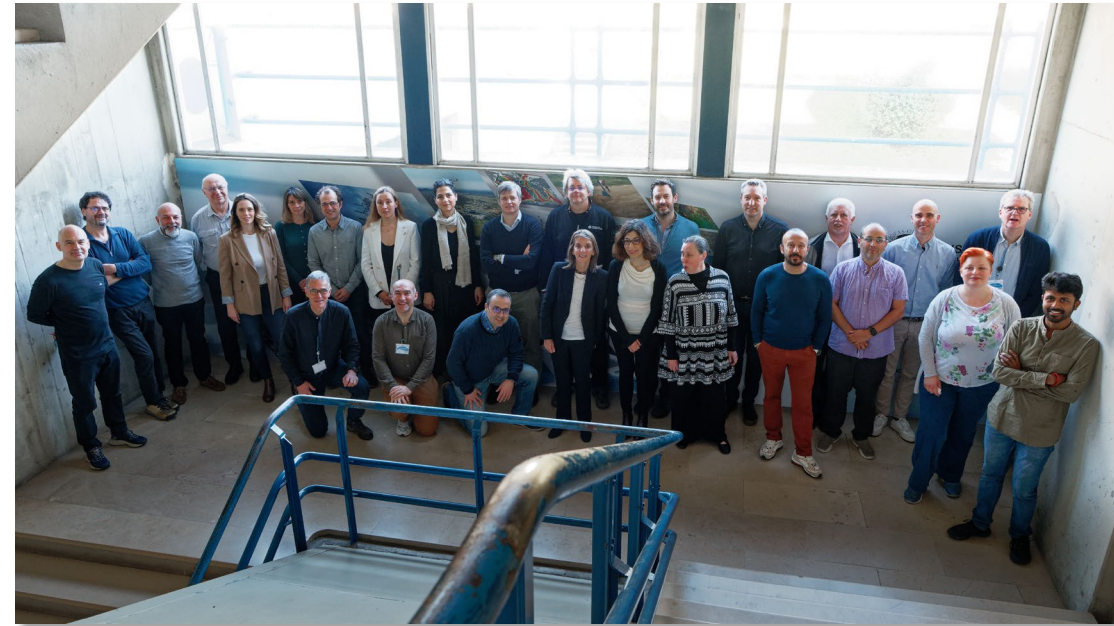
Irina Rafliana<sup>a,b,\*</sup>, Fatemeh Jalayer<sup>c</sup>, Andrea Cerase<sup>d,e</sup>, Lorenzo Cugliari<sup>e</sup>, Marco Baiguera<sup>f</sup>, Dimitra Salmanidou<sup>g</sup>, Öcal Necmioğlu<sup>h,1</sup>, Ignacio Aguirre Ayerbe<sup>i</sup>, Stefano Lorito<sup>e</sup>, Stuart Fraser<sup>j</sup>, Finn Løvholt<sup>k</sup>, Andrey Babeyko<sup>l</sup>, Mario A. Salgado-Gálvez<sup>m,n</sup>, Jacopo Selva<sup>o</sup>, Raffaele De Risi<sup>p</sup>, Mathilde B. Sørensen<sup>q</sup>, Jörn Behrens<sup>r</sup>, Iñigo Aniel-Quiroga<sup>s</sup>, Marta Del Zoppo<sup>c</sup>, Stefano Belliazzi<sup>c</sup>, Ignatius Ryan Pranantyo<sup>s</sup>, Alessandro Amato<sup>e</sup>, Ufuk Hancilar<sup>h</sup>



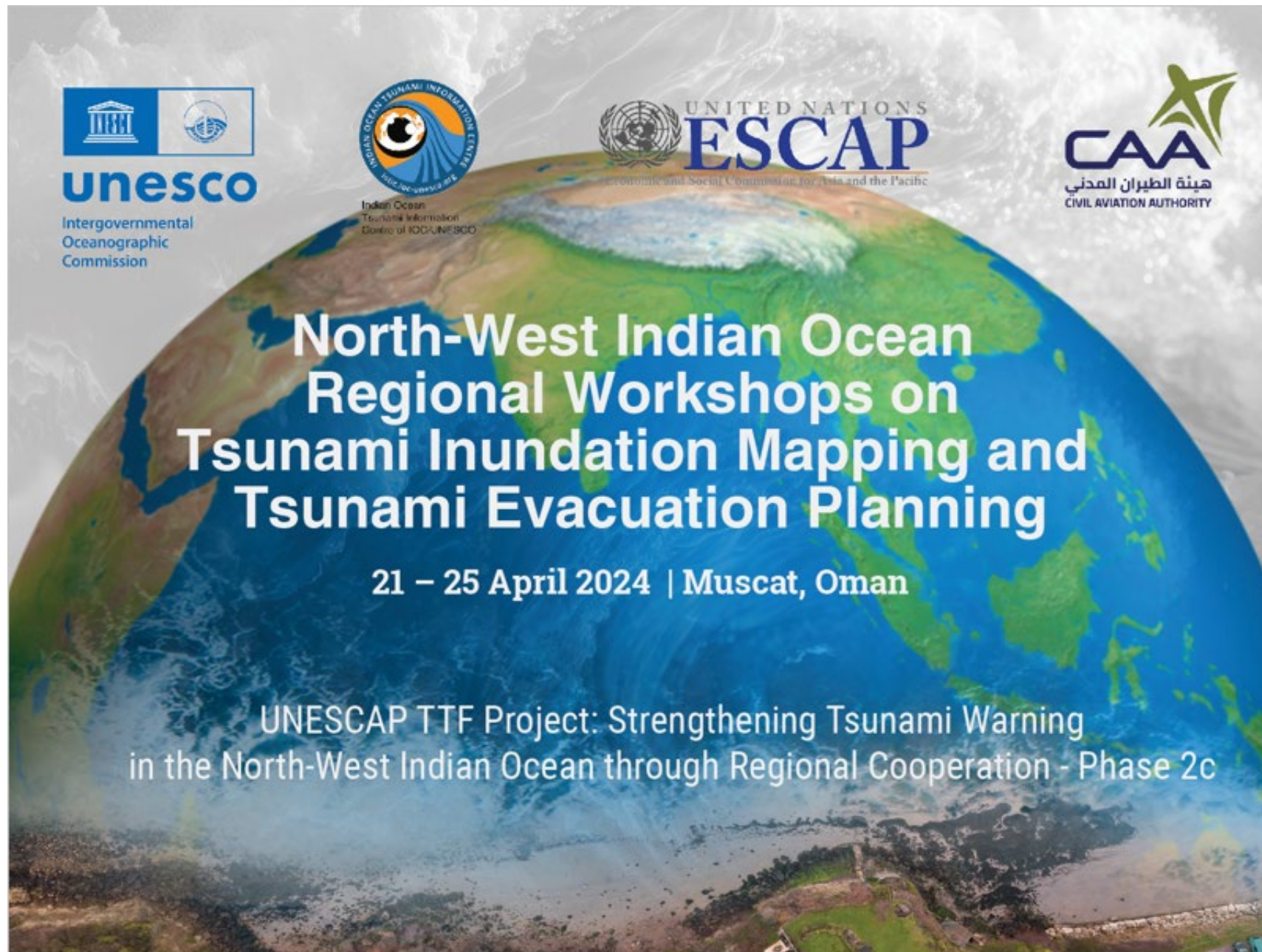
# GTM present status



- ✓ Several work group in European COST Innovation Grant working for establishing a GTM entity
- ✓ Finalization of tsunami “cookbook” that gives guidelines to practitioners
- ✓ Several working groups
  - Vision WG
  - Legal WG → → **Legal Entity Group**
  - Business Plan WG → → **Business Plan Group**
  - Products WG → → **Products Management Group**
  - Target Groups WG → → **Liaison Management Group**
  - Training WG → → **Funding for Training Group**
- ✓ General Assembly Meeting Lisbon. March 2024
- ✓ Stakeholder meetings
  - EGU, Vienna. **Scientific Community** – April 2024
  - WCEE2024, Milan. **Industry community** – July 2024
- ✓ Emphasis on finalizing plan for concretizing GTM by fall 2024
- ✓ <https://edanya.uma.es/gtm/>







# North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Tsunami Evacuation Planning

21 – 25 April 2024 | Muscat, Oman

UNESCAP TTF Project: Strengthening Tsunami Warning  
in the North-West Indian Ocean through Regional Cooperation - Phase 2c

# NORTH-WEST INDIAN OCEAN REGIONAL WORKSHOPS ON TSUNAMI INUNDATION MAPPING AND EVACUATION PLANNING

- As part of our commitment to disaster risk management and promoting the idea exchange and knowledge sharing among ICGs, we participated as part of the Team of Tsunami Evacuation Planning Trainers as training facilitator and resource person at the **North-West Indian Ocean (NWIO) Regional Workshops on Tsunami Inundation Mapping and Tsunami Evacuation Planning**, held in Muscat, Oman on 21-25 April 2024.
- The workshops were **organised by 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**), and Project Team for the **UNESCAP** TTF project with the support of the UNESCO-IOC Tsunami National Contacts (TNCs) from the countries participating in the event: **India, Iran, Oman, Pakistan, and United Arab Emirates.**
- The workshops were framed within the UNESCAP TTF Project: “**Strengthening Tsunami Warning in the North-West Indian Ocean through Regional Cooperation – Phase 2c**”.

North-West Indian Ocean Regional Workshops on Tsunami  
Inundation Mapping and Evacuation Planning, 21-25 April 2024





# OBJECTIVES OF THE WORKSHOPS

- The two workshops kicked-off joint working processes between and within the five partner Member States, to develop inundation maps and evacuation plans for Pilot Areas of each Member State.
- Provided 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 utilizing the RWG-TIMM and NWG-TEPs.
- Discussion and further sharing of knowledge on principal concepts and approaches for tsunami inundation mapping and evacuation planning from Phase 2b to build a common understanding among the participants.
- Site visit to a community with existing tsunami inundation maps to analyse the evacuation zone boundary, the overall evacuation strategy, facilities that need special consideration in evacuation planning / critical spots on coastline.
- Training in tsunami evacuation mapping using existing global approaches, standards, methodologies and best practices outlined in Phase 2b.

North-West Indian Ocean Regional Workshops on Tsunami  
Inundation Mapping and Evacuation Planning, 21-25 April 2024







North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Evacuation Planning, 21-25 April 2024



Ignacio Aguirre Ayerbe. ICG/NEAMTWS Steering Committee and Information Session. May 2024 - online