

Secretariat Report to Inter-sessional Meeting of the Intergovernmental Coordination Group for Indian Ocean Tsunami Warning & Mitigation System (ICG/IOTWMS)

23 - 24 November 2021

Rick Bailey
Head of Secretariat
IOC-UNESCO ICG/IOTWMS

ICG/IOTWMS Secretariat



- Established in August 2005
- Primarily based in Perth, Australia
- Funded by Australia since 2005 (AUD\$420,000/year)
- Head of Secretariat Rick Bailey
- Programme Specialist Nora Gale
- Roles:
 - > Part of the IOC Tsunami Unit
 - > Supports and coordinates activities of ICG/IOTMWS
 - > Assists with strategic planning
 - ➤ Manages TNC and TWFP formal registration
 - ➤ Works in close collaboration with Indian Ocean Tsunami Information Centre (IOTIC) on community education and capacity building
 - > Provides online survey capability
 - > Runs training programmes
 - > Helps promote tsunami awareness (eg WTAD)
 - > Manages externally funded projects



Governance



Working Group for Tsunami & Other sea level related Warning & mitigation Systems (TOWS-WG)

[4x ICG Chairs, WMO, UNISDR, UNDP, IMO, IHO]

WMO, IHO, IMO, UNDRR, UNDP...

Task Team Disaster Management

& Preparedness

ICG Caribbean & Adjacent Seas (CARIBE-EWS)

Intergovernmental Coordination Group Indian Ocean Tsunami Warning & Mitigation System (IOTWMS)

> Chair: Prof Dwikorita Karnawati (Indonesia) Vice Chairs: Mr Pattabhi Rama Rao Eluri (India) Vice Chair: Prof Behrouz Abtahi(Iran)

Steering Group: Officers, WG Chairs/VCs

ICG Pacific Tsunami Warning & Mitigation System (PTWS)

ICG NE Atlantic & Mediterranean

Seas (NEAMS-TWS

WG1 Tsunami Risk, Community Awareness and **Preparedness**

Watch Operations

Chair: Dr. Harkunti Rahayu (Indonesia)

WG2 Tsunami Detection, Warning & Dissemination

Chair: Dr. Yuelong Miao (Australia)

1x Regional WG: NW Indian Ocean Chair: Dr. Mohammad Mokhtari (Iran)

Task Team - IOWAVE20 Chair: Ms Weniza (Indonesia)

Task Team – Tsunami Preparedness for a Near-field Tsunami Hazard

Chair: Dr. Mahmood Reza Akbarpour Jannat (Iran)

Task Team - Scientiifc Hazard Assessment of the Makran Subduction Zone A/Chair: Dr Abdolmajid Naderi Beni (Iran)

IOC Tsunami Unit (Paris) A/Head: Bernardo Aliaga

ICG/IOTWMS Secretariat (Perth) Head: Rick Bailey

Indian Ocean Tsunami Information Centre (Jakarta) Head: Ardito Kodijat

Past ICG/IOTWNS Chairs

2017 - 2019: Dr Andi Eka Sayka (Indonesia)

2015 – 2017: Srinivasa Kumar Tummala (India)

2010 - 2015: Rick Bailey (Australia)

2007 – 2010: Jan Sopaheluwakan (Indonesia)

2005 - 2007: P. S. Goel (India)



Unit **Tsunami** Secretariat,





- Supported ICG related meetings of Steering Group, WG1, WG2, WG-NWIO, TT IOWAVE 20, TT Scientific Tsunami Hazard Assessment of MSZ
- Supported TOWS-WG and its Task Team on Tsunami Watch Operations
- Supported six workshops of the UNESCAP Project in NWIO
- Supported IOTIC in development of 14 Tsunami Ready short animation videos
- Supported IOC Exec Secretary at UNESCO Board Meeting and UNESCO General Conference with regards to IOC Tsunami Programme
- Regular status reports to Australian Bureau of Meteorology and UNESCAP
- Supported online surveys for IOWAVE 2020 and COVID preparedness





- International Disaster Risk Reduction Day (IDRR) 13 Oct 21
 - Sri Lankan national event: "COVID-19 and systemic risks"
- World Tsunami Awareness Day (WTD) 5 Nov 2021
 - Contributed to planning between IOC TSU and UNDRR
 - UNDRR, UNESCO, UNESCAP, UNDP Event: International Cooperation on Tsunamis in Asia-Pacific
 - Sri Lankan national event: "Learn, Share, Actions Amidst COVID-19 Pandemic"
 - International Cooperation: A Strategic Pathway for the Indian Ocean Tsunami Warning and Mitigation System within the Context of UN Decade for Ocean Science, including youth video competition on tsunami awareness
 - WTAD 2021: Leveraging the Power of Science and Technology to Reduce Tsunami Risk for Current and Future Generations







Letter to Dr Vladimir Ryabinin, Exec sec IOC, from Ms Mami Mizutori, UN Special Representative of the Secretary-General for Disaster Risk Reduction:

"The UNDRR New York Liaison Office has received very positive feedback on your compelling message on the basic principle on tsunami awareness which reached a wide network across social media platforms".





 With IOTIC managed UNESCAP project "Strengthening Tsunami Warning in the North-West Indian Ocean through Regional Cooperation"

<u>PROJECT GOAL</u>: Timely delivery of national tsunami warnings to at-risk coastal communities who are prepared to respond effectively (Tsunami Ready)

Phase 1: Hazard and risk assessment

National tsunami warning chain development

Phase 2: Inundation and evacuation mapping capacity development

Phase 3: At-risk coastal community preparedness

Phase 1 completed 30 Oct21 (24 months)

Phase 2 approved 5 Nov21 and to start 20 Dec21 (24 months)

Phase 3 proposal to be submitted towards end Phase 2

<u>SECRETARIAT OBJECTIVE</u>: Use procedures and outcomes and lessons learnt from this project and apply to benefit of all MS in the Indian Ocean











- Continue to improve coordination and communication across all activities of the ICG/IOTWMS
- Continue to coordinate and support the work plans of the WGs and TTs leading into ICG/IOTWMS XIII in May 2022
- Continue to work with IOTIC to enhance community awareness of tsunami risk
- Continue to work with IOTIC to help develop the capacity of Member States
- Translate the outcomes of projects like the UNESCAP project in NWIO into outcomes for all Member States
- Work in collaboration with other organisations like UNDRR, UNDP and WMO to achieve common goals
- Assist and seek opportunities for the ICG/IOTWMS and the IOC UNDOS Tsunami Programme to meet the goal of more timely and more accurate tsunami warnings to 100% of at-risk coastal communities being Tsunami Ready

The Pathway



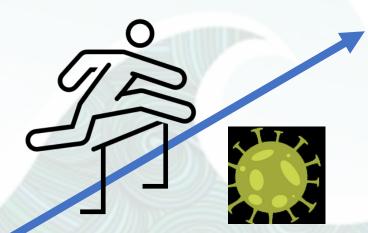


- Lack of active and consistent engagement of all relevant organizations nationally.
- Working in Silos (Upstream and Downstream).
- Establishing and maintaining effective national working chains
- Multi-hazard Vs Combination of Single Hazards DRR → integration of single hazards into multihazard framework \rightarrow deliver community education in context of multi-hazard
- Maintaining commitment and awareness for low risk - high consequence hazard from penta-helix/multi entity (government, community, business entities, academia, broadcast media)

Today







Commission 10 years time: **More timely warnings** with reduced uncertainties delivered to 100% at-risk Tsunami **Ready communities**

Challenges along the route

- Maintaining sustainable funding, either for maintaining existing and implementing new observing systems, or for R&D on supporting the effort in implementing new technologies;
- Changes in government can result in loss of momentum
- COVID-19
- **Supporting SIDS and LDCs**
- Achieving 100% at-risk communities Tsunami Ready







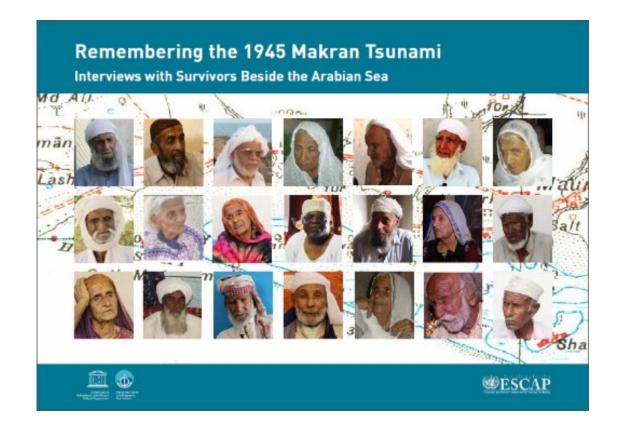


The United Nations Decade of Ocean Science for Sustainable Development (2021-2030)



- **UN Ocean Decade** 2021 2030 Tsunami Programme.. includes Science Plan to be developed by TOWS-WG
- Development of Multi-hazard Framework by WMO
- Working closer with UNDRR, UNDP, ...
- Utilising the expertise of other international activities, such as: Kyoto Landslide Commitment 2020, Augmenting Tsunami Monitoring Steering Committee, Joint Task Force Scientific Monitoring And Reliable Telecommunications (SMART) cables, German Tsunami Risk Project, UNESCAP Project Strengthening Tsunami Warning in the North-West Indian Ocean through Regional Cooperation
- Lessons to be Learnt from past and future tsunami events





National, Regional, Commitment & Global Commitment

- National operational and R&D funding
- Support for IOC-UNESCO Indian Ocean tsunami Information Centre (IOTIC) by Indonesia
- Support for IOC-UNESCO ICG/IOTWMS Secretariat by Australia
- Support and provision of tsunami threat information to Member States Tsunami Service Providers (TSPs) by Australia, India, Indonesia.
- Support of capacity building in community preparedness, such Japan's support for schools programme being developed by UNDP
- The UN Economic and Social Commission for Asia and the Pacific (ESCAP) funding of capacity building, such as in North-West Indian Ocean region
-