



CONCEPT NOTE

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

**Western Indian Ocean Member States
Training Workshop:
*Standard Operating Procedures (SOPs) for
National Tsunami Warning Centres (NTWCs) and
Disaster Management Organisations (DMOs)***

03 – 06 July 2023

BACKGROUND

Effective tsunami warning for all in the community requires rapid and reliable processes for detection and monitoring, the decision to warn, the generation of a warning by the national warning provider, and dissemination of the warning along a functioning national tsunami warning chain to reach communities at-risk in a timely manner. Integrated and timeline driven Standard Operating Procedures (SOPs) at all levels for organisations involved are essential to achieve this.

The UNESCO-IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning & Mitigation System (ICG/IOTWMS) supports Indian Ocean Member States in developing the necessary capacity to operate such warning processes in their countries by providing guidelines, training, advice, exchange of experience, and regular exercises. At the 13th Session of the ICG/IOTWMS during 28th November – 2nd December 2022, in Bali, Indonesia, it was decided to hold two SOP training workshops in the inter-sessional period: one workshop for Western Indian Ocean Member States (Comoros, France Indian Ocean Territories, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania) and one workshop for Eastern Indian Ocean Member States (Australia, Bangladesh, Indonesia, Malaysia, Maldives, Myanmar, Singapore, Sri Lanka, Thailand, and Timor-Leste). North-West Indian Ocean Member States (India, Iran, Pakistan, Oman, United Arab Emirates) have recently received extensive SOP training as part of the UNESCAP funded project “*Strengthening tsunami warning in the North-West Indian Ocean through regional cooperation*” and will have a separate SOP workshop to review progress.

This hybrid four-day SOP training workshop for Western Indian Ocean Member States during 03 - 06 July 2023 will provide an opportunity to share the latest information regarding the development and status of SOPs along the tsunami warning chain at all levels in the Member States, provide conceptual input, discuss, and exchange experiences, and identify areas where improvements are needed. Accordingly, **it is essential for each Member State to have representatives from the designated National Tsunami Warning Centre (NTWC) and from all the National, Provincial and Local Disaster Management Organisations (N/P/LDMOs) involved in the national tsunami warning chain.**

After the relevant authorities and national organisations have reviewed and updated their roles and responsibilities in the national tsunami warning chains, a further workshop will be held on 16th August specifically for the awareness and development of SOPs for the broadcast media, given their important role in the national tsunami warning chain. The upcoming Exercise IOWave23 in October this year will subsequently provide an excellent opportunity to test the national tsunami warning chains and their underpinning SOPs.

OBJECTIVES OF THE MEETING

This Regional Meeting will bring together representatives from ICG/IOTWMS Member States from the Western Indian Ocean (WIO) to:

1. Discuss the importance of national tsunami warning chains and SOPs.
2. Build common understanding on how an time-driven warning process can be made effective and operational with the support of tried and tested SOPs.
3. Share best practice, templates, and tools for SOP development.
4. Provide training on availability and use of tsunami threat information provided by IOTWMS Tsunami Service Providers (TSPs), including new products for tsunamis generated by non-seismic sources such as volcanoes.
5. Enable joint work of the Member State teams on their tsunami warning chains in terms of further clarification of roles and responsibilities, decision making processes, status of integrated time-line driven SOPs, and the particular linkages of SOPs between the different responsible organisations in the warning chain.
6. Define how to move forward in order to improve/update SOPs and prepare for testing under Exercise IOWave23

REQUIRED PARTICIPANTS

For the workshop to be successful, the following participants are required:

- Representatives from the National Tsunami Warning Centres (NTWCs) and all the relevant National, Provincial and Local Disaster Management Organisations (N/P/LDMOs) from **Comoros, France Indian Ocean Territories, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania**
- Representatives of UNESCO-IOC Secretariat and IOTIC and their technical consultant
- Chairs and vice-chairs of relevant ICG/IOTWMS Steering Group, working groups, and task teams
- Representatives of IOTWMS Tsunami Service Providers (TSPs) in Australia, India, and Indonesia

ORGANISERS

This workshop is being organised by ICG/IOTWMS *Working Group 3 Tsunami Ready Implementation*, with the support of:

- UNESCO-IOC Secretariat of Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)
- UNESCO-IOC Indian Ocean Tsunami Information Centre (IOTIC).

MEETING FORMAT

The meeting will be held in a hybrid format using Microsoft TEAMS.

- First and Second day will be regional and held online.
- Third day Member States will be asked to gather representatives from all the relevant organisations, either face-to-face or online, to work together to review national status.
- Fourth day will again be held regionally online to hear of the results of the national gatherings.

SCHEDULE AND DURATION

Duration 3-4 hours each day, starting at 0700 UTC to recognise time zones of participants and presenters

MEETING LINK

To join the meeting, please use the following link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MGRkYjUwZTgtZTY4Mi00ZWJjLWI3MGItYzRhOTVjOTgxMjBm%40thread.v2/0?context=%7b%22id%22%3a%221d4fae52-39b3-4bfa-b0b3-022956b11194%22%2c%22oid%22%3a%220f298537-3d08-4fde-9bd7-c4e2e9f364e0%22%7d

Meeting ID: 378 188 094 427 Passcode: NovEj4

MEETING WEBSITE

For further information on the event, please refer to event website: <https://oceanexpert.org/event/3935>

Intergovernmental Coordination Group
Indian Ocean Tsunami Warning & Mitigation System (ICG/IOTWMS):
**Western Indian Ocean Member States Training Workshop:
Standard Operating Procedures (SOPs) for
National Tsunami Warning Centres (NTWCs) and
Disaster Management Organisations (DMOs)**

Day-1 3rd JULY: Introduction and driving forces

Start UTC	End UTC	Topic	Presenters/ moderator
1.1 Plenary			
0700	0720	a. Opening - UNESCO-IOC Secretariat welcome (2mins) - Chair ICG/IOTWMS (2mins) - Chair WG3 welcome (2mins) - Objectives of the Workshop (12mins) - Workshop logistics (2mins)	Rick Bailey Dwikorita Karnawati Suci Anugrah Rick Bailey Nora Gale
0720	0830	b. Introduction - Overview of the IOTWMS (5mins) - Results from IOTWMS Capacity Assessment (15mins) - Tsunami warning chains and SOPs: Roles and responsibilities (30mins) - Media SOP webinar in August 2023 (5mins) - Exercise IOWave23 and scenarios (15mins)	Rick Bailey Nora Gale Harald Spahn Rick Bailey Weniza
0830	0845	Break	
1.2 NTWC Breakout Session			
0845	0900	a. Introduction to TSP Services	Sunanda Manneela
0900	0940	b. TSP Product Demonstration	Padmanabham Robert Greenwood Yedi Dermadi
0940	1000	c. New TSP Product – Tsunamis generated by non-seismic and complex sources	Robert Greenwood Iman Fatchurachman Rick Bailey
1000	1015	d. Discuss Exercise IOWave23 scenarios	Rick Bailey
1.3 DMO Breakout Session			
0845	0905	a. Findings from the 2018 IOTWMS Capacity Assessment regarding the downstream process	Nora Gale
0905	0925	b. Implementing Tsunami Ready in the Indian Ocean	Suci Anugrah
0925	0945	c. Tsunami Ready Response Indicators in relation to SOP development	Ardito Kodijat
0945	1015	d. Discuss outcomes and participation of DMOs and communities in Exercise IOWave23	Harald Spahn

Day-2 4th JULY: The role and function of SOPs in tsunami warning chains

Start UTC	End UTC	Topic	Presenters/ (moderator)
2.1 Plenary			
0700	0720	a. Near and Distant Tsunamis: Timeline driven SOPs	Harald Spahn
0720	0740	b. Warning Levels	Harald Spahn
0740	0755	c. Critical issues in the Warning Chain for disseminating warnings down to the community	Harald Spahn
0755	0815	d. Using SOP Templates to Develop General Roles and Responsibilities and Timeline of Processes and Actions (Criteria for Action, Evacuation Checklists, Information Dissemination, Media Information)	Rick Bailey
0815	0830	e. Example NTWC SOPs	Yuelong Miao
0830	0845	f. Example DMO SOPs	TBC
0845	0900	g. Example Broadcast Media SOPs	Ardito Kodijat
0915	0930	Break	
2.2 NTWC Breakout Session			
0930	1000	a. Tsunami Warning Centre SOPs - Concept of Operations, Overview of Routine and Event Operations	Yuelong Miao
1000	1030	b. Utilising TSP Threat Information products in NTWC SOPs	Padmanabham
1030	1045	c. Incorporating advice and decision for evacuation	Rick Bailey
1045	1100	d. Discussion	Rick Bailey
2.3 DMO Breakout Session			
0930	1000	a. DMO SOPs - Concept of Operations, Overview of Routine and Event Operations	Harald Spahn
1000	1030	b. Utilising NTWC products in DMO SOPs	TBC
1030	1045	c. Decision to call for evacuation	Harald Spahn
1045	1100	d. Discussion:	Harald Spahn

Day-3 5th JULY: Member State Individual Workshops:

****Times and presenters/moderators to be determined by each Member State**

Time (mins)	Start	End	Topic	Presenters/ (moderator)
3.1 National Workshops				
10			a. Introduction	
20			b. Discuss findings and conclusions from Workshop Day - 1 and Day-2	
30			c. Review national tsunami warning chain and status of SOPs	
30			d. Review/update NTWC products and timelines, including warning levels, advice and dissemination channels	
15			Break	
15			e. Examine and coordinate linkages across NTWC, N/P/LDMO, and Media SOPs, especially with regards to timelines (including call for evacuation decision)	
15			f. Identify work on further SOP development, including Media SOPs	
20			g. Discuss how to move forward after the workshop to resolve identified issues	
20			h. Discuss mechanisms and opportunities to routinely exercise NTWC, DMO and Media SOPs individually and jointly going forward, including scenario choice and participation in Exercise IOWave23 in October 2023	
20			i. Agree on the Member State report back to the workshop on Day-4	

Day-4 6th JULY: Feedback from Member State Workshops and Forward Plans

Start	End	Topic	Presenters/ (moderator)
4.1 Plenary			
0700	0900	a. Member State reports from national workshops (10mins each): - National tsunami warning chain status update (using template) - SOP status report (using template) - Issues to be further pursued - Exercise plans	Harald Spahn
0900	0915	Break	
0915	0945	b. Discussion on identified joint challenges	Harald Spahn
0945	1000	c. Broadcast Media SOP workshop plans	Rick Spahn
1000	1030	d. How to plan, conduct and evaluate exercises	Nora Gale
1030	1100	e. Closing remarks	Suci Anugrah Rick Bailey
1100		CLOSE	