



## CONCEPT NOTE

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

**North-Western Indian Ocean Member States  
Training Workshop:  
*Review Standard Operating Procedures (SOPs) and  
Tsunami Service Provider (TSP) Products in  
Preparation for Exercise IOWave23***

*7 – 8 August 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 13<sup>th</sup> Session of the ICG/IOTWMS during 28<sup>th</sup> November – 2<sup>nd</sup> 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 (NWIO) Member States (India, Iran, Pakistan, Oman, and United Arab Emirates) have recently already 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 and help prepare for UNESCO-IOC Exercise IOWave23 in October 2023. This hybrid two-day workshop will also provide detailed training on the Tsunami Service Provider (TSP) products generated by Australia, India, and Indonesia for all Member States around the Indian Ocean. The workshop will also be extended to Yemen. **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 NWIO Member States authorities and national organisations have reviewed and updated their roles and responsibilities in their national tsunami warning chains, a further workshop for all Member States around the Indian Ocean will be held on 16<sup>th</sup> 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 UNESCO-IOC 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 North-Western Indian Ocean (NWIO) to:

1. Review status of national tsunami warning chains and SOPs.
2. 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.
3. 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.
4. Define how to move forward in order to ensure SOPs are prepared for testing under UNESCO-IOC 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 **India, Iran, Pakistan, Oman, United Arab Emirates, and Yemen**
- 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 day will be regional and held online.
- Second 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 and prepare for UNESCO-IOC Exercise IOWave23.

## **SCHEDULE AND DURATION**

Two days starting at 0500 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\\_MDdmM2YxODktYml3ZS00MjZjLWI5NjEtNzU2ODcxNzc3N2Fh%40thread.v2/0?context=%7b%22Tid%22%3a%221d4fae52-39b3-4bfa-b0b3-022956b11194%22%2c%22Oid%22%3a%220f298537-3d08-4fde-9bd7-c4e2e9f364e0%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MDdmM2YxODktYml3ZS00MjZjLWI5NjEtNzU2ODcxNzc3N2Fh%40thread.v2/0?context=%7b%22Tid%22%3a%221d4fae52-39b3-4bfa-b0b3-022956b11194%22%2c%22Oid%22%3a%220f298537-3d08-4fde-9bd7-c4e2e9f364e0%22%7d)

Meeting ID: 377 949 953 384 Passcode: Pvr5HN

## **MEETING WEBSITE**

For further information on the event, please refer to event website: <https://oceanexpert.org/event/3956>

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**Day-1 7<sup>th</sup> August 2023: Review National Tsunami Warning Chains and SOPs**

Start UTC	End UTC	Topic	Presenters/Moderators
<b>1.1 Plenary (Moderator Rick Bailey)</b>			
0500	0530	a. Opening - UNESCO-IOC Secretariat welcome - Chair ICG/IOTWMS welcome - Chair WG3 welcome - Objectives of the Workshop - Workshop logistics	Rick Bailey Dwikorita Karnawati Suci Anugrah Rick Bailey Nora Gale
0530	0545	b. Update UNESCAP funded NWIO project Phase 2c	Ardito Kodijat
0545	0645	c. Member State updates on National Tsunami Warning Chains and SOPs (10mins each)	Harald Spahn
0645	0700	d. Exercise IOWave23 and scenarios (15mins)	Weniza
0700	0730	<b>Break</b>	
<b>2.1 NTWC Breakout Session (Moderator: Rick Bailey)</b>			
0730	0745	a. Refresher NTWC SOPs and related documents	Rick Bailey
0745	0815	b. Examples NTWC SOPs (Distant and local source threat)	Padmanabham J. Yedi Dermadi
0815	0830	c. Overview TSP Services	Sunanda Manneela
0830	0915	d. TSP Product Demonstration	Karyono
0915	0930	<b>Break</b>	
0930	1000	e. New TSP Product – Tsunamis generated by non-seismic and complex sources	Rick Bailey
1000	1030	f. Accessing products on TSP web sites	Padmanabham J. Yedi Dermadi
1030	1045	g. New InaTNT sea level data displays and analysis	Iman Fatchurochman
1045	1100	h. Utilising TSP Threat Information products in NTWC SOPs	Padmanabham J.
1045	1100	i. Exercise IOWave23 scenarios and pathway finalising NTWC SOPs	Rick Bailey
<b>2.2 DMO Breakout Session (Moderator: Nora Gale)</b>			
0730	0800	a. Implementing Tsunami Ready in the Indian Ocean	Suci Anugrah
0800	0830	b. Tsunami Ready Response Indicators and SOP development	Ardito Kodijat
0830	0845	c. Refresher DMO SOPs and related documents	Harald Spahn
0845	0915	d. Example DMO SOPs	Ardito Kodijat
0915	0930	<b>Break</b>	
0930	1000	e. Utilising NTWC products in DMO SOPs	Ardito Kodijat
1000	1015	f. Decision to call for evacuation	Harald Spahn
1015	1030	g. Discuss Exercise IOWave23 scenarios	Nora Gale
1030	1100	h. Pathway to finalising DMOs SOPs	Harald Spahn



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**Day-2 8<sup>th</sup> August: Member State Individual Workshops:**

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

Time (mins)	Start	End	Topic	Presenters/ (moderator)
<b>3.1 National Workshops</b>				
10			a. Introduction	
20			b. Discuss findings and conclusions from Workshop Day#1	
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			<b>Break</b>	
30			e. Examine and coordinate linkages across NTWC, N/P/LDMO, and Media SOPs, especially with regards to timelines (including call for evacuation decision)	
20			f. Identify any work on further SOP development, including Media SOPs	
20			g. Discuss how to move forward after the workshop to resolve any 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	