Working Group 2 Meeting 5-6 April 2023

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United Nations Educational, Scientific and Cultural Organization Intergovernmenta Oceanographic Commission

#### IOC TS-143: Capacity Assessment of Tsunami Preparedness in the Indian Ocean: Status Report, 2018

Nora Gale, ICG/IOTWMS Secretariat

Acknowledgements:

ICG/IOTWMS Task Team on Capacity Assessment of Tsunami Preparedness

### BACKGROUND

- In the aftermath of the 2004 Indian Ocean tsunami, IOC facilitated missions to assess the state of tsunami readiness in 16 affected countries.
- The findings were published in the 2005 Assessment of Capacity Building Requirements for an Effective and Durable Tsunami Warning and Mitigation System in the Indian Ocean (IOC/INF-1219)
- These findings provided critical inputs to the design and development of the IOTWMS.

# METHODOLOGY

- 12 years later, the ICG/IOTWMS at its 11 session (Putrajaya, Malaysia, 2017) decided to establish a Task Team to design and conduct an extensive online survey covering all aspects of the end-to-end tsunami warning and mitigation system.
- The online survey forms the dataset for the 2018 Status Report on Capacity Assessment of Tsunami Preparedness in the Indian Ocean.
- 20 Indian Ocean countries have provided input to the Capacity Assessment

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Intergovernmental Oceanographic Commission Technical Series 143



Capacity Assessment of Tsunami Preparedness in the Indian Ocean

Status Report, 2018



**Executive Summary** 

Capacity Assessment of Tsunami Preparedness in the Indian Ocean

Status Report, 2018

UNESCO



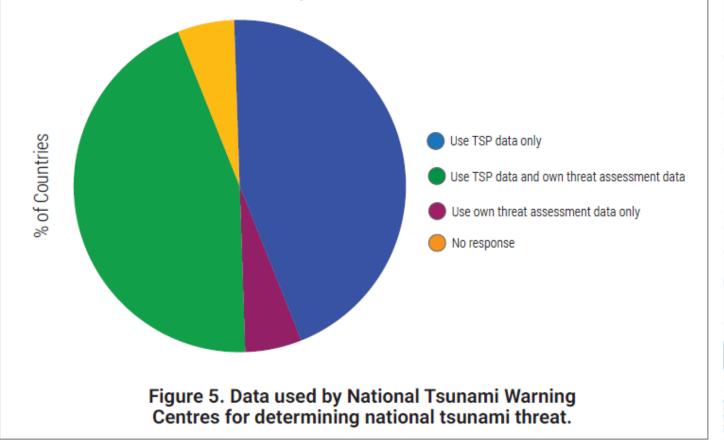
#### COMPARATIVE LISTS OF COUNTRIES SURVEYED IN THE 2005 AND 2018 ASSESSMENTS (by alphabetical order)

| 2005 Assessment of Capacity Building<br>Requirements for an Effective and Durable<br>Tsunami Warning and Mitigation System in<br>the Indian Ocean (IOC/INF-1219) –<br>Consolidated Report for Countries Affected<br>by the 26 December 2004 Tsunami | 2018 Capacity Assessment of Tsunami<br>Preparedness in the Indian Ocean –Status<br>Report (IOC Technical Series, 143) |
|---|---|
|   | Australia   |
| Bangladesh  | Bangladesh  |
| Comoros   | Comoros   |
|   | Overseas France (Indian Ocean)  |
|   | India   |
| Indonesia   | Indonesia   |
|   | Iran (Islamic Republic of)  |
| Kenya   | Kenya   |
| Madagascar  | Madagascar  |
| Malaysia  | Malaysia  |
| Mauritius   | Mauritius   |
| Mozambique  | Mozambique  |
| Myanmar   | Myanmar   |
| Oman  | Oman  |
| Pakistan  | Pakistan  |
| Seychelles  |   |
|   | Singapore   |
| Somalia   |   |
|   | South Africa <sup>16</sup>  |
| Sri Lanka   | Sri Lanka   |
| Tanzania  | Tanzania  |
| Thailand  | Thailand  |
|   | Timor-Leste   |

# 2018 CAPACITY ASSESSMENT REPORT

- The 2018 assessment provides a new baseline of the status of tsunami preparedness capacity in the region.
- The online survey include five sections: 1) Policies, plans and guidelines; 2) risk assessment and reduction; 3) detection, warning and dissemination; 4) public awareness, preparedness and response; 5) Recommendations to address policy gaps and support requirements
- The results indicate that there has been considerable improvement across all components of the IOTWMS since 2005
- It also identifies specific gaps and prioritises capacity development requirements at both regional and national levels
- A summary of each responding country is provided in Annex IV

#### Detection, Warning and Dissemination



# Detection, Warning and Dissemination

- All countries reported they have the capacity to assess and/or receive potential tsunami warning threat information and provide advisories or warnings to their coastal communities.
- 18 countries reported they have access to seismic network data.
- 12 countries reported having the capacity to use tsunami models using a variety of software tools.
- Countries use a wide range of media to disseminate tsunami information.
  Email is the most widely used followed by SMS and television.

#### Recommendations (Detection, Warning and Dissemination)

- Provide support to increase the capacity for analysing real-time seismic and sea-level data for tsunami threat
- Provide support to increase the capacity for tsunami modelling to support generation of threat forecasts
- Undertake a further study to examine whether there is a need for so many different software tools to be used to analyse data for tsunami threat or tsunami modelling
- Increase the frequency of tabletop or similar tsunami warning exercises to review and test SOPs, and reduce the potential for complacency among countries that have not experienced a recent tsunami event

# Thank you.

Nora Gale, ICG/IOTWMS Secretariat

Acknowledgements:

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