



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION  
COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE  
COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL  
МЕЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ

اللجنة الدولية الحكومية لعلوم المحيطات

政府间海洋学委员会

UNESCO – 7 Place de Fontenoy - 75352 Paris Cedex 07 SP, France  
<http://ioc.unesco.org> - contact phone: +33 (0)1 45 68 03 18  
E-mail: [v.ryabinin@unesco.org](mailto:v.ryabinin@unesco.org)

**IOC Circular Letter No 2965**  
(Available in English, French and Spanish)

IOC/VR/BA/ah  
9 October 2023

To : ICG/CARIBE-EWS Tsunami National Contacts (TNC) and  
Tsunami Warning Focal Points (TWFPs)

C.c. : Official National Coordinating Bodies for liaison with IOC Member States  
Permanent Delegates/Observer Missions to UNESCO  
National Commissions for UNESCO of IOC Member States  
ICG/CARIBE-EWS Chair and Vice-Chairs  
IOC Tsunami List

**Subject: Call for nomination for ICG/CARIBE-EWS  
Working Groups and Task Team**

Recommended at the Sixteenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions ([ICG/CARIBE EWS-XVI](#); San José, Costa Rica, April 2023), the terms of reference for four ICG/CARIBE-EWS Intersessional working groups and a task team were endorsed by the IOC Assembly at its 32<sup>nd</sup> Session (June 2023) as shown hereafter. I hereby kindly invite you to nominate experts to the following working groups and task team (meetings to be conducted in English), no later than 17 November 2023, to Mr Ocal Necmioglu ([o.necmioglu@unesco.org](mailto:o.necmioglu@unesco.org)) copied to Ms Alison Brome ([a.brome@unesco.org](mailto:a.brome@unesco.org)).

I look forward to your active participation in these groups and remain,

Yours sincerely,

*[signed]*

Vladimir Ryabinin  
Executive Secretary

**Enclosure:** Terms of reference of the ICG/CARIBE-EWS Intersessional working groups  
and task team

**Chairperson**

Dr Yutaka MICHIDA  
Professor  
Atmosphere and Ocean Research  
Institute, The University of Tokyo  
Kashiwanoha 5-1-5  
2778564 Kashiwa  
JAPAN

**Executive Secretary**

Dr Vladimir RYABININ  
Intergovernmental Oceanographic  
Commission — UNESCO  
7 Place de Fontenoy  
75352 Paris Cedex 07 SP  
FRANCE

**Vice-Chairpersons**

Dr Marie-Alexandrine SICRE  
Directrice de Recherche  
Centre national de la recherche scientifique  
(CNRS)  
3 rue Michel Ange  
75016 Paris  
FRANCE

Dr Nikolay VALCHEV  
Director  
Institute of Oceanology  
Bulgarian Academy of Sciences  
40 Parvi May Str.  
9000 Varna  
BULGARIA

Mr Juan Camilo FORERO HAUZEUR  
Executive Secretary  
Colombian Ocean Commission (COO)  
Avenida Ciudad de Cali No. 51 – 66  
Edificio WBC, Oficina 306  
111071 Bogotá, D.C.  
COLOMBIA

Dr Srinivasa Kumar TUMMALA  
Director  
Indian National Centre for Ocean  
Information Services (INCOIS)  
Pragathi Nagar (BO), Nizampet (SO)  
Hyderabad 500090  
INDIA

Prof. Amr Zakaria HAMOUDA  
President  
National Institute of  
Oceanography and Fisheries  
(NIOF)  
Qaitbay, Al-Anfoshi  
Alexandria  
EGYPT

## **Working Group 1: Risk Knowledge**

Purpose: To advise the ICG on the identification and characterization of the risk associated with tsunami and other coastal hazards, and their assessment and required modelling.

Chair: Frédéric Dondin (France)

Vice-Chair: Raphaël Paris (France)

### Tasks:

- Review and evaluate required methods and data sets, including bathymetry and coastal topography for determining coastal hazards.
- Advise Member States on the requirements for operating the appropriate models for risk assessment.
- Advise and build capacity for risk assessments and their interpretation.
- Present a progress report based on the Key Performance Indicators related to the United Nations (UN) Ocean Decade Tsunami Programme (ODTP).
- Advise and seek advice from Member States about other coastal hazards that can be included into the warning system.
- Promote the sharing of experience and expertise, and capacity building essential to effective tsunami risk knowledge.

## **Working Group 2: Tsunami Detection, Analysis and Forecasting**

Purpose: To review and recommend to the ICG priorities and actions required to ensure and enhance existing capabilities as well as explore new technologies to improve tsunami detection and forecasting capability.

Chair: Elizabeth Vanacore (USA)

### Vice Chairs for Subgroups:

1. Tsunami Source Identification and Characterization (Dan McNamara, USA)
2. Tsunami Detection (Gloria Romero, Venezuela)
3. Tsunami Forecasting (Chris Moore, USA)

### Tasks:

#### *General*

- Support the operations of a fully interoperable regional tsunami warning system.
- Support and integrate the work of the subgroups.
- Present a progress report based on the Key Performance Indicators related to the UN ODTP.
- Establish strategies to enhance the warning system by including the detection, analysis and forecasting of other coastal hazards.
- Promote the sharing of experience and expertise, and capacity building essential to effective tsunami source characterization, detection and forecasting.

#### *2.1 Tsunami Source Detection, Identification and Characterization*

- Ensure the effectiveness of the observational system by promoting the open exchange of seismic and other relevant data in real time.
- Advise Member States on the monitoring and detection capabilities of tsunamigenic sources needed for operating national tsunami warning centres.

- Assure the compliance with the agreed standards for the detection systems.

### 2.2 *Tsunami Wave Detection*

- Ensure the effectiveness of the observational system by promoting the open exchange of sea level data in real time.
- Advise Member States on the tsunami monitoring and detection capabilities needed for operating national tsunami warning centres.
- Assure the compliance with the agreed standards for the tsunami detection systems.

### 2.3 Tsunami Forecasting

- Define the operational requirements for the monitoring and forecasting systems.
- Provide guidance on tsunami forecasting tools to TSPs, NTWCs and provide actionable information to emergency managers.
- Explore, experiment and test novel approaches for tsunami forecasting.

## **Working Group 3: Tsunami Warning Dissemination and Communication**

Purpose: To examine current and developing capacities and advise the ICG about the definition and composition of early warnings and tsunami products and the methods and best practices for effective end-to-end dissemination and communication.

Chair: Christa von Hillebrandt-Andrade (USA)

Vice-Chair: Susan Hodge (Anguilla)

### Tasks:

- Explore and document the dissemination capabilities and existing alert guidance in the countries of the region.
- Identify the difficulties and challenges existing in the region that hinder the impact of “end to end” dissemination and communication of early warnings.
- Establish strategies for the development and implementation of methods and technologies to strengthen the interaction with the media and dissemination of early warnings within the countries of the region.
- Evaluate communication tests and tsunami exercises, in order to identify weaknesses and make recommendations to help strengthen these delivery systems.
- Create communication protocol and standardized information identifying the minimum acceptable levels for communication and dissemination of tsunami early warning in all countries for approval by the ICG.
- Provide feedback to the Tsunami Service Providers on its products and communication procedures.
- Serve as a reviewing and approving body for proposed changes to TSP products for the CARIBE-EWS or determine if proposed changes warrant going to the ICG for review and approval.
- Present a progress report based on the Key Performance Indicators related to the UN ODTP.
- Promote the sharing of experience and expertise, and capacity building essential to effective tsunami warning dissemination and communication.

#### **Working Group 4: Preparedness and Response Capabilities**

Purpose: To advise and recommend to the ICG strategies to enhance awareness, education, preparedness, response capabilities and mitigation and to develop the necessary recommendations, tools and procedures.

Chair: Silvia Chacon (Costa Rica)

Vice-Chairs for Subgroups:

1. Preparedness and Response capabilities (Jacob Ngumbah, St Kitts and Nevis)
2. Mitigation (Stacey Edwards, Trinidad and Tobago)
3. Tsunami Ready (Fabian Hinds, Barbados)

Tasks:

##### *General*

- Consider UN Ocean Decade Tsunami Programme and other relevant decade actions, the Regional Action Plan for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in the Americas and the Caribbean and the UN Early Warnings for All Initiative (EW4ALL)
- Present a progress report based on the Key Performance Indicators related to the UN ODTP
- Support the development of guidelines and capacity development on preparedness, response and recovery planning for Member States, communities and organizations, which should include sharing of training and evacuation best practices.

##### *4.1 Preparedness and Response capabilities*

- Identify the public awareness and education strategies and tools that the Member States can integrate into their risk reduction and emergency management programmes.
- To closely cooperate with the Caribbean Tsunami Information Centre (CTIC) in carrying out its mandate and in the implementation of its programme.

##### *4.2 Mitigation*

- Identify mitigation best practices related to plans, structural and nature-based solutions.
- Advise Member States on measures to minimize impacts to critical infrastructure and marine assets from tsunamis and other coastal hazards.
- Identify and employ strategies to support mainstreaming disaster risk reduction into urban planning.

##### *4.3 Tsunami Ready*

- Identify and employ strategies to ensure 100% of at-risk communities achieve UNESCO/IOC Tsunami Ready recognition.

#### **Task Team on CARIBE WAVE**

Purpose: Coordinate planning, running, and follow-up of CARIBE WAVE Exercises.

Chair: Glorymar Gomez (USA, PRSN)

Vice-Chair: Antonio Aguilar (Venezuela)

Tasks:

- Propose and coordinate development of scenarios agreed by ICGs.
- Coordinate preparation of CARIBE WAVE activities, including establishing a timeline, publishing of Exercise Manuals, and organization of relevant informational materials and events.
- Follow-up on CARIBE WAVE outcomes including coordinating post-event surveys and reporting.