

UNESCO INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

Seventeenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-XVIII)

Virtual

5-7 and 9 May 2025

Agenda Item 4.3

Working Group 3: Tsunami Warning Dissemination and Communication

This document presents the activities, recommendations, conclusions and a proposed work plan of Working Group 3: Tsunami Warning and Communication. The ICG is requested to consider, comment and eventually endorse the recommendations issued by Working Group 3.

1. Introduction – Terms of Reference

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.

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.

Currently the Working Group IV is chaired by Ms. Christa von Hillebrandt-Andrade and cochaired by Ms. Susan Hodge (UK, Anguilla). It has a total of 20 members, including 2 ex officio members. There were four virtual meetings, other business was done through email.

2. Working Group 3 Activities

2.1. Status on Implementation of Recommendations from ICG CARIBE EWS XVII:

- Finalize and submit the Inventory document including the results of the CARIBE WAVE 24 exercise. **DONE** (ICG XVIII document)
- Further recommends the UNESCO-IOC Tsunami Resilience Section to promote and make available the final document to ICG/CARIBE-EWS Member States and other stakeholders. **DONE (Email Sent by Chair to MS in December 2024)**
- Use the Inventory and EW4ALL initiatives to document the dissemination capabilities, existing alert guidance and capacity enhancement needs in each of the Member States of the ICG/CARIBE-EWS **DONE** (ICG XVIII document)
- Review and revise Technical, Logistical and Administrative Requirements of a Regional Tsunami Service Provider for CARIBE-EWS and present at its XVIII session at the latest. **DONE sent to CARIBE EWS Steering Group.**

2.2. Other Activities 20024-2025

- The working group had four virtual meetings during the intersessional 2024-2025 period.
- Reviewed and suggested changes to PTWC updated User's Guide for CARIBE EWS
- Received updates from CATAC on its Users Guide, shared among members the April 4, 2025 version
- Shared with WG 3 the Global Service Definition Document
- Received updates from CATAC on Earthquake Early Warning (EEW), and potential applications for tsunami warning and communication
- Supported the planning, conduct and evaluation of the CARIBE WAVE 2025

3. The Key challenges/opportunities

Impacts and risks of other hazards on coastal communities (hurricanes, storm surges, sargassum, volcanic eruptions, floods, etc,) compete with resources for Tsunami. There is an opportunity through CARIBE EWS initiatives and global initiatives to harness capabilities and activities of these efforts to strengthen the communication and delivery of tsunami warnings.

Challenges

- Member States are addressing economic, health and social challenges along with emergencies, disasters and stressors limiting their resources for Tsunami Warning Dissemination and Communication.
- Lack of financial and human resources to implement actions of the WG 3
- Tsunamis are low frequency events which leads to complacency
- There are many Disaster Risk Reduction initiatives in the region in which the same tsunami stakeholders are also involved, the smaller, the state the greater is this challenge

Opportunities

- CARIBE WAVE exercises have high participation rate of all Member States and within the member states and territories, including diverse sectors (National, Local, Education, Government, Industry, Service, etc)
- The Ocean Decade Tsunami Programme outlines the actions and metrics for Tsunami Dissemination and Communication
- The UNESCO/IOC Tsunami Ready Program, which is being implemented in many Member States across the region, has two specific indicators on tsunami warning reception and dissemination, as well as response planning actions.
- Regional Action Plan for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 provides high level guidance on multi-hazard early warning systems
- UN Early Warnings for All Initiative (EW4ALL), including capacity enhancement offers additional opportunities for Capacity Enhancement

Recommendations for ICG/CARIBE EWS XVI

Recognizes the actions of the Working Group 3 towards the advancement of tsunami warning dissemination and communication.

Welcomes the representatives of WMO and UNDRR in the Working Group 3 as well as other new members nominated by the Member States.

Noting the lack of participation of some of the Working Group members,

Encourages Tsunami National Contacts to encourage active participation of all its members and communicate to the Secretariat changes in designations.

Noting the advances in the implementation plan for the Ocean Decade Tsunami Programme and its recommended actions for advancing Tsunami Warning, Dissemination and Communication,

Additionally noting the findings and recommendations of the UN Early Warnings for All Initiative (EW4ALL),

Acknowledging the updates to the CARIBE EWS Inventory of Tsunami Warning Dissemination and Communication Methods for the Caribbean and Adjacent Regions.

Recommends the Working Group 3 to work with UNESCO/IOC Tsunami Resilience Section to post and share the report and findings as a living document.

Acknowledging the WG 3 report on the survey conducted among Member States on communication methods used and training required,

Noting that some of the training priorities can best be done locally (telecoms) and others regionally (online or in person),

Further Noting TOWS recommendation and the results of the CARIBE EWS survey for the need of Common Alerting Protocol (CAP) training and the efforts underway through EW4ALL,

Requests UNESCO/IOC Tsunami Resilience Sector to enhance coordination, including training, with UNDRR, International Telecommunications Union and WMO on CAP.

Recommends WG3 to develop a training strategy for tsunami warning dissemination and communication taking into consideration international, regional and national resources and activities.

Noting the updates to the PTWC Users Guide for the CARIBE EWS, and the integration of the 2006 PTWC Communications Plan for the CARBE EWS,

Recommends the adoption of the 2025 PTWC Users Guide for the CARIBE EWS,

Further recommends the implementation of the new products by PTWC following notification to Member States with three months in advance.

Noting further advances by CATAC in Earthquake Early Warning, and potential applications for Tsunami warning and communication,

Recommends CATAC to continue to share, explore and integrate EQEW applications into its tsunami services and products for its TWFP and NTWCs.

Acknowledging that the Global Service Definition Document updated and approved by TOWS in 2025 is based on agreed concepts and guidelines and describes global tsunami warning services that are provided by regional tsunami warning systems operating in different ocean basins as a global system of systems and coordinated by the Intergovernmental Oceanographic Commission,

Noting that there are some items of the CARIBE EWS Tsunami Service Provider that are not included or are inconsistent with the Global Service Definition Document,

Further noting the duplications between the TOWS Global Service Definition Document and the CARIBE EWS Technical, Logistical and Administrative Requirements of a Regional Tsunami Service Provider for CARIBE-EWS.

Recommends the ICG CARIBE EWS Steering Group to prepare a CARIBE EWS supplement to the GDDS.

Further recommends that both the GSDD and the CARIBE EWS supplement guide the operations of the CARIBE EWS Tsunami Service Providers.

Noting the task of the WG 3 to create a 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,

Requests the Working Group 3 to review existing national and local SOPs and provide a report for the ICG XIX.

Appreciates the support that the International Tsunami Information Centre Caribbean Office has provided to Working Group 3 with as the contributions of other stakeholders;

Working Group Internal Work Plan/Key Proposed Activities

Proposed activities/tasks to be implemented over the intersessional ICG/CARIBE EWS period.

ACTION	Lead	DEADLINE
Hold quarterly meetings of the WG, coopt new members, eg ITU, and from Member States	Chair/Co- Chair	July 2025 November 2025 February 2026 April 2026
Post on the website and socialize the Inventory of Communication Methods and the Results of the Survey on MS Methods and Training Needs	Secretariat	July 2025
Evaluate CARIBE WAVE 25, the Feb. 8 Earthquake and Tsunami Assessment and the Survey on Communication methods and determine work plan for developing training strategy for tsunami warning dissemination and communication	WG 3	July 2025
Determine a work plan for the review and update of national and local SOPs	WG3	July 2025
Work with the Secretariat to facilitate up to date designations of warning authorities	Secretariat	Ongoing
Review progress on training strategy and SOP review.	WG 3	November 2025
Discuss CARIBE WAVE 26 as it relates to Tsunami Warning Dissemination and Communication	WG 3	November 2025
Review draft training strategy and draft report on existing national and local SOPs to present to ICG CARIBE EWS XIX	WG 3	February 2026

	Review final training strategy and report on existing national and ocal SOPs to present to ICG CARIBE EWS XIX	WG 3	April 2026
	Jpon request, provide feedback to the Tsunami Service Providers	WG 3	Ongoing
	on its products and communication procedures and reviewing and		
1	ecommend actions for proposed changes to TSP products		

Membership as of April 30, 2025:

- 1. Christa Von Hillebrandt-Andrade, Puerto Rico, USA (Chair, 2023-2025)
- 2. Susan Hodge, Anguilla, UK (Vice Chair, 2023-2025)
- 3. Racquel Davis, Barbados
- 4. Wilberth Steban Forero Wagner, DIMAR, Colombia **
- 5. Kristel Espinoza Hernández, Costa Rica
- 6. Eva Merceron, France
- 7. Gael Rakoto, METEOFRANCE, France**
- 8. José Antonio Tojil Jiménez, Guatemala*
- 9. Pablo Daniel Martínez Zeceña, Guatemala*
- 10. Wilfried Strauch, Nicaragaua (CATAC)
- 11. Miguel Flores, Nicaragua (CATAC)*
- 12. Junior Aimable, Saint Lucia*
- 13. Kaza Hippolyte, Saint Lucia*
- 14. Mabius Francis, Saint Lucia
- 15. Asim Frett, USVI, USA*
- 16. Charles McCreery, USA (PTWC)
- 17. Maria Torres, PRSN, PR, USA
- 18. Rodney Martínez Güingla, WMO Representative for North America, Central America, and the Caribbean**
- 19. Jair Torres, UNDRR**
- 20. Ocal Necmioglu, Technical Secretary, UNESCO-IOC (Ex-Officio)
- 21. Eng. Gerard Metayer, Caribe EWS Chair (Ex-Officio)
- *Members Inactive in the Intersessional Period
- **New Members as of ICG CARIBE EWS XVII (May 2024)