



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-TEWS-Hawaii)
TSUNAMI EARLY WARNING SYSTEMS
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
15-26 September 2025, Honolulu, Hawaii USA

UNESCO IOC Global Tsunami System

ICG/PTWS, Roles of TNCs, TSPs, TWFPs, NTWCs, and TICs

Dr. Charles McCreery
Director, PTWC



Mandates

- **UNESCO** – United Nations Educational, Scientific, and Cultural Organization

The purpose of UNESCO is to contribute to peace and security by promoting collaboration among the nations through education, science, and culture.

- **IOC** – Intergovernmental Oceanographic Commission

The work of the IOC contributes to the mission of UNESCO by promoting international cooperation in marine sciences through coordinating programmes in capacity development, ocean observations and services, ocean science, tsunami warning and ocean literacy to improve management of the ocean, coasts and marine resources.

- **IOC Tsunami Programme**

The IOC Tsunami Programme, through the coordination of regional meetings, capacity building activities and the support of national and regional projects, aims at reducing the loss of lives and livelihoods due to tsunamis. In order to accomplish this, the IOC Tsunami Resilience Section supports IOC Member States in assessing tsunami risk, implementing Tsunami Early Warning Systems (TEWS) and in educating communities at risk about preparedness measures.

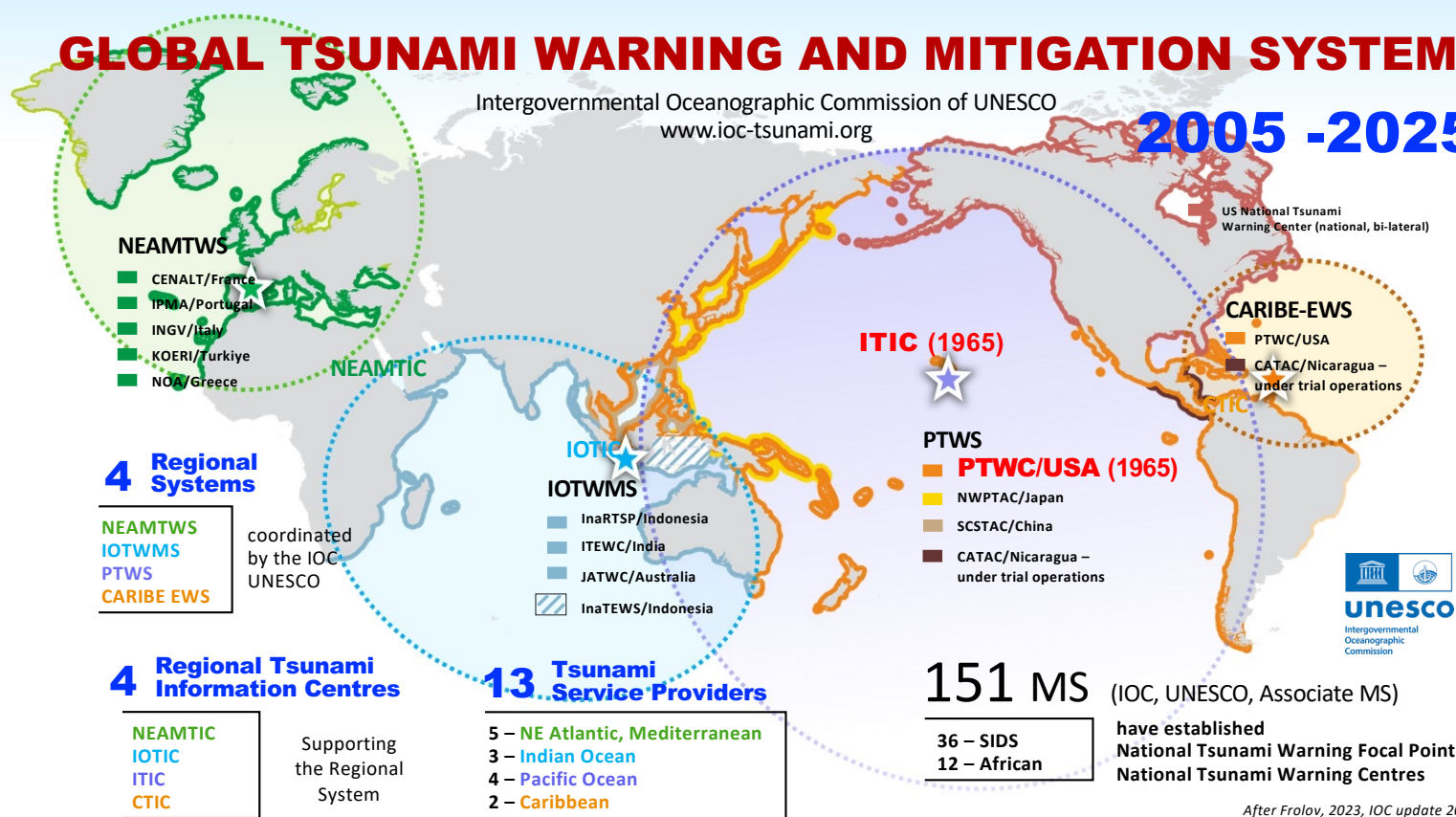
IOC Tsunami Programme Organization

- **Four Systems – Each Governed by its Intergovernmental Coordination Group (ICG)**
 - PTWS** - Pacific Tsunami Warning and Mitigation System (46 Member States)
 - IOTWMS** – Indian Ocean Tsunami Warning and Mitigation System (27 Member States)
 - NEAMTWS** - Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (40 Member States)
 - CARIBE-EWS** - Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (48 Member States)
- **ICG Coordinating Body – Covers Common Issues of the Four Systems**
 - TOWS-WG** - Working Group on Tsunamis and Other Hazards related to Sea Level Warning and Mitigation Systems (TOWS-WG)
- **IOC Secretariat – Provides Structure, Continuity and Overall Support**
 - Head of the Tsunami Unit and Technical Secretaries for each ICG
- **Overall Governance** – IOC Assembly and IOC Executive Council

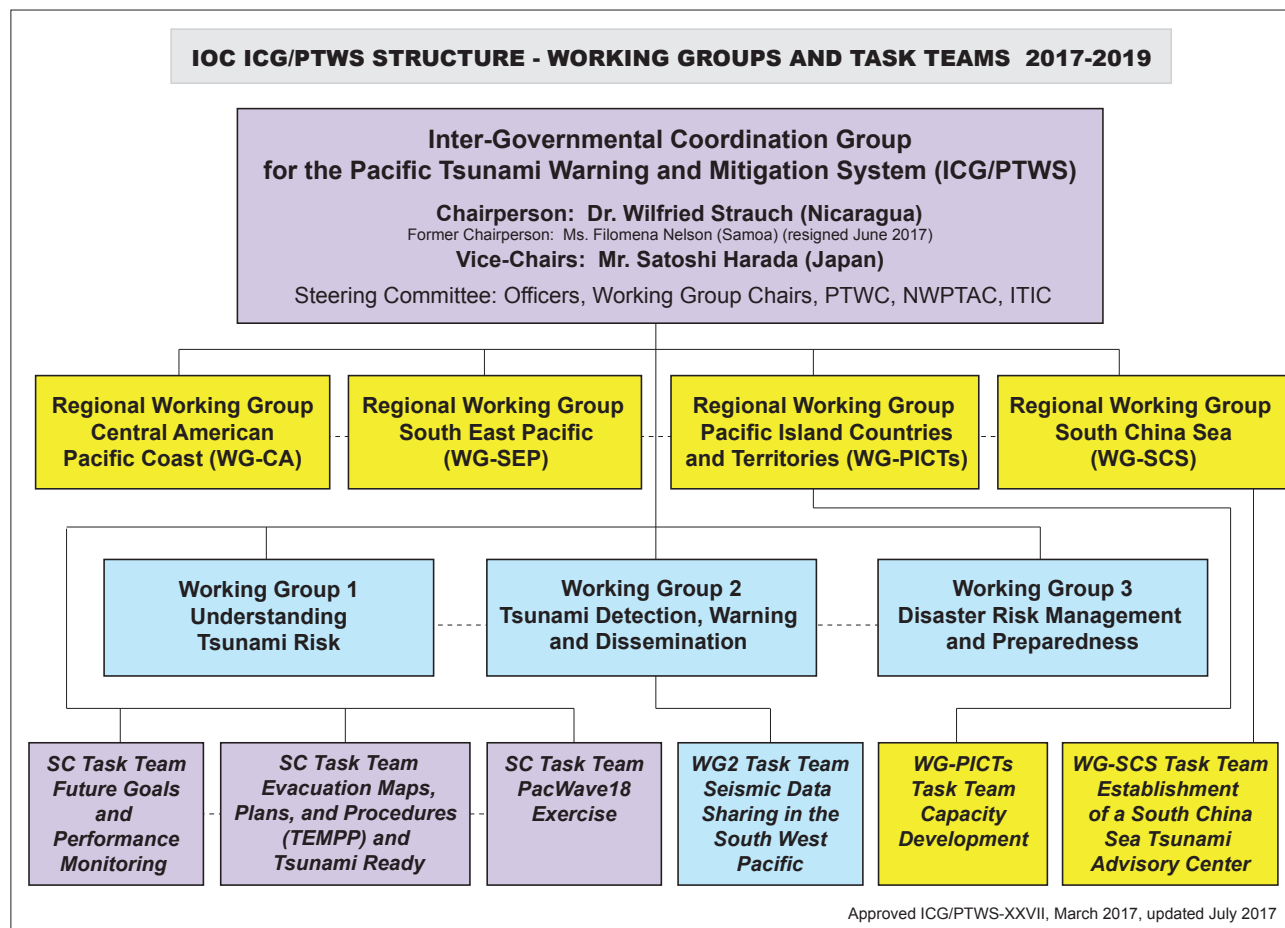
GLOBAL TSUNAMI WARNING AND MITIGATION SYSTEMS

Intergovernmental Oceanographic Commission of UNESCO
www.ioc-tsunami.org

2005 -2025



Sample Organization of System by its ICG (PTWS)



TNC, TWFP, and NTWC of each Member State

- **Tsunami National Contact (TNC)**

The person designated by an ICG Member State government to represent his/her country in the coordination of international tsunami warning and mitigation activities. The person is part of the main stakeholders of the national tsunami warning and mitigation system programme. The person may be the Tsunami Warning Focal Point from the national disaster management organization, from a technical or scientific institution, or from another agency with tsunami warning and mitigation responsibilities.

- **Tsunami Warning Focal Point (TWFP)**

A 24x7 point of contact (office, operational unit or position, not a person) officially designated by the NTWC or the government to receive and disseminate tsunami information from an ICG Tsunami Service Provider according to established national Standard Operating Procedures. The TWFP may or not be the NTWC.

- **National Tsunami Warning Center**

A centre officially designated by the government to monitor and issue tsunami warnings and other related statements within their country according to established national Standard Operating Procedures.

Roles and Responsibilities of the TSPs

■ Tsunami Service Provider

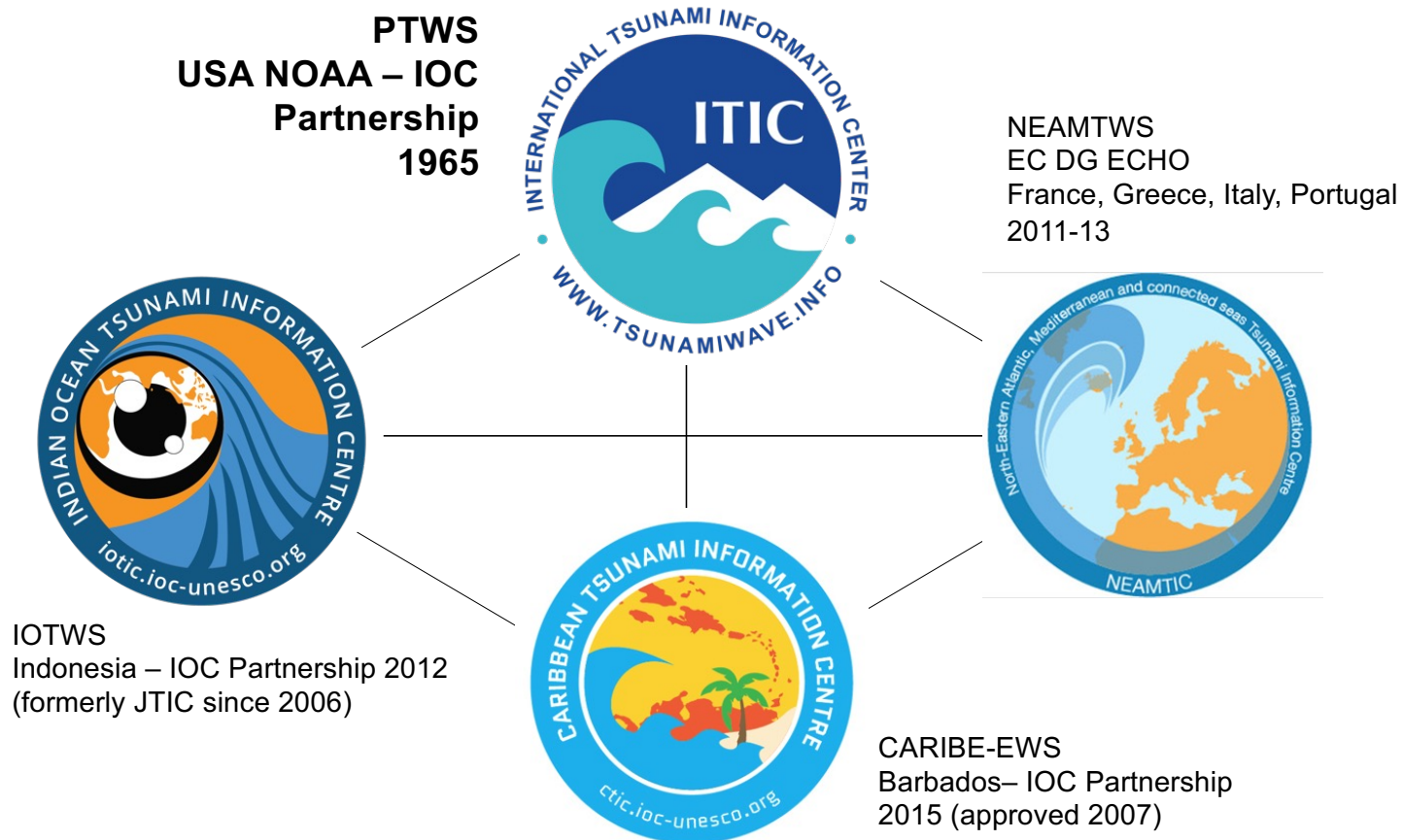
Centre that monitors seismic and sea level activity and issues timely tsunami threat information within an ICG framework to National Tsunami Warning Centres/Tsunami Warning Focal Points and other TSPs operating within an ocean basin. The NTWCs/TWFPs may use these products to develop and issue tsunami warning for their countries. TSPs may also issue Public messages for an ocean basin and act as National Tsunami Warning Centres providing tsunami warnings for their own countries.

Roles and Responsibilities of the TIC

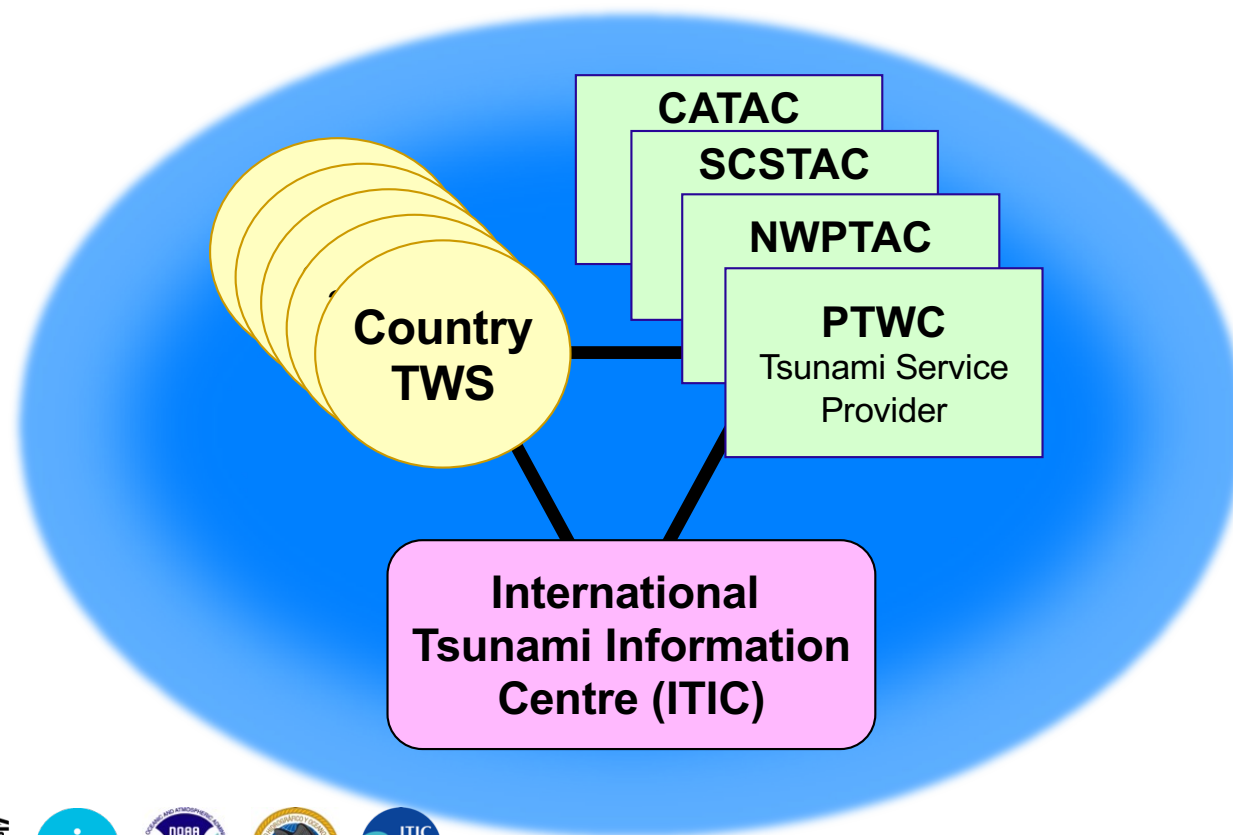
■ Tsunami Information Center

Centres that provide education, outreach, technical and capacity building assistance to Member States and the public in preventing, preparing, and mitigating measures for tsunamis. Among other activities, the centres manage post event performance surveys, serve as a resource for the development, publication, and distribution of tsunami education and preparedness materials and information on tsunami occurrences, and may support risk assessment and mitigation activities. A Tsunami Information Centre has been established in each of the regional tsunami warning systems within the ICG framework.

IOC Tsunami Information Centers



PTWS FOUNDATIONAL ELEMENTS





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Thank You

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