



2021  
2030 United Nations Decade  
of Ocean Science  
for Sustainable Development

United Nations  
Educational, Scientific and  
Cultural Organization

Organisation  
des Nations Unies  
pour l'éducation  
la science et la culture

Organización  
de las Naciones Unidas  
para la Educación  
la Ciencia y la Cultura

Организация  
Объединенных Наций по  
вопросам образования  
науки и культуры

• Intergovernmental  
Oceanographic  
Commission

• Commission  
océanographique  
intergouvernementale

• Comisión  
Oceanográfica  
Intergubernamental

• Межправительственная  
океанографическая  
комиссия

# UN Decade of Ocean Science for Sustainable Development: 2021-2030: Safe Oceans Outcome

Rick Bailey

*Head of Secretariat for the UNESCO-IOC Intergovernmental Coordination Group  
for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)*

# UN Decade of Ocean Science for Sustainable Development: 2021 - 2030



The United Nations  
Decade of Ocean Science  
for Sustainable Development  
(2021-2030)



"The United Nations Decade of Ocean Science for Sustainable Development is a unique opportunity to engage the ocean science community in achieving the Sustainable Development Goals - globally, regionally and locally."



**Vladimir Ryabinin**  
Executive Secretary of the  
Intergovernmental Oceanographic  
Commission of UNESCO

# UN Decade of Ocean Science for Sustainable Development: 2021 - 2030

## VISION:

The Decade will harness, **stimulate and coordinate interdisciplinary research efforts** at all levels, in order to support **delivery of the information, action and solutions** needed to achieve the UN's 2030 Agenda for Sustainable Development.

## Goal:

### Goal 1:

To generate **the scientific knowledge and underpinning infrastructure and partnerships** needed for sustainable development of the ocean.

### Goal 2:

To provide **ocean science, data and information to inform policies for a well-functioning ocean** in support of all SDG-2030 Agenda.

## SOCIETAL OUTCOMES:

1. **A Clean Ocean;**
2. **A Healthy and Resilient Ocean;**
3. **A Predicted Ocean;**
4. **A Safe Ocean;**
5. **A Sustainable harvested and productive ocean;**
6. **A “Transparent and Accessible” Ocean;**



2021 United Nations Decade  
2030 of Ocean Science  
for Sustainable Development



# The Vision of A Safe Ocean

## **A Safe Ocean** is:

- **not** an ocean in which tsunamis do not occur;
- **is** an ocean in which tsunamis are understood, observed, and their impact is **accurately predicted before** they reach the coast;
- **is** an ocean in which those that live, work, and recreate along it are **armed with knowledge and prepared** to act before a tsunami strikes.

# UN Decade of Ocean Science for Sustainable Development: 2021 - 2030

## Safe Oceans Outcome

Includes Science Plan for tsunami warning & mitigation system development. The vision is based on two over-arching aspects:

1. **Explore technological and observational advances** lower uncertainties in tsunami detection and warnings.
2. Match these capability advancements with improved community preparedness efforts, including striving for **100% Tsunami Ready or comparable recognition of all at-risk coastlines.**



# Tsunami Dedicated Programme within UNDOS

1. **Expansion of existing observational systems** including seismometers, coastal tide gauges, and deep ocean tsunameters (DARTs) to fill identified gaps;
2. **Deployment of new technologies to address observational gaps that cannot be covered by existing networks.** For example, this would include the widespread implementation of scientific instrumentation on deep-ocean telecommunications cables as developed by the ITU/WMO/ UNESCO-IOC Joint Task Force (JTF) SMART Subsea Cables effort; and submission of a Programme to the UN Decade of Ocean Science for Sustainable Development;

# Tsunami Dedicated Programme within UNDOS

3. **Wide expansion of data access and availability and development of capability for real-time and near-real time sea level, seismic and GNSS-derived land motion data** at an appropriate sampling rate and relevant tools to forecast tsunamis from all sources;
4. **Increased access and regular updates to the collection of coastal topographic and bathymetric data**, in collaboration with the Nippon Foundation-GEBCO Seabed 2030 project, as well as **high performance computational capabilities** to enable more timely, accurate and comprehensive tsunami and other coastal hazard forecasts to better advise community response;

# Tsunami Dedicated Programme within UNDOS

5. **All National Tsunami Warning Centres have access to data, tools and communication platforms, protocols and training to timely and effectively warn coastal and maritime communities** threatened by tsunamis and other coastal hazards and are integrated into a multi-hazard framework;
6. **100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030** through the implementation of the UNESCO/IOC Tsunami Ready Programme and other initiatives.



# UNDOS Tsunami Programme Governance

