



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

Ocean Literacy: recent developments and the way forward

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Intergovernmental Oceanographic Commission of UNESCO

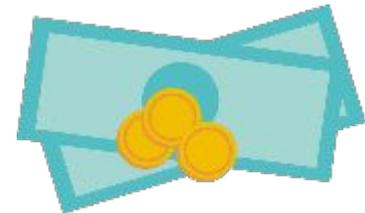
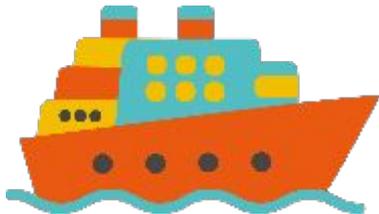
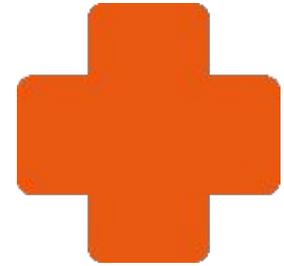
1st Ocean Observer Workshop, 14 June 2017

All aspects of life are deeply rooted in the ocean



Our Ocean Our Health

What does our ocean have to offer?



Threats

PLASTICS IN THE MARINE ENVIRONMENT

DID YOU KNOW?

More than **8 million tonnes** of plastic waste enters the ocean every year.

≈ **one truckload** every minute

80% of marine plastic waste comes from land-based sources.

Plastic is very slow to break down in the ocean. It breaks down into smaller and smaller pieces. Pieces of plastic less than 5 mm wide are called **"MICROPLASTICS"**.

Larger plastic can affect fish and wildlife through **choking, ingestion or entanglement**.

Dissolved contaminants from the water can adhere to the surface of microplastics.

Microplastics can be ingested and retained by filter feeders such as shellfish.

Although some research suggests that microplastics don't currently pose a significant health risk for humans, more research is needed.

YOU CAN MAKE A DIFFERENCE WITH THESE EASY STEPS . . .



USE REUSABLE SHOPPING BAGS



CHOOSE REUSABLE PLATES AND METAL CUTLERY



NEVER FLUSH PLASTIC DOWN THE TOILET

RECYCLE PLASTIC WASTE



CARRY YOUR OWN REUSABLE WATER BOTTLE AND COFFEE CUP



AVOID PRODUCTS WITH MICROBEADS
CHECK THE LABEL - DOWNLOAD THE APP
GET.BEATTHEMICROBEAD.ORG/

AVOID PLASTIC STRAWS



DO A #2MINUTEBEACHCLEAN
HTTPS://BEACHCLEAN.NET/

CHOOSE PACKAGE-FREE FOODS OR THOSE IN BIODEGRADABLE PACKAGING



MAKE A SEA CHANGE TO PROTECT OUR OCEAN:

[HTTP://SEACHANGEPROJECT.EU/takeaction](http://seachangeproject.eu/takeaction)

JOIN THE CONVERSATION ON TWITTER:
#OUROCEANOURHEALTH

For sources, see: <http://seachangeproject.eu/MarinePlastics>



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SEA CHANGE
OUR OCEAN | OUR HEALTH

Ocean Literacy

- * Ocean Literacy means understanding the ocean's influence on you and your influence on the ocean.
- * An ocean literate person is able to:
 - * Understand the importance of the ocean to humankind
 - * Can communicate about the ocean in a meaningful way
 - * Is able to make informed and responsible decisions regarding the ocean and its resources

History of ocean literacy

The screenshot shows the Ocean Literacy website homepage. At the top, the title "Ocean Literacy" is displayed in a large, white, serif font, with the tagline "Understanding the ocean's influence on you and your influence on the ocean" to its right. Below the title is a navigation menu with links: Home, Scientists, Educators, Policy Makers, Framework, Network, Research, and Getting Involved. The main content area is divided into two columns. The left column features a "Welcome to Ocean Literacy" heading and a slideshow. The first slide of the slideshow shows a satellite image of Earth with the text "1 The Earth has one big ocean with many features." Below the image is a navigation bar with numbered buttons from 1 to 7. The right column contains a search bar, a link to the "OCEAN LITERACY GUIDE", and a "FRAMEWORK DIAGRAM" which is a circular diagram illustrating the components of ocean literacy.

Ocean Literacy
Understanding the ocean's influence on you and your influence on the ocean

Home Scientists Educators » Policy Makers Framework » Network » Research » Getting Involved »

Welcome to Ocean Literacy

1 The Earth has one big ocean with many features.

1 2 3 4 5 6 7

Slideshow image #1 ©NASA Photo Library; all other slideshow images ©Kip Evans

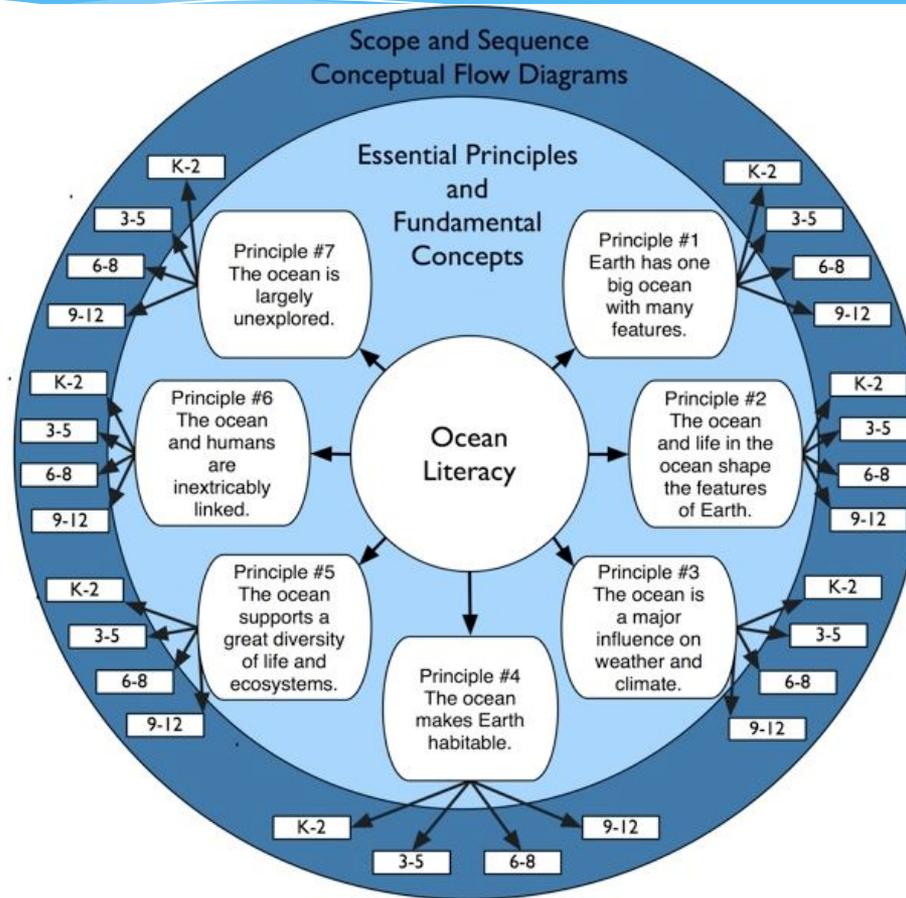
search this site...

OCEAN LITERACY GUIDE

OCEAN LITERACY
The Essential Principles and Fundamental Concepts of Ocean Literacy for Literacy of All Ages
VERSION 2 - MARCH 2011

FRAMEWORK DIAGRAM

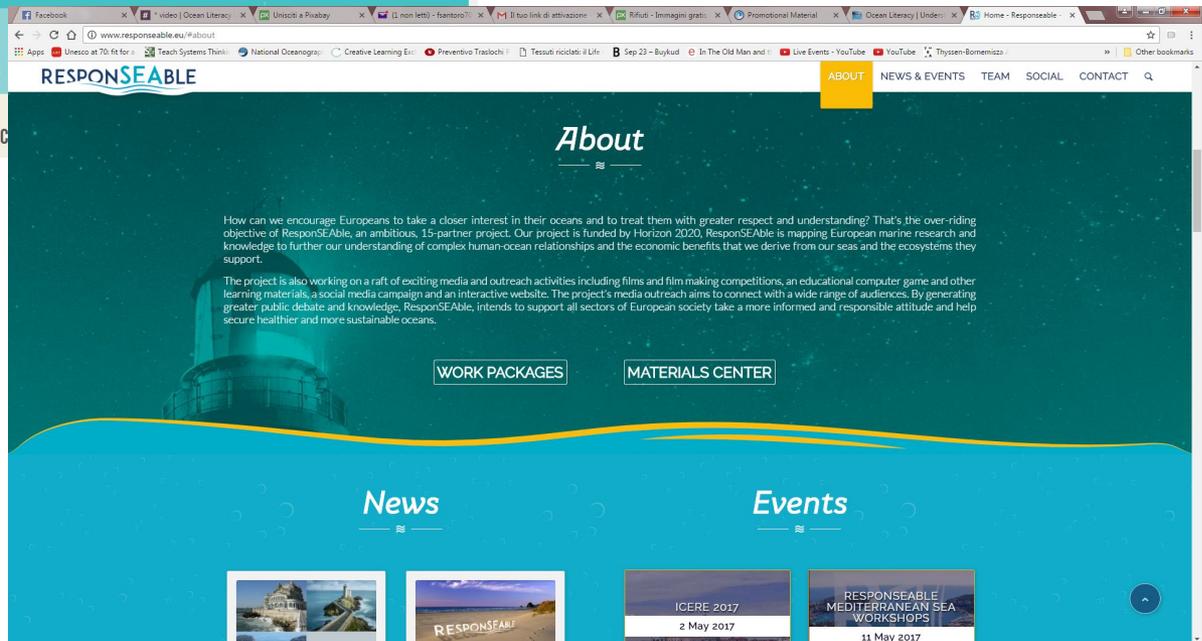
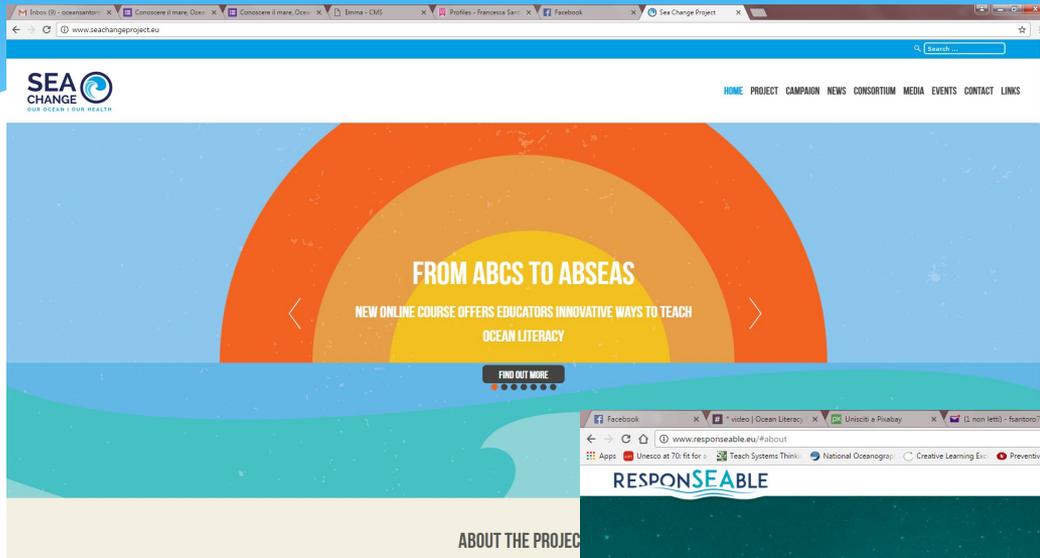
Ocean Literacy



Atlantic Ocean Research Alliance



Sea Change & ResponSEAbLe



Some outputs



COURSE
From ABC to ABSeas: Ocean Literacy for all

COURSE INFO

Francesca Santoro 8 Nov '16 5 Weeks Free Certified TRANSLATION

Virtual Classroom:

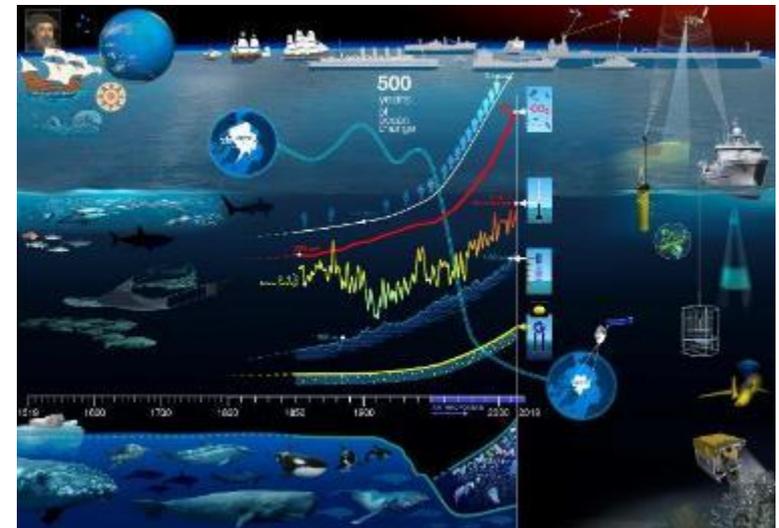
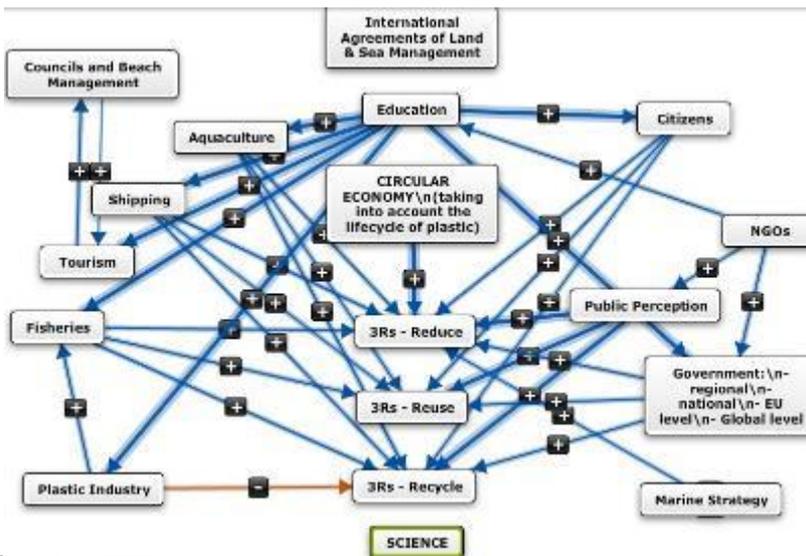
COURSE OVERVIEW

This first *Ocean Literacy MOOC* aims at sensitise and enable teachers and students to incorporate **ocean literacy into educational programmes**.

Education in its broader understanding (in both formal and informal settings) serves as a high potential channel to reach young citizens. As a lack of sufficient 'Ocean Literacy' has been identified in many countries, this clearly presents a barrier for citizens to engage in ocean responsible behaviour or consider ocean-related careers.

To overcome this, it is recommended to develop education to provide the capacity to **understand environmental issues**, to **participate in decision-making processes** and to **bring about changes in behaviour**.

Ocean Literacy can be seen as a way of incorporating scientific literacy in practice in **education**, whereby scientific literacy not only refers to a person's knowledge of science but also to his or her ability to **use this knowledge in making socially responsible decisions**.



European Marine Science Educators Association (EMSEA)

The screenshot shows the EMSEA website homepage. At the top, there is a navigation bar with the following menu items: Home, about EMSEA, Conferences, and Marine education. The main content area features a large image of a jellyfish with the text "EMSEA EUROPEAN MARINE SCIENCE EDUCATORS ASSOCIATION" overlaid. Below this, there is a section for the "EMSEA16-conference in Belfast, 4 - 7 October 2016" at Titanic Belfast, Northern Ireland's centre of excellence for ocean literacy. The text indicates that conference registration is open and provides a link to the conference website. To the right of the main content, there is a "facebook" section and a "Latest Tweets" section. The tweets include information about a MOOC on Ocean Literacy for secondary school teachers and a reminder to book dates for EMSEA17 in Malta.



Adapting OL principles to the Med

What makes the Mare Nostrum special?

- The Mediterranean Sea is not only considered the cradle of civilization, but it has also great environmental, social and economic importance
- Hot spot for biodiversity
- Mediterranean brand
- First world tourist destination



Adapting OL principles to the Med (2)

Ocean Literacy - An understanding of the ocean's influence on you - and your influence on the ocean.

A framework made up of 7 essential principles, developed in the United States and now adapted for the Mediterranean Sea.

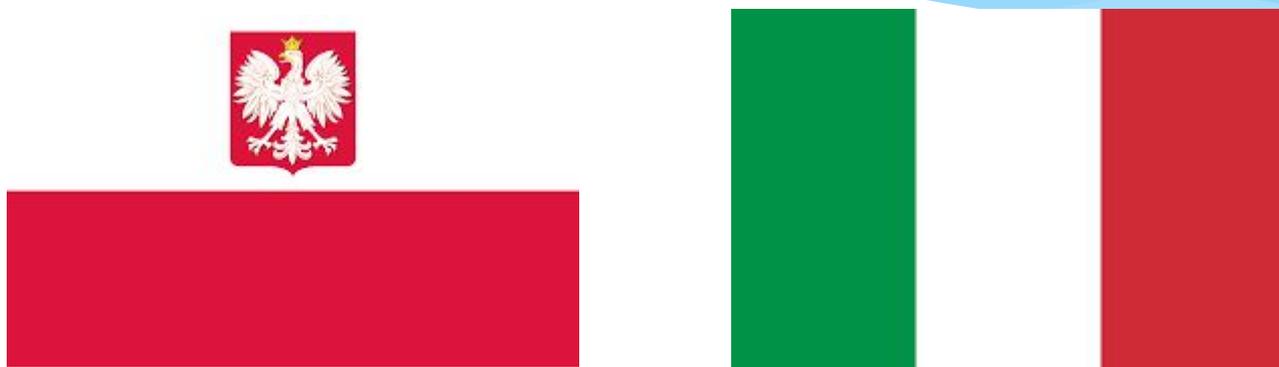
Ocean Literacy (OL) Principles

- OL 1** The Earth has one big ocean with many features.
- OL 2** The ocean and life in the ocean shape the features of Earth.
- OL 3** The ocean is a major influence on weather and climate.
- OL 4** The ocean made the Earth habitable.
- OL 5** The ocean supports a great diversity of life and ecosystems.
- OL 6** The ocean and humans are inextricably interconnected.
- OL 7** The ocean is largely unexplored.

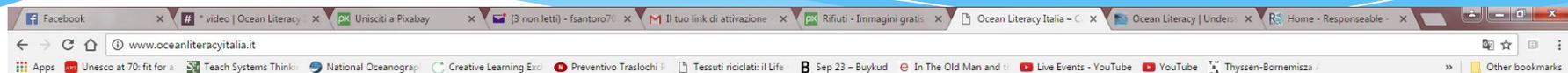
The Mediterranean Sea Literacy (MSL) Principles

- MSL 1** The Mediterranean Sea, almost enclosed by land of three continents (Europe, Africa and Asia) with many unique features, is connected to the one big ocean of the Earth.
- MSL 2** The Mediterranean Sea and its living organisms shape the features of the Mediterranean basin and its adjacent land masses.
- MSL 3** The Mediterranean Sea has a major influence on climate and weather of the Mediterranean region.
- MSL 4** The Mediterranean Sea made the Mediterranean region habitable through its richness of life and its influence on the mainland which then became a cradle of world civilization.
- MSL 5** The Mediterranean Sea is a marine biodiversity hot spot, with a high level of endemism.
- MSL 6** Culture, history, economy, lifestyle, and well-being of its inhabitants are inextricably connected to the Mediterranean Sea.
- MSL 7** A considerable part of the Mediterranean Sea is yet to be investigated.

Creation of national networks for OL



Ocean Literacy Italia



Ocean Literacy Italia

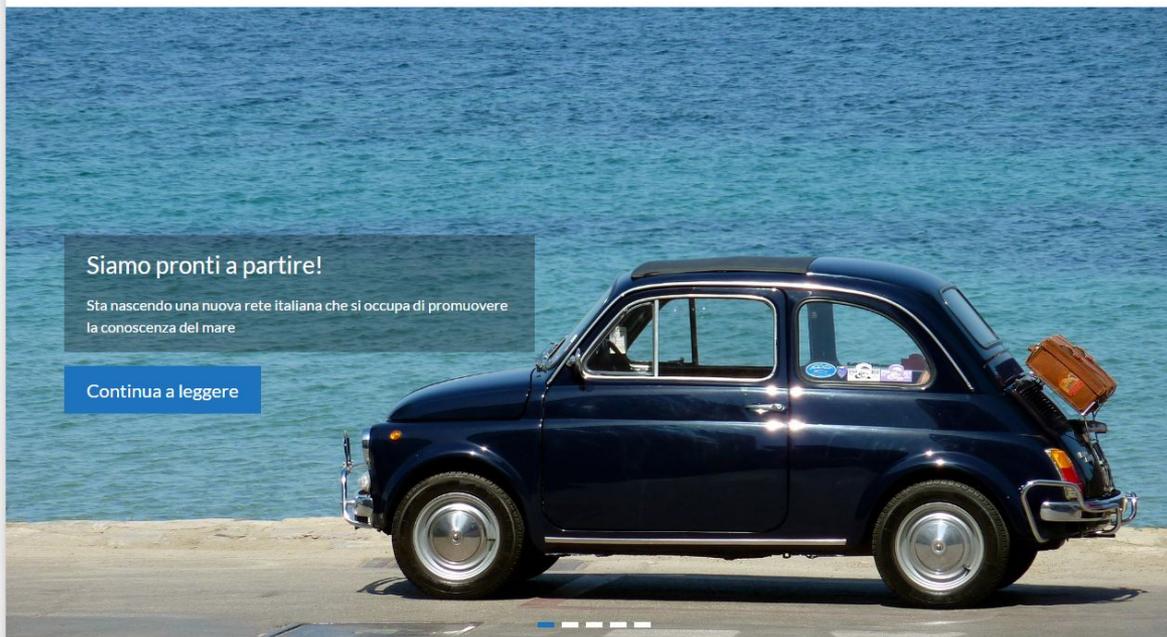
Capire come il mare influenza la nostra esistenza e come noi influenziamo l'esistenza del mare

[Obiettivi](#) [Cosa significa Ocean Literacy](#) [I Sette Principi](#) [Chi siamo](#) [Contatti](#)

Siamo pronti a partire!

Stia nascendo una nuova rete italiana che si occupa di promuovere la conoscenza del mare

[Continua a leggere](#)



World Ocean Day

National Educational Programme

HOME | ABOUT US | PUBLICATIONS | CONTACT US

ENGLISH GAEILGE

A⁻ A A⁺



AREAS OF ACTIVITY | INFRASTRUCTURE & FACILITIES | RESEARCH & FUNDING | DATA SERVICES | IRELAND'S MARINE RESOURCE | NEWS & EVENTS

Home / Areas of Activity / Education & Outreach

Education & Outreach

- Education & Outreach Overview
- Explorers Education Programme
- Sea for Society / Blue Society

Explorers Education Programme



Explorers Education Programme Overview

The Explorers Education Programme provides fun lesson plans, resources and activities for primary school teachers to inspire their student's interest and knowledge in our ocean, marine environment, species and seashores.

The Explorers Education Programme is supported by the Marine Institute, and is funded under the Marine Research Programme by the Irish Government.



[Explorer Explorers Mission Statement And Goals](#)

The Explorers Education Programme™ aims to build on Ireland's marine and maritime heritage by increasing awareness of the value, opportunities and social benefits of our ocean wealth and identity.

UN Ocean Conference



THE
OCEAN
CONFERENCE
UNITED NATIONS, NEW YORK, 5-9 JUNE 2017

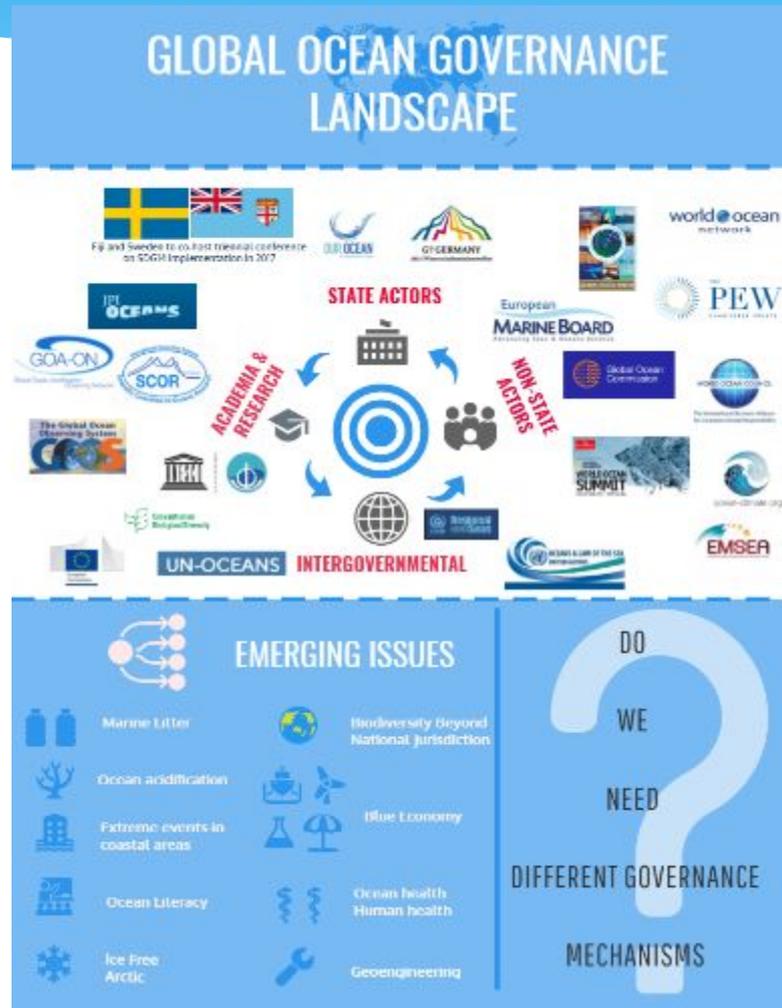


Call for Action

Paragraph 13e: (e) Support plans to foster ocean-related education, for example as part of education curricula, to **PROMOTE OCEAN LITERACY** and a culture of conservation, restoration and sustainable use of our ocean



What are the current needs?



What are the current needs?



The way forward

- * Reference
- * Quality
- * Hub
- * Synergies
- * Partnerships

Example

Unesco IOC ITIC IOTIC

United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission

North-Eastern Atlantic, Mediterranean and connected seas Tsunami Information Centre

North-Eastern Atlantic, Mediterranean and connected seas Tsunami Information Centre

Tsunami Info Technical Info NEAMTWS Resources Training & Exercises About NEAMTIC

Recent News



> More news

Upcoming Events

ICG/NEAMTWS Task Team and Steering Committee Meetings, 20-21 March 2017

The Task Teams and SC meetings will discuss about the ICG/NEAMTWS workplans for 2017-2018; NEAMWave17 to be conducted in the 4th quarter of 2017; the World Tsunami Awareness Day, 5 Nov 2017 and preparations for the next ICG/NEAMTWS Session.

Venue

UNESCO1 Rue Miollis, 75015 Paris MEETING...

[Read more →](#)

Other events of IOC Tsunami unit can be found at IOC Tsunami Calendar.

Tsunami Information

NEAMTWS Tsunami Service Providers (TSPs) Links

Recent Tsunami

 [NOA \(Greece\)](#)

 [CENALT \(France\)](#)

 [INGV \(Italy\)](#)

 [KOERI \(Turkey\)](#)



Conclusions

- * Ocean literacy concept is evolving
- * Several initiatives exist
- * Need for a better connection with policy-making and blue economy
- * Need for hub or one-stop-shop

Many Thanks
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