

Intergovernmental Oceanographic Commission of UNESCO (IOC)



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WHAT IS IOC?

It is an intergovernmental organization established in 1960. Its purpose is to promote international cooperation and to coordinate programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development the protection of the marine environment, and the decision-making processes of its Member States.

IOC is a community of 148 Member States assisted by the Secretariat and hosted at UNESCO in Paris (France). It operates by making decisions by consensus through formal governing bodies and primary subsidiary bodies (technical and regional).

VALUE OF OCEAN SCIENCE

Knowledge of the ocean conditions gives the base of understanding climate, living resources and availability, hazards from the ocean, storms, cyclones, tsunamis and warning systems for them, of marine pollution and impacts; changes in the ocean (acidification, sea level rise, warming and impacts thereof on coral reefs, coastal conditions, erosion, and how to adapt and mitigate; ocean uptake of CO₂ and impacts thereof). The global ocean can impact local conditions and well-being. It is too big to study by any one country so cooperation is essential.

Why an intergovernmental collaborative approach is needed for understanding and managing the ocean?

Various national economic assessments of the contributions of marine-related activities to national economies have typically shown that 5% of GDP, or in some cases even more, is directly due to marine activities. Societal benefits from national investments in ocean observations and marine science and international collaboration in these fields can contribute to development of national capacity for marine science, for safeguarding coast, for developing or supporting offshore industry, improved management of marine resources, coastal tourism, safe navigation, and national security.

As recognized in the UN Sustainable Development Goal No 14 the healthier and resilient the ocean, the more positive its contribution to the environmental, social and economic dimensions of sustainable development and vice versa. The Ocean is a jointly shared value. It covers nearly three-quarters of the planet's surface and it forms an essential part of our environment, the air we breathe, the water we drink, the weather and climate. In addition, we rely on the oceans for food, to carry 80% of our trade, to absorb our wastes and to be part of our culture and enjoyment.

Since the ratification of the Law of the Sea in 1994, jurisdiction over large tracts of the coastal waters, stretching out to two hundred nautical miles and more, have been accorded to the Coastal States.

However, much of the ocean waters remain an international commons and the ocean waters and their inhabitants recognize no man-made boundaries, flowing at will from one jurisdiction to another.

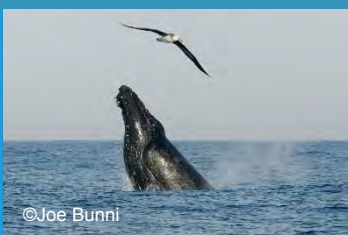
To reduce loss of life and property from ocean-related hazards and to sustainably use of the ocean resources we need to understand and, as much as possible, to predict the ocean behaviour. Great opportunities and challenges are associated with the economy of the ocean, but this requires responsible, coordinated and sustainable management.

Understanding and predicting the ocean behaviour and long term changes require sustained observations on a global scale in analogy with what is in place for the atmosphere. The generation of ocean information products largely depend on the national marine research community (where it exists) with access to ships.

No single country can observe the global ocean alone. Oceanography, just as meteorology, is international by necessity. It requires governmental cooperation as well as coordination and pooling of resources, being costly in terms of manpower and infrastructure.

The Intergovernmental Oceanographic Commission – the intergovernmental mechanism to help achieve this – was established in 1960, with the objective to also stimulate and support capacity development, data exchange and storage, and building of trust.

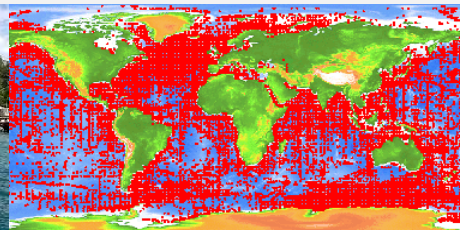
14 LIFE BELOW WATER



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The value of cooperation: What is in it for my institution / country?

1. The intergovernmental character allows countries to agree on issues as countries, rather than as individual scientists. **The mechanism allows such agreements to move upwards to the UN level.** It is an advisory body to UNCLOS (IOC has developed guidelines for the transfer of marine technology).



8. IOC assists developing countries to participate, in an equitable fashion, in global programmes in **marine research, observation and management** where global issues/risks impact also at the regional level.



5. IOC ensures/promotes sharing of data and information.

6. Participation in IOC programmes allows countries to, through a limited investment, become co-owner of global infrastructures and networks (leveraging their own investment). **IOC facilitates the opportunity for marine science experts to meet and discuss issues on a regular basis enabling 'science alignment' to take place**, ensuring that national investment in major infrastructure such as research ships, cruise planning and decisions regarding priority areas for research can be coordinated with partner nations.



2. Decisions made by the IOC Governing Bodies can assist in decision-making by national governments. **IOC allows messages arising from marine science to feed into the governmental (decision-making) level.**

9. IOC assists developing countries to organize and collaborate regionally and to **jointly build capacity based on regional needs** but in a global framework.

3. The intergovernmental mechanism facilitates undertaking joint research / observations in other countries' waters.

7. IOC assists developing countries in acquiring the necessary expertise / capacity to carry out nationally relevant marine research and management. **IOC develops and implements "standardized" training mechanisms, emphasizing north-north, north-south, south-south cooperation and training.**



4. IOC agrees on, and promotes applying best practices (technical and political), **standards reference materials, guidelines and nomenclature.**

10. IOC assists countries to establish and maintain **Disaster Risk Reduction systems** (tsunami).



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

Benefits: What we offer

IOC-UNESCO

7, Place de Fontenoy
F-75352 PARIS 07 SP
France
<http://ioc.unesco.org>

Chairperson:

Prof. Peter M. Haugan
(Norway)

Executive Secretary:

Dr. Vladimir Ryabinin
v.ryabinin@unesco.org

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The **Intergovernmental Oceanographic Commission of UNESCO (IOC)** provides opportunities for Member State individual scientists, practitioners and their institutions in ocean and marine science, planning and resource management to enhance the quality, scope, visibility and societal value of their research.

1. The IOC offers **scientists and research institutions** engaging with the IOC and its activities access to participate in fora which focus their scientific field and which provides a platform for new research partnerships and synergies where the research capacity is scattered, transdisciplinary or emerging.
2. Working with the IOC allows formulating **complex and societal relevant** science that would otherwise not be addressed systematically and coordinated. Ocean and marine research, observations and technology are expensive, and such coordination implies mechanisms to pooling of resources instead of relying on national resources alone. Research institutions as well as individual scientists and practitioners involved get opportunities to access more data and to communicate and promote a given research area in the context of larger global issues and political priorities and thereby contribute to translate their science into societal value.
3. Exchange of experience and approaches in ocean and marine science, **strengthened networks and collaboration potentials at regional and global scale** enhance both individual and institutional research competencies and thus the likelihood of funding for research in both a short and a long term perspective.
4. Complementing individual or institutional ocean and marine research by engaging in international collaboration, offers involvement in **high impact scientific products such as manuals and guides, norms and standard setting, and peer reviewed publications with other leading scientists**, allows more efficient use and benefits from IOC services and products, and adds credibility and recognition of own research at both the national and international level.