

# **THE INTERNATIONAL DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT 2021 – 2030**



**TOWARDS THE OCEAN WE NEED  
FOR THE FUTURE WE WANT**

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# TIMELINE TO THE DECADE

## *Strongly supported by the UK at the General Assembly*

**June 2016**, 49<sup>th</sup> session **IOC Executive Council** - to pursue concept of an *International decade on ocean science for sustainable development (2021 – 2030) – Towards the ocean we need for the future we want*

**January 2017** – IOC Officers prepare concept note which is refined after consultation with IOC Member States and presented to 29<sup>th</sup> Session, IOC Assembly.

**May 2017** – IOC Executive Secretary invites UN agencies, organisations and scientific unions, to develop the Decade proposal

**June 2017** – 29<sup>th</sup> session of IOC Assembly

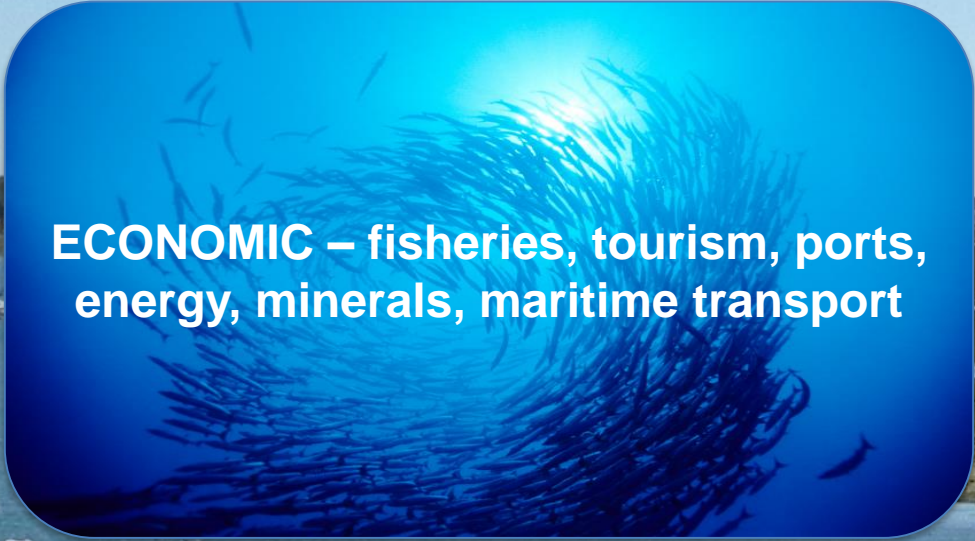
- endorses IOC Resolution XXIX-1 proposing an International Decade of Ocean Science for Sustainable Development.
- requests IOC Executive Secretary convey resolution to 72<sup>nd</sup> session of the United Nations General Assembly (UNGA) with view to proclaim Decade under auspices of UN and to offer the IOC services as lead agency.

**6 December 2017** – UNGA endorses 2021-2030 as the ‘Decade of Ocean Science for Sustainable Development’ to enhance international cooperation on research and scientific programmes to better manage ocean and coastal zone resources and reduce maritime risks.

Ref 1

(Ref 1)

# SOCIETAL BENEFITS OF THE OCEAN



**ECONOMIC** – fisheries, tourism, ports, energy, minerals, maritime transport



**NON-ECONOMIC** – biological services, regulating services, flood protection, erosion control, waste and nutrient recycling

# THE DECADE: PRELIMINARY OBJECTIVES

- Stimulate global partnership on marine science requirements needed to support implementation of Agenda 2030
- Understand impacts of cumulative stressors and seek sustainable solutions for sustaining benefits from the ocean
- Share knowledge and enhance capacities through transfer of marine technology, leading to benefits for all Member States, particularly for Small Island Developing States and Least Developed Countries
- Gain better quantitative knowledge of ocean ecosystems and their contribution to society
- Map ocean floor and resources to support sustainable management



Text: Ref 2  
Image: Leighton Rolley

# WHY INTERNATIONAL DECADE OF OCEAN SCIENCE?

## SUSTAINABLE DEVELOPMENT GOAL (SDG) 14

**‘...CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT’**

There is an ‘urgent need’ for scientific solutions to tackle the seriously degraded state of the ocean.

The International Decade of Ocean Science for Sustainable Development could enable coordination and consolidation of the observations and research needed to achieve SDG 14.

**Novel science-based solutions**



**Transformation into  
informed policies  
and decisions**

Ref (4)

No method yet to meaningfully evaluate of cumulative impacts of stresses

No internationally-agreed methodology for estimating economic value of services

**99%** of habitable marine areas – lack of **basic** biodiversity knowledge needed for effective management

## FACTS AND KNOWLEDGE GAPS

Only **5%** of the ocean floor has been mapped...only **1%** of this is gridded at high resolution

Only **three** people have ever explored the deepest known point of the ocean

**103 million square miles** of deep sea are in perpetual darkness...up to a million species may yet to be discovered

Ref: 4



# IMPLEMENTATION MAY INCLUDE:

New generation of observing technologies. More biochemical, biological, biodiversity and ecosystem related parameters

Use of new generation modelling tools for prediction of ocean conditions, including biological and biochemical parameters



Image: NERC ChEsSO Consortium

Complete mapping of the ocean conditions and resources, bathymetry, subduction zones, hot vents, biodiversity in areas beyond national jurisdiction, update of the Census of Marine Life.

Ref: 2

## IMPLEMENTATION MAY INCLUDE:

More transdisciplinary and integrating oceanographic research, with potential improved delivery of science and technological results and data

Strengthened and directed capacity building activities linked to technology transfer, including new technologies, and sustained observations with training through research

Information portal of IOC responding to new role of science in communication and use of scientific results, regularly providing and updating information on state of the ocean to stakeholders.

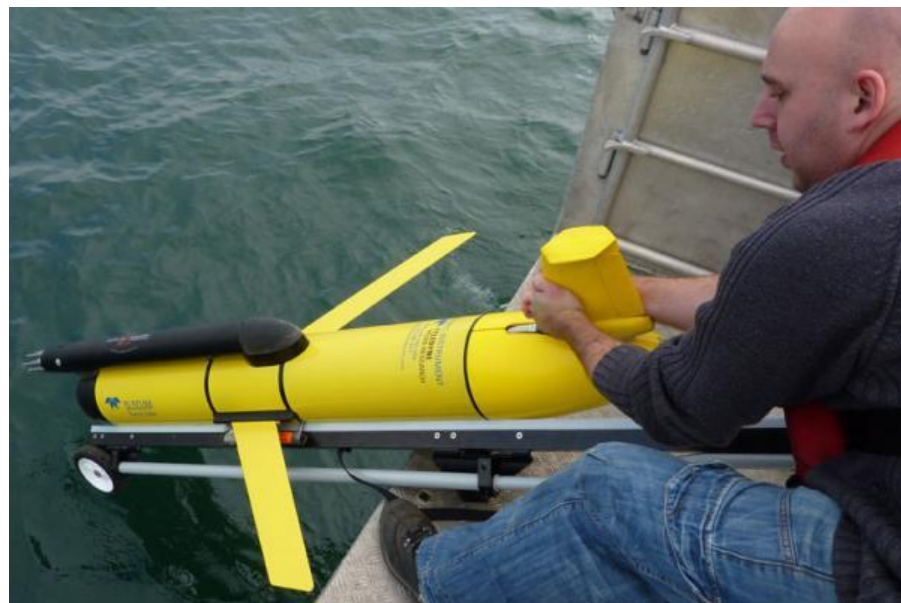


Image: NOC

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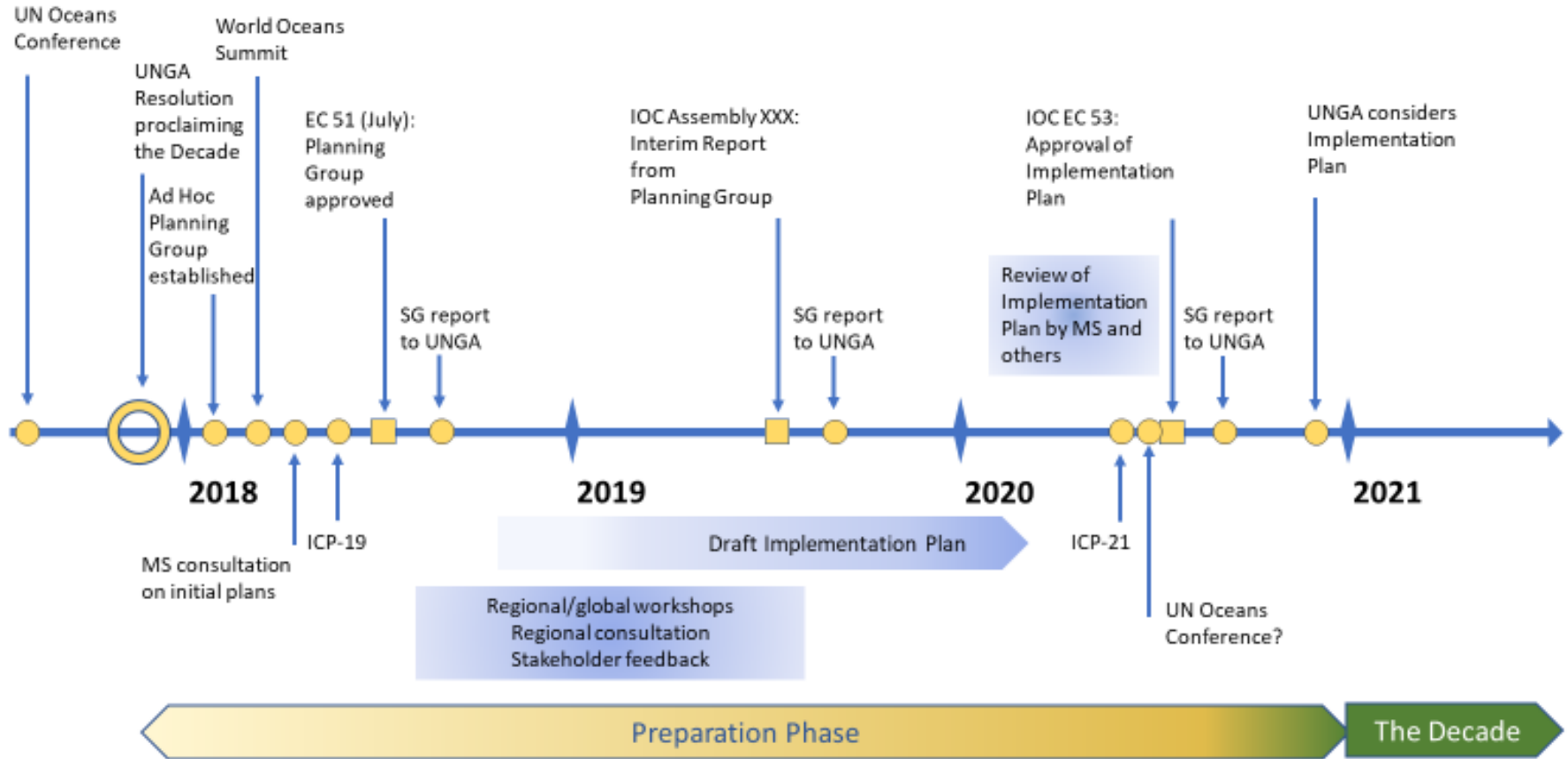
# HOW? OMNIBUS RESOLUTION FOR OCEANS AND THE LAW OF THE SEA



Ref (2 & 3)



# KEY DATES FOR THE PREPARATION PHASE FOR THE DECADE



Ref 3

# TOWARDS THE OCEAN WE NEED FOR THE FUTURE WE WANT

**CLIMATE**

**FOOD**

**ECONOMY**

**ENERGY**

**EMPLOYMENT**

**HEALTH**

**OXYGEN**

**WATER**



*“An International Decade of Ocean Science could help to build a shared information system, based on trustworthy, science-based data, from all parts of the world ocean.”*  
– Professor Peter Haugan, Chair of the Intergovernmental Oceanography Commission of UNESCO

# REFERENCES

1. UNESCO (2017) *International Decade of Ocean Science for Sustainable development (2021 – 2030)* Available on-line: <http://unesdoc.unesco.org/images/0025/002596/259627e.pdf>
2. Haugan, P. (2017) *International Decade of Ocean Science For Sustainable Development (2021-2030)* Available on-line: [http://www.ioc-unesco.org/index.php?option=com\\_oe&task=viewDocumentRecord&docID=19619](http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=19619)
3. UNESCO (2018) *Roadmap for the UN Decade of Ocean Science for Sustainable Development* Available at [https://ar.unesco.org/sites/default/files/ioc\\_oceandecade\\_draftroadmap\\_v5\\_0.pdf](https://ar.unesco.org/sites/default/files/ioc_oceandecade_draftroadmap_v5_0.pdf)
4. UNESCO (2017) *The Ocean We Need for the Future We Want.* Available on-line at: [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/IOC\\_Gatefold\\_Decade\\_SinglePanels\\_PRINT.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/IOC_Gatefold_Decade_SinglePanels_PRINT.pdf)

