First Meeting of the Editorial Board of the second edition of the Global Ocean Science Report (GOSR-II)

IOC-UNESCO Headquarters, Paris, 24-26 April 2018

DRAFT QUESTIONNAIRE FOR THE GLOBAL OCEAN SCIENCE REPORT II

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Dear Recipient,

The questionnaire seeks to gain information about current Ocean Science capacity[1] your country. Your response will be used for the production of the second edition of the IOC Global Ocean Science Report (GOSR-II) (cf. **GLOBAL OCEAN SCIENCE REPORT** for more information on the Report).

This questionnaire is the annex to the IOC Circular Letter No. XXX inviting all IOC Member States to participate in this important initiative. The GOSR covers many different aspects of ocean science capacity and so the following questionnaire also addresses various fields of expertise. Please feel free to consult your colleagues and national experts at ocean science related institutions and universities. Part E focusses on data management and data services, therefore we encourage to consult your national IODE focal point[2][3] (if present in your country, as per **HTTPS://WWW.IODE.ORG/INDEX.PHP?OPTION=COM_OE&TASK=VIEWGROUPRECORD&GROUPID=349**) when answering these questions.

Questions marked with an asterisk (*) are mandatory.

While the questions are written in English please feel free to answer (free text fields) in French or Spanish if you are more comfortable with those languages.

PART A RESPONDENT DETAILS:

1. Country:
2. Full Name of respondent:

[1] Science Capacity/Research Capacity is the ability to define problems, set objectives and priorities, conduct sound scientific research, build sustainable institutions, and identify solutions to key (national) problems. This definition encompasses research capacity at the levels of individuals, research groups, institutions and countries (source: https://www.guidelines.kaowarsom.be/annex_dimension_strengthening_research_capacity).

[2] International Oceanographic Data and Information Exchange" (IODE) programme of the "Intergovernmental Oceanographic Commission.

[3] IODE focal point - Each IOC Member States that has established an NODC (National Oceanographic Data Centre) or DNA (Designated National Agency) has also nominated an IODE National Coordinator (for ocean data management). Some IOC Member States that have not established a data centre (NODC or DNA) have nevertheless nominated an IODE National Coordinator (for ocean data management, https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=59). In addition, IOC Member States identified IODE National Coordinators for Information Management (https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=60). The IODE contact list further includes ADU contact points, the individuals through which an IODE Associate data Unit can be contacted (https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=297).

3. Organization:
4. Postal contact details (Address):
5. Email:
6. Telephone number:
7. OceanExpert ID[4] (https://www.oceanexpert.net/):
8. In what capacity are you responding to the survey?

IOC focal point[5]

IODE[6] focal point[7]

Other (please specify)

[4] Ocean Expert - The Global Directory of Marine and Freshwater Professionals Database contains information on individual involved in all aspects of Marine and Freshwater Research and Management. It is intended to be a tool for scientists, policy makers and anyone who needs to contact a marine or freshwater professional.

[5] IOC focal point – Each IOC Member State identified one national coordinating body for Liaison with the Commission. Given the intergovernmental character of the Commission, this officially designated body is governmental by nature. It coordinates the communication between IOC and relevant official national authorities dealing with ocean matters. The national coordinating body officially designates focal points, facilitating the communication between the Member State and IOC. http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=17716

[6] International Oceanographic Data and Information Exchange" (IODE) programme of the "Intergovernmental Oceanographic Commission

[7] IODE focal point - Each IOC Member States that has established an NODC (National Oceanographic Data Centre) or DNA (Designated National Agency) has also nominated an IODE National Coordinator (for ocean data management). Some IOC Member States that have not established a data centre (NODC or DNA) have nevertheless nominated an IODE National Coordinator (for ocean data management, https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=59). In addition, IOC Member States identified IODE National Coordinators for Information Management (https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=60). The IODE contact list further includes ADU contact points, the individuals through which an IODE Associate data Unit can be contacted (https://iode.org/index.php?option=com_oe&task=viewGroupRecord&groupID=297).

PART B OCEAN SCIENCE GOVERNMENTAL ORGANIZATION AND GENERAL INFORMATION

9. Which ministry(ies) is overseeing Ocean Science in your country? (multiple answers possible) Please select relevant ministries or list them in the comment field.

   Ministry for science and technology
   Ministry for research and development
   Ministry for education
   Ministry for fisheries
   Ministry for defense
   Ministry for food security
   Others (Please name the respective ministry) (empty field)

   Comment:

10. Please list research institutions and universities or university faculties/departments specialized specialized in Ocean Science[8] in your country. Please provide the name and full address or the OceanExpert institution ID (https://www.oceanexpert.net/) if available.

11. Does your country have a national ocean science strategy? (Title and/or URL to the document, year of publication)

12. Please rate the relative relevance of different categories of Ocean Science for your country (from 8 highest to 1 lowest).

    Marine ecosystem's functions and processes[9]

[8] Ocean Science, as used in this report, includes all research disciplines related to the study of the ocean: physical, biological, chemical, geological, hydrographic, health, and social sciences, as well as engineering, the humanities, and multidisciplinary research on the relationship between humans and the ocean. Definition by 'Ocean Science in Canada: Meeting the challenge, seizing the opportunity', The Expert Panel on Canadian Ocean Science, published in 2013.

[9] Marine ecosystems functions and processes: This category refers to marine ecosystem's structure, diversity and integrity and includes abiotic and biotic characteristics. Marine ecosystem functions include biogeochemical, chemical, physical and biological processes. They are characterized by nutrient cycles, energy flow, exchanges of material, as well as trophic dynamics and structure. All these processes are marked by a variability in—and diversity of—natural dynamics, including seasonal, temporal and spatial differences and perturbations. The report comprises the following topics under Marine ecosystems functions and processes: biodiversity; physical setting; primary production; consumption; sedimentation; respiration; aerobic and anaerobic processes across the different trophic levels; biological pump, etc.

Ocean and climate[10]
Ocean health[11]
Human health and wellbeing[12]
Blue growth[13]
Ocean crust and marine geohazards[14]
Ocean technology and engineering[15]
Overarching theme: Ocean observation and marine data[16]

[10] Ocean and climate: This category refers to research on the interaction between the ocean and the atmosphere to provide better predictions of reciprocal changes in the ocean and climate system. The ocean and climate category comprises the following topics: palaeoceanography; ocean warming; ocean acidification; deoxygenation; sea-level rise; changes in ocean circulation and air-sea interaction, etc. but does not include studies on extreme weather events.

[11] Ocean health: This category refers to research covering the condition of the marine environment from the perspective of adverse and cumulative effects caused by anthropogenic activities, in particular, changes in biodiversity, genetic diversity, phenotypic plasticity, habitat loss and alteration in ecosystem structure and processes. Ocean health comprises studies on marine pollution, alien and invasive species, disruption of ecosystems, marine protected areas, and marine spatial planning, etc.

[12] Human health and wellbeing: This category includes research on the relationship between the ocean and human health and wellbeing. Human health and wellbeing covers physical and social studies on provision of marine ecosystem services, in particular food security as well as recreation, harmful algae blooms, and human-related social, educational and aesthetic values, etc.

[13] Blue growth: This category refers to the research on—and in support of—sustainable use of marine resources, including the research on economically important species with regard to food security (fisheries and aquaculture). Blue growth further covers studies on the utilization of new energy resources in the ocean and marine bio-resources, as well as clean technologies, pharmaceuticals, cosmetics, and desalination, etc.

[14] Ocean crust and marine geohazards: This category refers to geological/geophysical marine research, including hydrothermal vents, seismology, ocean drilling, movements and associated marine hazards (tsunamis, gas/fluid escape above huge sub-seafloor, rapid sea-level rise, flooding, hurricanes, and extreme coastal weather events), etc.

[15] Ocean technology: Research related to marine innovation and the design and development of equipment and systems for marine science and industries. This category covers studies on marine engineering, such as the development of marine energy solutions, satellites and remote-sensing techniques, Remotely Operated Vehicles (ROV), gliders, floats, sensors, new measurement devices and techniques, etc. in addition to marine geoengineering (e.g. solar radiation management and carbon dioxide removal techniques).

[16] Ocean observation and marine data: This category is relevant for all categories of ocean science. It includes the collection, management, dissemination and use of marine data and information to create knowledge on the seas and ocean. This cross-cutting category underpins all marine and maritime activities in particular marine scientific research. However, it also covers studies on—and development of—marine data platforms, marine databases, data reporting and management activities.

13. Are the national Ocean Science activities, human and technical capacities, published in a specialized report or part of national report?

Yes
No
If you answered yes please provide the title and the URL as well as year of publication.

PART C OCEAN SCIENCE INVESTMENT

Funding for Ocean Science

The data requested in Tables should relate to actual expenses for Ocean Science made in your country. If they are not available, please provide estimated data calculated using budget allocations for Ocean Science or other methodologies and explain as a note. Ocean Science funding should be reported in your national currency or US Dollar (using the conversion rate for the respective year).

Potential question:

Please provide the amount of money allocated to Ocean Science in your country by governmental resources in your country, please divide by local/regional/national administrated funds if this information is available.

Year	Total governmental administrated funding for Ocean Science [A]	International administrated funding for Ocean Science [B]	Private administrated funding for Ocean Science [C]	Total funding for Ocean Science [A+B+C]	Monetary unit (i.e. millions, thousands)	Currency
2017						
2016						
2015						
2014						
2013						

Type of period considered

- ○ Calendar year
- ○ Fiscal year; starting month:

Comment:

14. Please provide the amount of money allocated to Ocean Science in your country by governmental resources in your country, please divide by local/regional/national administrated funds if this information is available.

Year	National/Central/Federal administrated governmental funding for Ocean Science [A]	Regional/State/Provincial and Local/Municipal (within country borders) administrated funding for Ocean Science [B]	Total governmental administrated funding for Ocean Science [A+B]	Monetary unit (i.e. millions, thousands)	Currency
2017					
2016					
2015					
2014					
2013					

Type of period considered

- ○ Calendar year
- ○ Fiscal year; starting month:

Comment:

15. Does your country benefit from and/contribute to international (global, regional) science funding regimes, which support Ocean Science in your country? (e.g. Horizon 2020, Belmont Forum, JPI Oceans, WIOMSA, Global Environmental Facility, UN bodies)

Yes
No
I do not know
If you answered yes please provide the name and URL of the related programme(s).

16. Proportion of total governmental administrated funding for Ocean Science in your country broken down by field of Science (please provide the information in percentage).

Year	Field of Ocean Science		
	Fisheries[17] (A)	Observations (B)[18]	Other Ocean Science[19] (C)
2017			
2016			
2015			
2014			
2013			

Comment:

[17] Field of Ocean Science - Fisheries: Research related to marine fisheries, mariculture (open ocean) and aquaculture (coastal and indoor).
[18] Field of Ocean Science – Observations: Ocean Science related to coastal and open ocean monitoring, data repositories, measurements to track harmful algal blooms and pollution, satellite measurements, buoys and moorings.
[19] Marine research/other Ocean Science: Marine research/other Ocean Science: Areas of Ocean Science, which do not fit in the other two categories, such as experimental investigations and process studies.

PART D NATIONAL RESEARCH CAPACITY AND INFRASTRUCTURE

Human resources in Ocean Science[20]

Researchers are professionals engaged in the conception or creation of new knowledge. They conduct research and improve or develop concepts, theories, models, techniques, instrumentation, software or operational methods.	**Technicians and equivalent staff** are persons whose main tasks require technical knowledge and experience in one or more fields of engineering, the physical and life sciences (technicians) or the social sciences, humanities and the arts (equivalent staff). They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods and the use of research equipment, normally under the supervision of researchers.	**Other supporting staff** includes skilled and unskilled craftsmen, and administrative, secretarial and clerical staff participating in R&D projects or directly associated with such projects.

17. Ocean Science personnel by function (Headcount (HC) data cover the total number of persons who are mainly or partially employed in R&D.).

Year	Total Ocean Science personnel (A+B+C+D)	Function			
		Researchers (A)	Technicians and equivalent staff (B)	Other supporting staff (C)	Not specified (D)
2017					
2016					
2015					
2014					
2013					

Notes:

[20] Definitions given in 2015 Frascati Manual (FM).

18. Ocean Science personnel by occupation – Full-time equivalents (FTE)[21]

Year	Total Ocean Science personnel (A+B+C+D)	Function			
		Researchers (A)	Technicians and equivalent staff (B)	Other supporting staff (C)	Not specified (D)
2017					
2016					
2015					
2014					
2013					

Notes:

19. Ocean Science personnel by gender – Headcounts (HC).

Year	Total Ocean Science personnel				Researchers			
	Total (A+B+C)	Female (A)	Male(B)	Not specified by sex (C)	Total (D+E+F)	Female (D)	Male(E)	Not specified by sex (F)
2017								
2016								
2015								
2014								
2013								

Notes:

[21] FTE data measure the volume of human resources in R&D. 1 FTE is equal to 1 person working full-time for 1 year. Thus, a person who normally spends 30% of his/her time on R&D and the rest on other activities (such as teaching, university administration and student counselling) should be considered as 0.3 FTE. Similarly, if a full-time R&D worker is employed at an R&D unit for only six months, this results in an FTE of 0.5.

20. Ocean Science personnel by gender – Full time equivalents (FTE).

Year	Total Ocean Science personnel				Ocean Science Researchers			
	Total (A+B+C)	Female (A)	Male(B)	Not specified by sex (C)	Total (D+E+F)	Female (D)	Male(E)	Not specified by sex (F)
2017								
2016								
2015								
2014								
2013								

Notes:

21. Age distribution of researchers, engaged in Ocean Science– Headcounts (HC). >25, 25-34, 35-44, 45-54, 55-64 and 65>

Year	Age class >25 years (A)	Age class –25-34 years (B)	Age class –35-44 years (C)	Age class –45-55 years (D)	Age class 55-64 years (E)	Age class >65years (F)	Total researchers (A+B+C+D+E+F)
2017							
2016							
2015							
2014							
2013							

Notes:

22. Of your country's current ocean science personal (overall), what percentage of their salary is funded from external (project) sources?

- ○ 0%
- ○ 1-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

Notes:

Ocean Observation

23. Does your country have regular ocean observation programme(s)/activity(ies)?

Yes
No
If you answered yes please provide name(s) and URL(s).

24. Does your country's ocean observation include satellite observations?

Yes
No
I do not know

If you answered yes please provide name(s) and URL(s).

Vessels

25. Please provide information about the number of research vessels, vessels partly used for Ocean Science (e.g. navy ships used for ocean science), and ships of opportunity (Commercial vessels equipped with ocean observation equipment.) are operated by your nation (for 2017 or the last year with available data). Further, please specify their length (if information is available).

Vessel	Year	Number (A+B+C+ D)	Length of the vessels[22]			
			Local coastal ≥10 m <35 m (A)	Regional ≥35 m <55 m (B)	International ≥55 m <65 m (C)	Global ≥65 m (D)m
Research vessels						
Vessels partly used for Ocean Science						
Ships of opportunity						
Total number of vessels						

Notes:

[22] Classification according to UNLOS (University National Oceanographic Laboratory System, USA, http://www.unols.org/

26. Please list the name and IMO [23]number of research vessels bigger than 55 m.

27. Please specify the time of the conducted research (days per year for 2017 or the last year with available data). Divide between research in national waters and waters outside of your exclusive economic zone (EEZ).

Vessel	Year	Days at sea		
		EEZ (A)	International waters (B)	Total number of days at sea (A+B)
Research vessels (1)				
Vessels partly used for Ocean Science (2)				
Ships of opportunity (3)[24]				
Total (1+2+3)				

Notes:

[23] IMO -The International Maritime Organization (IMO) number is a unique reference for ships and for registered ship owners and management companies. IMO numbers were introduced under the SOLAS Convention to improve maritime safety and security and to reduce maritime fraud. For ships, the IMO number remains linked to the hull for its lifetime, regardless of a change in name, flag, or owner.

[24] Volunteer commercial and research vessels to collect measurements related to physical, chemical and biological oceanography and ecology. As chartered research vessels are expensive and time consuming, the use of volunteer vessels as well as oceanographic samplers while underway is a central, cost-effective way to improve ocean observation.

28. Please specify the research field conducted (percentage for the year 2017 or the last year with available data) for the different kind of vessels used for conducting ocean science.

Vessel	Year	Percentage of research field conducted per year			
		Fisheries (A)	Observations (B)	Other Ocean Science (C)	Tota; (A+B+C)
Research vessel (1)					
Vessel partly used for Ocean Science (2)					
Ships of opportunity (3)					
Total (1+2+3)					

PART E OCEANOGRAPHIC DATA AND INFORMATION EXCHANGE (IF YOUR COUNTRY HAS AN IODE FOCAL POINT, PLEASE CONSULT THEM FOR THE FOLLOWING QUESTIONS)

29. Does your country have (tick one or more):

☐ IODE National Oceanographic Data Centre(s) (NODC)
please provide the name(s) and URL(s) of this (these) data centre(s)

☐ IODE Associate Data Unit(s) (ADU)
please provide the name(s) and URL(s) of this (these) data centre(s)

☐ Regional OBIS (Ocean Biogeographic Information System) Node(s)
please provide the name(s) and URL(s) of this (these) data centre(s)

☐ Marine Library(ies)
please provide the name(s) and URL(s) of this (these) centre(s)

30. Is/are your (data) centre(s) involved in the following types of collaboration (tick one or more):

☐ National (between your centre and other national institutions)

☐ Regional (eg Europe, Africa, South East Asia)

☐ International (in addition to IODE)

Please provide more information on the collaborations (project names,...):

31. Is/are your centre(s) collaborating with other IOC programmes, projects (in addition to IODE)? (tick one or more)

☐ Ocean Science (BCI, CCLME,GOA-ON, GO2NE, GOSR, HABs, IGMETS, TrendsPO, WG40, WG41, WCRP.)

☐ Ocean Observations and Services (GOOS)

☐ Tsunami Unit

☐ Marine Policy (including marine spatial planning, large marine ecosystems, integrated coastal area management)

☐ I do not know

Specify projects/activities you are involved in:

32. What observational data types are regularly collected and managed by your data centre(s)? (tick one or more)

- [ ] biological data (incl. taxonomic and physiological data, data about phyto- and zooplankton, benthos, pigments, fauna, flora, microorganisms,...)
- [ ] physical data (waves, currents, hydrography, sea level, temperature, salinity, optics, acoustics)
- [ ] geological and geophysical (sediments, bathymetry,...)
- [ ] chemical (nutrients, pH, CO2, dissolved gases, ...)
- [ ] pollutant (monitoring)
- [ ] fisheries data
- [ ] Other (please specify)

33. What data/information products do(es) your centre(s) provide to your clients? (tick one or more)

- [ ] online access to metadata
- [ ] online access to data
- [ ] online access to library catalogue
- [ ] online access to e-documents and e-publications
- [ ] published ocean data (eg "snapshots" of datasets as used for publications)
- [ ] online access to communication and capacity development products : webinars, audiovisual products, photolibrary
- [ ] GIS products (maps, atlases)
- [ ] portals
- [ ] numerical model data
- [ ] CD-ROM products
- [ ] Other (please specify)

34. What services do(es) your centre(s) provide to your clients? (tick one or more)

- [ ] metadata and data archival
- [ ] personal data repository
- [ ] cloud computing facilities
- [ ] virtual research environment
- [ ] web services (see http://www.webopedia.com/TERM/W/Web_Services.html)
- [ ] provision of PIDs (persistent identify, e.g. DOI minting)
- [ ] data analysis tools
- [ ] data visualisation tools
- [ ] data quality control tools
- [ ] communication tools (hosting of web sites, mailing lists, group discussion support, project management tools...)
- [ ] special tools (vocabularies, format descriptions, gazetteers,...)
- [ ] access to documented methods, standards and guidelines
- [ ] Other (please specify)

35. Do you have a data (sharing) policy on the management and sharing of data/information? (tick one or more)

- ◯ Yes, institutional
- ◯ Yes, national
- ◯ Yes, international
- ◯ No

Provide details of the policy, URL where it can be accessed, year of publicationand contact email to find out more.

36. Do you comply with the FAIR data management criteria as defined by Wilkinson, M. D. et al. (https://www.nature.com/articles/sdata201618)?

FAIR Criteria

Findable	Accessible	Interoperable	Reusable
F1. (meta)data are assigned a globally unique and persistent identifier F2. data are described with rich metadata (defined by R1 below) F3. metadata clearly and explicitly include the identifier of the data it describes F4. (meta)data are registered or indexed in a searchable resource	A1. (meta)data are retrievable by their identifier using a standardized communications protocol A1.1 the protocol is open, free, and universally implementable A1.2 the protocol allows for an authentication and authorization procedure, where necessary A2. metadata are accessible, even when the data are no longer available	I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation. I2. (meta)data use vocabularies that follow FAIR principles I3. (meta)data include qualified references to other (meta)data	R1. meta(data) are richly described with a plurality of accurate and relevant attributes R1.1. (meta)data are released with a clear and accessible data usage license R1.2. (meta)data are associated with detailed provenance R1.3. (meta)data meet domain-relevant community standards

- ◯ Yes
- ◯ No
- ◯ I don't know

37. Do(es) your data centre(s) restrict access to data/information?

- ☐ we do not restrict at all
- ☐ we restrict access to certain data types
- ☐ we restrict access to data collected in certain geographic areas
- ☐ we restrict access during a certain period of time (embargo)
- ☐ any other restrictions:

38. Do(es) your centre(s) apply the IOC Oceanographic Data Exchange Policy adopted as Resolution IOC- XXII-6? (see http://www.iode.org/policy)

- ◯ Yes
- ◯ No

◯ I don't know

39. Who are the clients and end users of the data, products or services provided by your centre(s)?

☐ only users in my own institution
☐ national researchers in my own country
☐ researchers in any country
☐ policy makers of my own ministry
☐ policy makers in other ministries of my country
☐ policy makers in any country (eg through UN commitments)
☐ military
☐ civil protection
☐ private sector (eg fisheries, hotels, industry,...)
☐ school children
☐ general public
☐ Other (please specify)

40. Are data and information from your centre contributed to international systems (meaning that you actively send data, or make data and metadata available, to e.g. the ICSU World Data System, GDACs or other such international systems?

◯ Yes ◯ No

Provide details

41. What are the URLs of the section of your data/information centre(s) web site(s) that deal(s) with your online products and services (enter 1 to 5):

URL1

URL2

URL3	
URL4	
URL5	

PART F CAPACITY BUILDING AND TRANSFER OF TECHNOLOGY

42. Please rank your country's top five specific capacity (development) needs? 5 Highest priority 1 lowest priority?

- ◯ we need basic training in ocean science
- ◯ we need advanced training in certain topics
- ◯ we need human capacity
- ◯ we need equipment
- ◯ we need opportunities to share our experience at conferences
- ◯ we need better networking (community building) with colleagues
- ◯ we need more funding
- ◯ we need better internet connectivity
- ◯ Other (please specify)

or

According to TMT

- Information and data, in a user friendly format, on marine sciences and related marine operations and services;
- Manuals, guidelines, criteria, standards, reference materials;
- Sampling and methodology equipment (e.g. for water, geological, biological, chemical samples);
- Observation facilities and equipment (e.g. remote sensing equipment, buoys, tide gauges, shipboard and other means of ocean observation);
- Equipment for in situ and laboratory observations, analysis and experimentation;
- Computer and computer software, including models and modeling techniques; and
- Expertise, knowledge, skills, technical/scientific/legal know-how and analytical methods related to marine scientific research and observation.

43. Does your country have special national efforts and mechanisms to absorb and keep graduates in ocean related jobs and activities (e.g. PhD programmes, young scientist funding resources, exchange programmes, early career support).

Yes
No
If you answered yes please specify name and URL

44. Does your country have special national efforts and mechanisms to support female graduates and scientists in ocean related jobs and activities?

Yes
No
If you answered yes please specify name and URL

45. What are the mechanisms that are in place to facilitate the participation of outside national experts in your country's ocean science projects and policy making?

☐ Guest positions
☐ Exchange programmes
☐ Board memberships
☐ Advisory capacity
☐ Others
☐ There are none
Notes:

46. Does your country take part in regional/international cooperation agreements to increase scientific in particular ocean science related capacities?

Yes
No
I don't know

47. Does your country take part in regional/international support programmes, such as POGO, SCOR, to increase scientific in particular ocean science related capacities?

Yes
No
I don't know

PART G SUSTAINABLE DEVELOPMENT

48. Does your country have a national strategy to achieve the goals of the Agenda 2030 in particular the Sustainable Development Goal 14 [25](https://sustainabledevelopment.un.org/sdg14) and related targets?

Yes
No
If you answered yes please specify name and URL

49. Does your country have a national focal point for the Sustainable Development Goal 14 (https://sustainabledevelopment.un.org/sdg14) and related targets?

Yes
No
If you answered yes please specify name and URL/email address

50. Please rank the below ocean services by their importance for your country. (6 Highest importance, 1 lowest importance)

Provisioning:
- Seafood
- Biomedical and biotechnology
- Energy
- Transportation
- National defense

Cultural:
- Tourism
- Education and research
- Inspirational
- Leisure and Recreational
- Spiritual

Regulating:

- Flood, storm and coastal protection
- Climate regulation

[25] SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Erosion control
Wastewater treatment

Supporting:
Biological diversity maintenance
Nutrient recycling
Primary productivity

51. Does your country have specific activities to economies related to ocean resources, blue growth, ocean economy?

Yes
No
If you answered yes please specify name and URL