

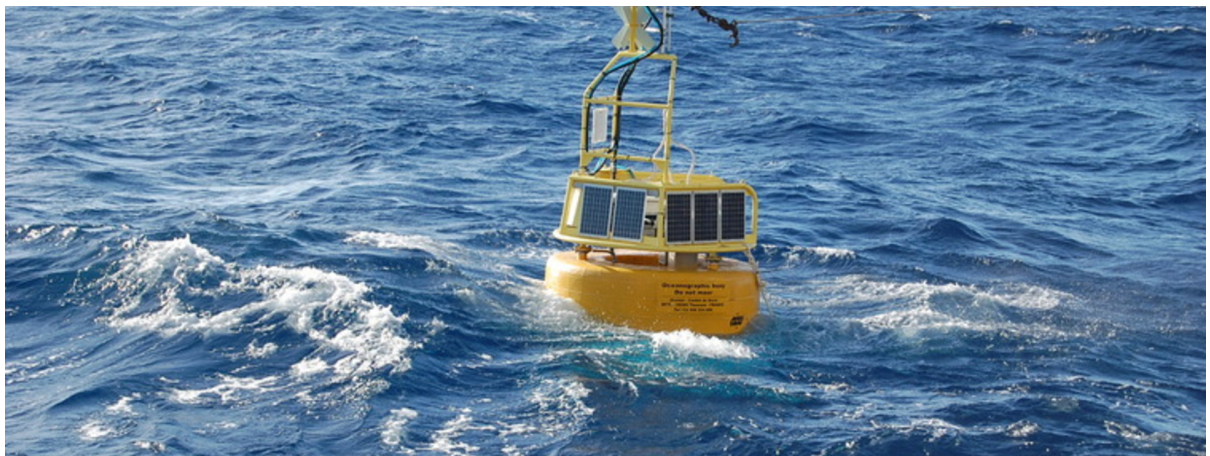
# Ocean Observation

Fields marked with \* are mandatory.

A

## Introduction

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The significant, sometimes dominant, role of the ocean in the heat and carbon cycles of our planet, its hosting of a biodiversity that is greater, at a phylum level, than on land and its sustenance of a blue economy are universally acknowledged. Unprecedented and accelerating changes in heat, acidity, ice-cover and sea-level and threats to nature from human activity are now bringing these processes into unknown territory. Not only this. The national climate and energy plans delivered by EU Member States at the beginning of 2020 indicate that the planned expansion of renewable offshore energy to combat these regime shifts will bring fundamental changes to Europe's seascape of 2030.

Dealing with the changes, the threats and opportunities requires knowledge of the past which can only be obtained through careful observation. By observation, we mean any activity that measures the state and dynamics of the marine environment and the life it supports - from the coast to the deep ocean, from the seabed to the sea surface. Thus it covers a whole range of activity from analysis of samples brought back to the laboratory to automated instruments sending signals to ships or monitoring stations. Here we do not consider observations made by orbiting satellites which are dealt with by the Copernicus programme. Neither do we consider accessibility to the observations, which again is covered by the European Marine Observation and Data (EMODnet) initiative.

The aim of this consultation is to gather opinions of the effectiveness, efficiency and fitness for purpose of ocean observation by the EU and its Member States and how it can be improved. Replying to the questionnaire will take about 15 minutes. It is possible to save a draft form for completion later.

## B About you

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### \* 1 Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- Gaelic
- German
- Greek
- Hungarian
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

### \* 2 I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation

- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

\* 3 First name

\* 4 Surname

\* 5 Email (this won't be published)

\* 7 Organisation name

*255 character(s) maximum*

\* 8 Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

9 Transparency register number

*255 character(s) maximum*

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

\* 10 Country of origin

Please add your country of origin, or that of your organisation.

- Afghanistan
- Djibouti
- Libya
- Saint Martin
- Åland Islands
- Dominica
- Liechtenstein
- Saint Pierre and Miquelon

- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Eswatini
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Lithuania
- Luxembourg
- Macau
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- São Tomé and Príncipe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname

- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Myanmar /Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Svalbard and Jan Mayen
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- The Gambia
- Timor-Leste
- Togo
- Tokelau
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- Uganda
- Ukraine

- China
- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Cuba
- Curaçao
- Cyprus
- Czechia
- Democratic Republic of the Congo
- Denmark
- Israel
- Italy
- Jamaica
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Russia
- Rwanda
- Saint Barthélemy
- Saint Helena Ascension and Tristan da Cunha
- Saint Kitts and Nevis
- Saint Lucia
- United Arab Emirates
- United Kingdom
- United States
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Western Sahara
- Yemen
- Zambia
- Zimbabwe

#### \* 11 Publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

**Anonymous**

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

**Public**

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

I agree with the [personal data protection provisions](#)

\* 15 What is your involvement with ocean observation? (more than one answer allowed)

- |   |  |                                |
|---|--|--------------------------------|
| <input checked="" type="checkbox"/> making observations             | <input checked="" type="checkbox"/> funding observations                                     | <input type="checkbox"/> other |
| <input checked="" type="checkbox"/> analysing or using observations | <input checked="" type="checkbox"/> making instruments, sensors or platforms for observation |                                |

17 More details about your involvement with observations (optional)

**C For those involved in making or funding observations**

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\* 18 What type of observations? (more than one answer allowed)

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> bathymetrical                                | <input checked="" type="checkbox"/> fisheries | <input checked="" type="checkbox"/> physical (temperature, salinity, waves etc.) |
| <input checked="" type="checkbox"/> biological (other than fisheries) | <input type="checkbox"/> geological           |  |
| <input checked="" type="checkbox"/> chemical                          | <input type="checkbox"/> other                |  |

\* 20 Where are observations that you make or use made? (more than one answer allowed)

- |   |   |                                    |
|---|---|------------------------------------|
| <input checked="" type="checkbox"/> within one nautical mile of coast | <input checked="" type="checkbox"/> in deep ocean | <input type="checkbox"/> not known |
| <input checked="" type="checkbox"/> on continental shelf              | <input type="checkbox"/> other                    |                                    |

\*

22 How are observations analysed ? (more than one answer allowed)

- analysis of samples in laboratory
- after processing of signals in laboratory
- not known
- in near-real time
- other

24 Approximately How much does your organisation spend on observation? (optional)

including investment and running costs, labour, ship-time, data processing, lab analysis

even an order of magnitude is useful (you can clarify this in the next box)

 €

25 Any comments on spending? (optional)

\*26 What is primary purpose of observations?

This will largely depend on which ministry or department is funding the observations

- research
- hydrography (for navigation)
- environmental monitoring
- defence
- fisheries management
- coastal protection
- planning or monitoring coastal or offshore activities (including impact assessments)
- other

28 Can you provide some details? (optional)



EMBL's main involvement on ocean observation has been through collaboration with Tara, which began with the Tara Oceans expedition (2009–2013). The project was initiated by EMBL, who led the mission's scientific activities. EMBL coordinates the expedition's scientific consortium, which includes more than 100 scientists from 18 partner institutions.

Throughout its expeditions since 2010, the schooner Tara has been collecting small particles of plastic – known as microplastics – in virtually all of its nets. Inspired by this growing problem, the Tara Ocean Foundation's Mission Microplastics has studied the nature of the plastic pollution entering the ocean from the European mainland, between June to November 2019.

EMBL is also participating in Mission Microbiome (launched in December 2020), during which the schooner Tara will travel 70,000 kilometers in the South Atlantic, along the South American and African coasts and as far as Antarctica, in order to study the ocean's most fundamental fabric — the microbiome — to understand the functioning of this ecosystem in a context of ongoing global change.

In addition, EMBL-EBI is involved in AtlantECO, an EU-funded project that will map new and existing knowledge about the microscopic organisms in the ocean. EMBL will play a key role in curating and analysing the colossal amount of data that will be generated to openly share with the international scientific community, allowing researchers everywhere to build their own analysis and modelling tools (<https://www.embl.org/news/science/atlanteco-launch/>).

\* 29 What is the source of funding?

- public     both public and private     do not know  
 private     other

\* 31 Is the monitoring part of

- a project lasting less than five years     a long term effort with precarious funding?     a long term effort with sustainable funding?

32 Can you provide more details? (optional)

\* 33 Are other bodies consulted when planning the monitoring (other than the one providing the funding)?

- Research Department     Environment Department or Agency     Private industry     other  
 Fisheries Department     Defence Ministry     Bodies in other countries     Do not know

- Coastal protection authorities
  Local or regional authorities
  Transnational bodies

### 35 Can you provide more details? (optional)

For sampling approval and scientific collaborations, we also contacted: Coastal protection authorities; Local or regional authorities; Bodies in other countries

### 36 Have you received funding for your observations from these EU instruments

	yes	no	do not know
* European Maritime and Fisheries Fund	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Data Collection Regulation for Fisheries	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* European Research Infrastructure Consortia	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Horizon 2020 research programme	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

### 38 Do your observations contribute to reporting for any of these EU measures

	yes	no	do not know
* Marine Strategy Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Birds and Habitats Directives	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Water Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Maritime Spatial Planning Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Nitrates Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Data Collection for Fisheries	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

### \* 40 Do you have an overview of all observations carried out by institutions in your country?

- yes
  partly
  no

### 41 can you explain your answer? (optional)

EMBL is an intergovernmental organisation, and has sites in 5 EU countries (France, Germany, Italy, Spain, Italy) and the UK.

We are mostly aware of all observations carried out in France, Italy, Spain, and the UK.

\* 42 Do you see scope for further campaign planning and asset sharing (ships, instruments, laboratories) with other organisations in your own country or in another country?

(more than one answer allowed)

- Research Department     
  Coastal protection authorities     
  Defence Ministry     
  Do not know  
 Fisheries Department     
  Environment Department     
  Private industry

43 Can you explain your answer? (optional)

44 What obstacles prevent more sharing of effort, assets or equipment?

	not at all	slightly	significantly	no opinion
* lack of incentive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* lack of time	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* lack of resource	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* lack of knowledge of other interested parties	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* fear of losing resources	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* fear of losing control	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* insufficient advantages	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

45 Can you explain your answer (optional)?

\* 46 Will the observations become available without restrictions of use?

- yes     
  partly     
  do not know  
 yes after a delay for publication     
  no

D For those using observations

\* 48 Do you know why observations that you use were made? (multiple answers allowed)

- research
- fisheries management
- hydrography (for navigation)
- coastal protection
- environmental monitoring
- planning or monitoring coastal or offshore activities (including impact assessments)
- defence
- other
- do not know

49 What other purpose?

50 Have you received funding for your analysis from these EU instruments?

	yes	no	do not know
* European Maritime and Fisheries Fund	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Data Collection Regulation for Fisheries	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* European Research Infrastructure Consortia	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* Horizon 2020 research programme	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Other (please specify)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 51 Please specify

French national funding

52 Is your analysis for for any of these instruments?

	yes	no	do not know
* Marine Strategy Framework Directive	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* Birds and Habitats Directives	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Water Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Maritime Spatial Planning Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Nitrates Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* Data Collection for Fisheries	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

* Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
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\* 54 Is your priority?

- near real time observations?
  a snapshot over a limited period?
  long time series?

55 can you explain your answer? (optional)

All three aspects are a priority for EMBL.

\* 56 What aspect would most improve the usefulness of the observations?

*between 1 and 2 choices*

- more frequent observations
  greater coverage of observations
  more standardisation of observations

## E For manufacturers or vendors of ocean observation equipment and sensors

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57 Do you sell mostly to public or private bodies?

- mostly public
  mostly private
  about half and half
  do not know

58 What are bottlenecks in selling?

	significant	relevant	no impact	do not know
* lack of investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* unfair competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* unable to meet customer specifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* unable to meet customer budget	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

59 Please explain or list any other bottlenecks (optional)

## F Importance of ocean observation

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60 Why do we need ocean observations?

	not useful	useful	essential
* coastal protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* ecosystem protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* early warnings of tipping points	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* fisheries management	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* adapting to climate change	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* safe navigation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* complying with environmental measures	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* understanding ecosystems	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* environmental impact assesments	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* planning new coastal or offshore activity	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

61 Can you explain your answer? Or add any other reason (optional)

62 Which further uncertainties do we need to narrow? rate in order of importance - 1 for most important)

This does not mean that the ones ranked lower are considered unimportant

	1	2	3	4	5	6	7	8
* ice melting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* impact of human activity (other than climate change) on marine life	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* impact of climate change on marine life	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* distribution and abundance of marine life	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* coastal resilience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* carbon balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* ocean circulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* magnitude and frequency of extreme events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

63 Can you explain your answer? (optional)

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64 What international processes bodies or processes contribute to the organisation of monitoring?

	relevant	relevant but could be better coordinated with other measures	only marginally relevant	no opinion
* JCOMM, Joint Technical Commission for Oceanography and Marine Meteorology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* GEOSS, Global Earth Observation System of Systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* G7, Group of Seven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* RFMOs, Regional Fisheries Management Organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* UNEP, United Nations Environment Programme (other than UNEP/MAP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* IOC, Intergovernmental Oceanographic Commission of UNESCO	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* FAO, United Nations Food and Agriculture Organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* ICES, International Council for the Exploration of the Sea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* regional sea conventions (OSPAR, HELCOM, Barcelona Convention, Black Sea Commission)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* IHO, International Hydrographic Organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* G20, Group of Twenty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* United Nations Decade of Ocean Science for Sustainable Development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

66 Do you know of any new technology or initiatives that could be more widely used?

(if you answer "yes" you will be asked for more details)

	yes	no
* new sensors	<input checked="" type="radio"/>	<input type="radio"/>
* new platforms	<input checked="" type="radio"/>	<input type="radio"/>
* citizen science	<input checked="" type="radio"/>	<input type="radio"/>
* ships of opportunity	<input type="radio"/>	<input checked="" type="radio"/>
* offshore wind turbines	<input type="radio"/>	<input checked="" type="radio"/>

### 67 which sensors? (optional)

microsensors

### 68 which platforms? (optional)

Imaging platform micro-fluidics;  
Single-cell omics;  
Chemical screens.

### 69 which citizen science programmes? (optional)

Plankton Planet

## G Future priorities

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### 71 How could ocean observation by EU Member States be improved?

	not at all	slightly	significantly	no opinion
* greater coherence between EU instruments	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* more coordination between national departments	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* stronger representation in international fora	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* introduction of new technology	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* citizen science	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* public-private partnerships	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
* more coordination in sea basin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* bringing national priorities to table at EU-level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
* more standardisation of observation methods	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
* more sharing of assets (sensors, platforms etc.)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>



72 Can you explain your answer or suggest and other area for improvement?  
(optional)

\* 73 What is EU role in supporting these improvements?

- significant    minor    none

74 Can you explain your answer? (optional)

EU funding could and should have a key impact in improving quality of observations and their use for scientific research.

75 Do you have any other points you wish to make? (optional)

National existing consortia (e.g. TARA Ocean) struggle with lack of funding for administrative and coordination overheads, which are massive. Fostering interactions with partners also represents a large expenditure that is rarely covered. Funding for these aspects should be considered.

76 You may add a file with additional information here (optional)

The maximum file size is 1 MB

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

## Contact

lain.SHEPHERD@ec.europa.eu

