



Mission OCEAN Digital Twin OCEAN OCEAN Observation

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IHO-European Commission 10 year anniversary

5 May 2022

Mission Ocean

≈ €100 million per year

Danube



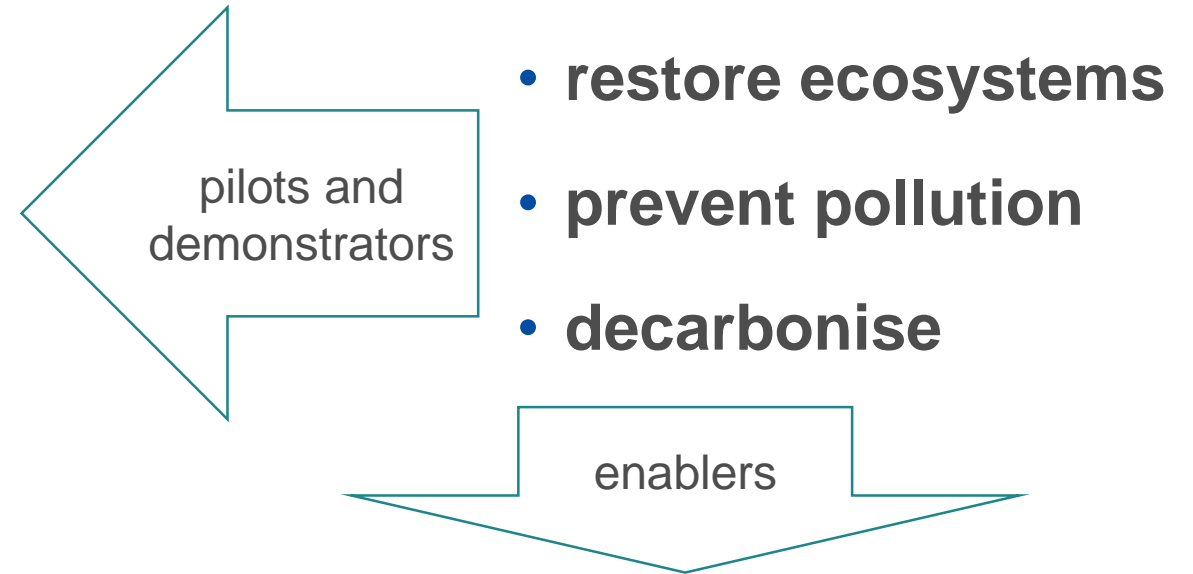
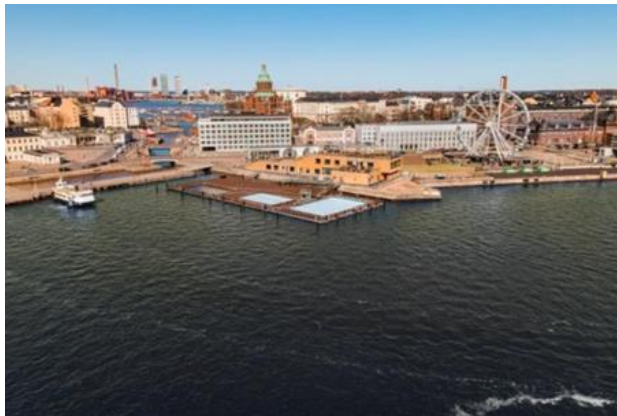
Mediterranean



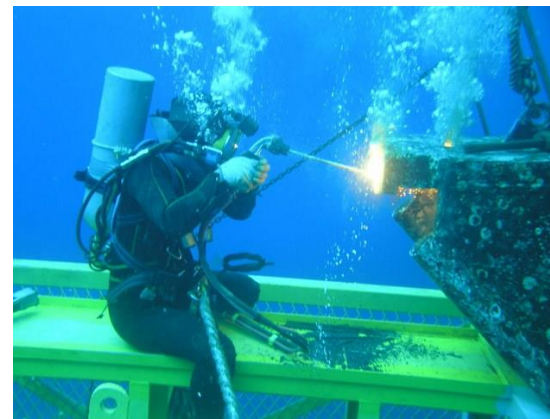
Atlantic and Arctic



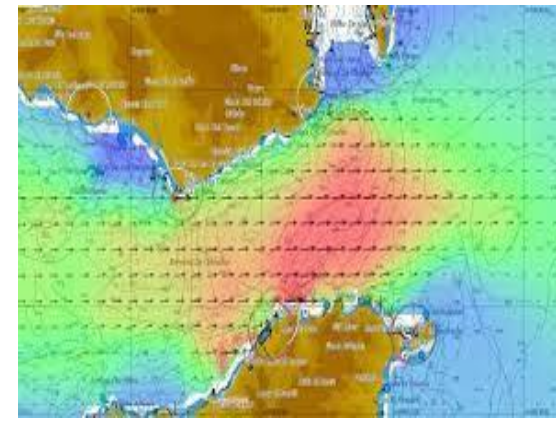
Baltic and North Sea



skills



Digital Twin Ocean



focus on nature-based solutions and community involvement

Digital Twin Ocean

more data
more models
easier access
high performance computing
artificial intelligence



EMODnet



European Marine
Observation and
Data Network



European
Commission



definitions

- Ocean observations”
 - all observations of the state and dynamics of oceans and of marine organisms made within and beyond the jurisdiction of EU Member States, **with the exception of observations made from Earth-orbiting satellites**
- “Ocean waters”
 - all salty and brackish waters as well as the underlying seabed and subsoil



problems

- inefficient planning
 - made for a specific purpose by a specific user community
- opaque planning
 - unaware of plans of neighbours
- insufficient sharing.
 - sharing of these assets could allow more observations for the same money
- insufficient innovation
 - take-up of new platforms and sensors slow;
- unsustainable observation –
 - precarious funding
- inequitable sharing of effort
 - for participation in international programmes
- lack of standards
 - inhibits citizen science

divided responsibility

	both		observing		monitoring
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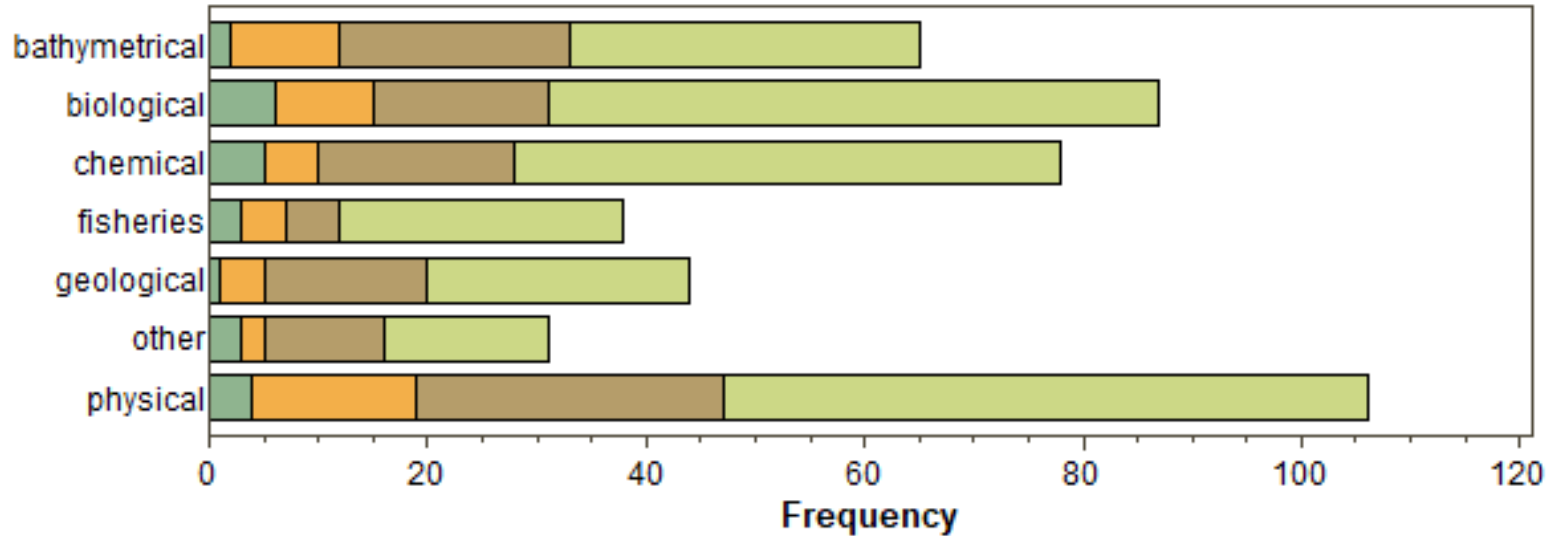
Country	Development and economy	Science and education	Agriculture and fisheries	Defence	Ocean	Foreign affairs	Energy	Environment	Transport	Other
Belgium										
Bulgaria										
Croatia										
Cyprus										
Denmark										
Estonia										
Finland										
France										
Georgia										
Germany										
Greece										
Ireland										
Italy										
Latvia										
Lithuania										
Malta										
Netherlands										
Poland										
Portugal										
Romania										
Slovenia										
Spain										
Sweden										

objectives

- aims for
 - a common EU approach for measuring once and using the data for many purpose
- proposes
 - joint planning of observation activities
 - a framework for collaboration on a national and EU scale.

replies from those engaged in observing

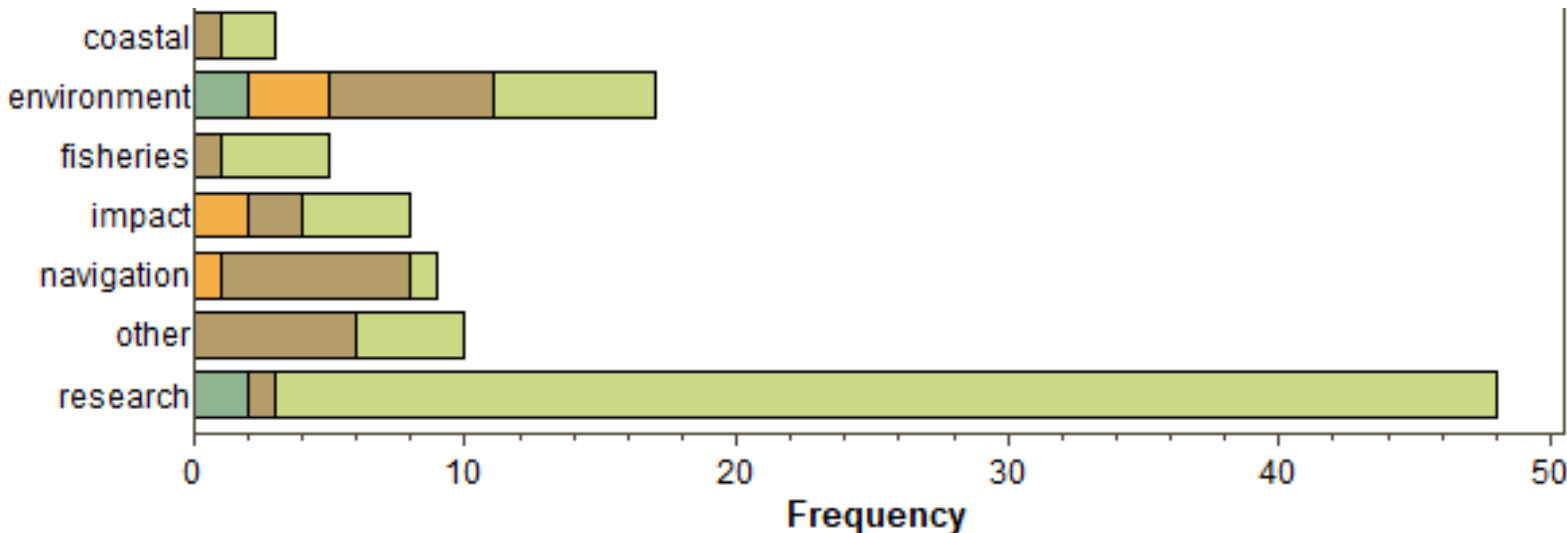
answer



- what are you observing?
- and why are you observing?

- coastal protection
- environmental monitoring
- fisheries management
- environmental impact
- safe navigation
- research
- etc

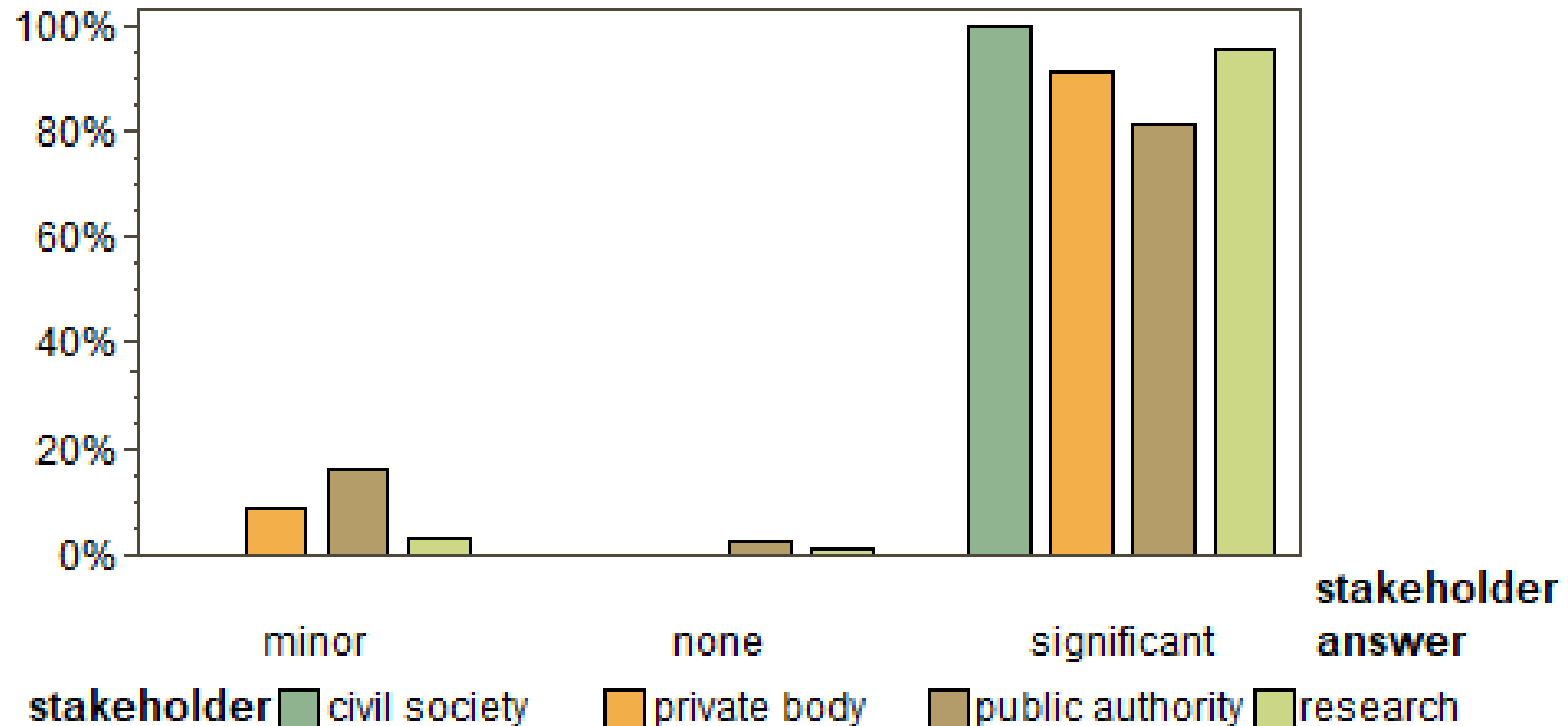
stakeholder civil society private body public authority research

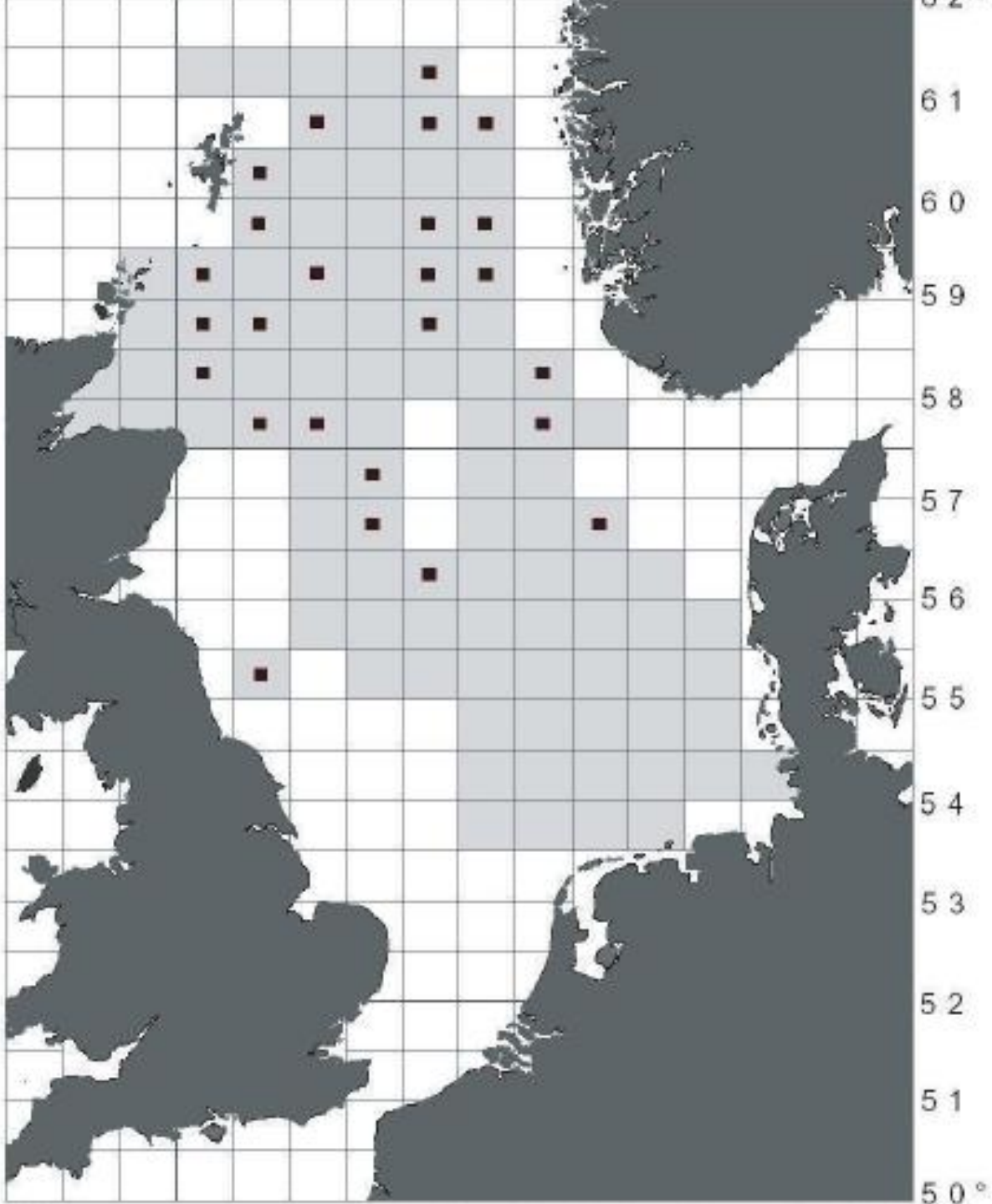


stakeholder civil society private body public authority research

what is EU role in improving matters?

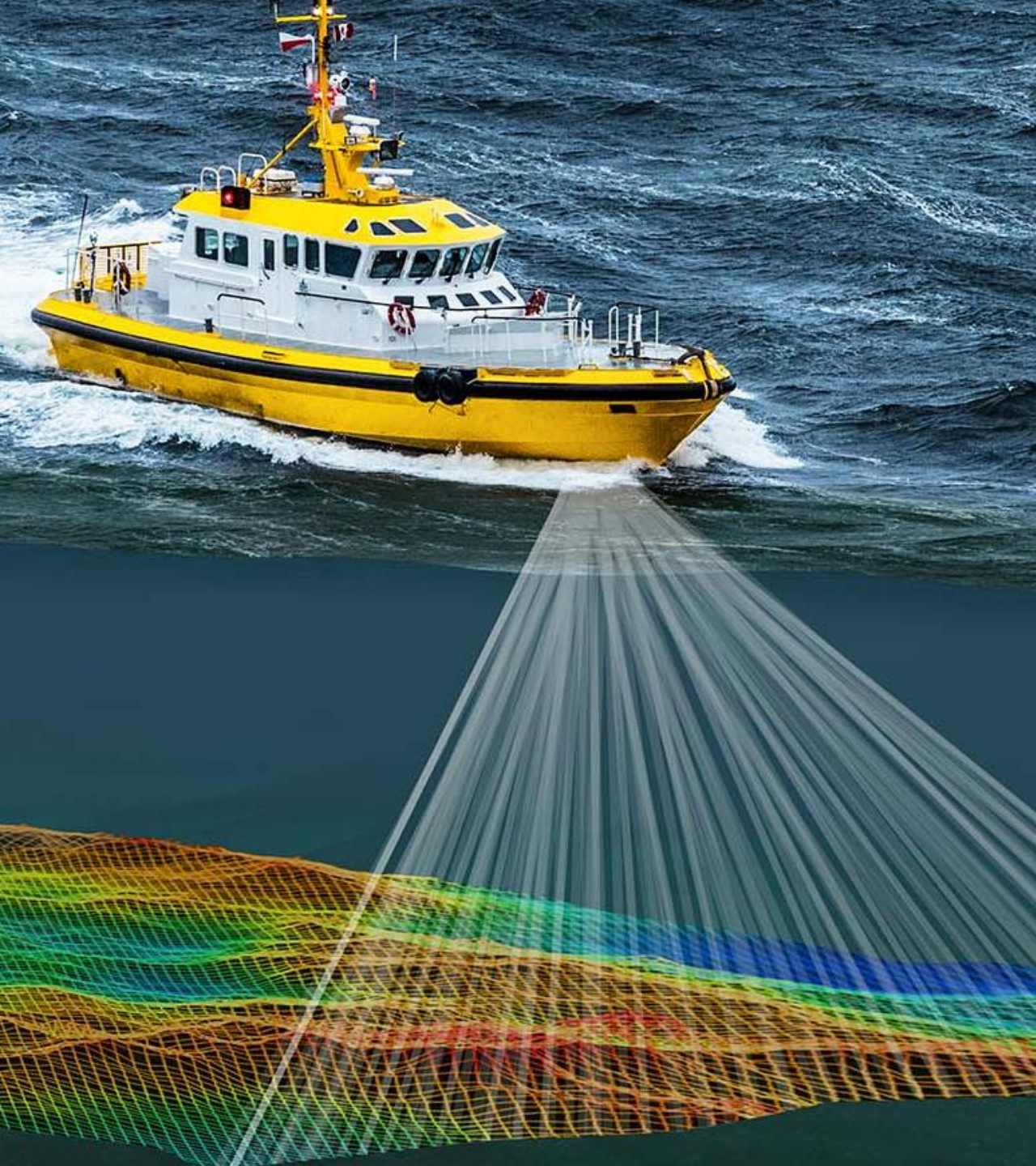
proportion of replies





call for tender: study for reporting obligations for ocean observation

- opened
 - 4 February 2022
- closed
 - 24 March 2022



tasks

- current practice
 - includes those mandated by EU legislation
- standards
 - identify current practice
- reporting template
 - INSPIRE format
- data collection
 - test on two EU Member States
- examples of different purposes
 - prototype on map viewer
- workshop
 - present results



that's all we can
say for now

we should be able
to announce
something in early
summer

Thank you



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