



Department
for Environment
Food & Rural Affairs

Marine Science: Evidence, Assessment and Foresight

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Coastal Futures 2018

Defra Group and Marine Science

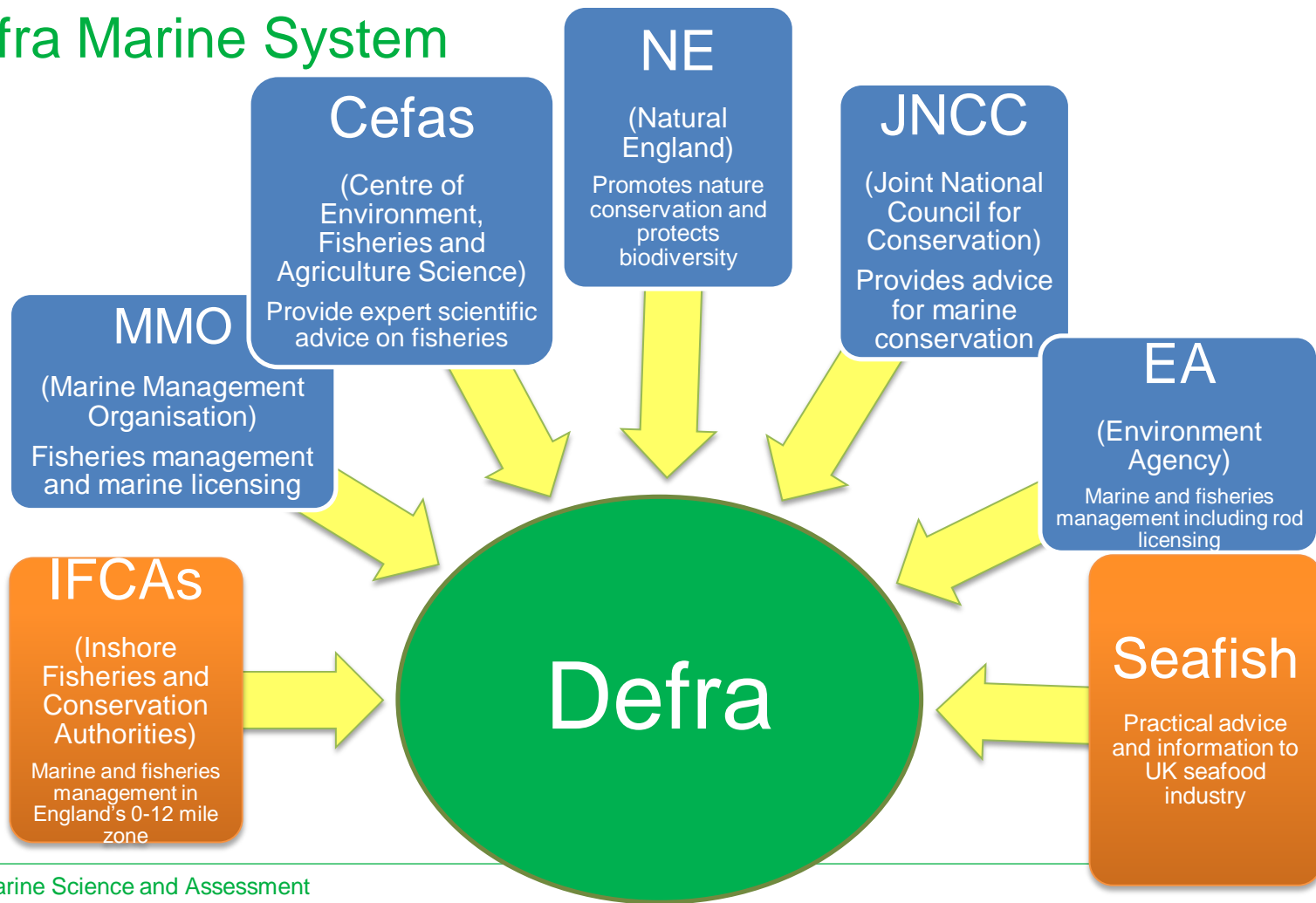
- Defra, and its delivery bodies together with the Welsh Government is a major supporter of marine science
- Funding of marine science is approximately £20 million annually.
- Partnership working of paramount importance

Defra Group and Marine Science

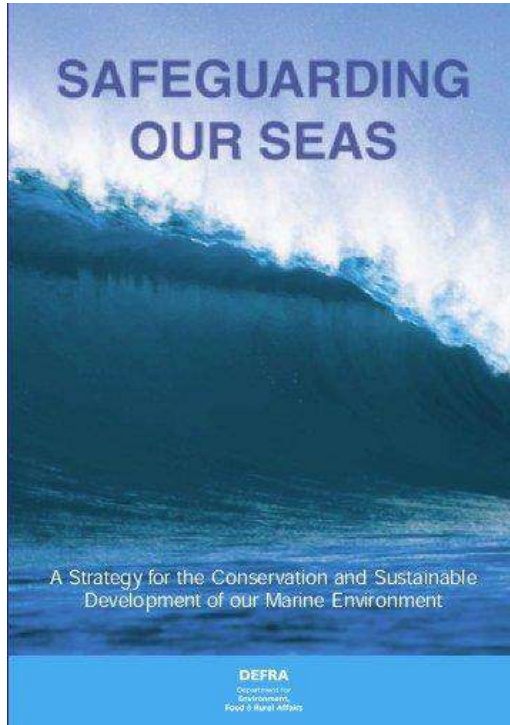
Role of Marine Science:

1. Allow monitoring and reporting on state of the environment;
2. Inform policy and decision making; and
3. Help us anticipate future challenges and opportunities.

The Defra Marine System



2002: Establishment of a new vision for the Marine Environment

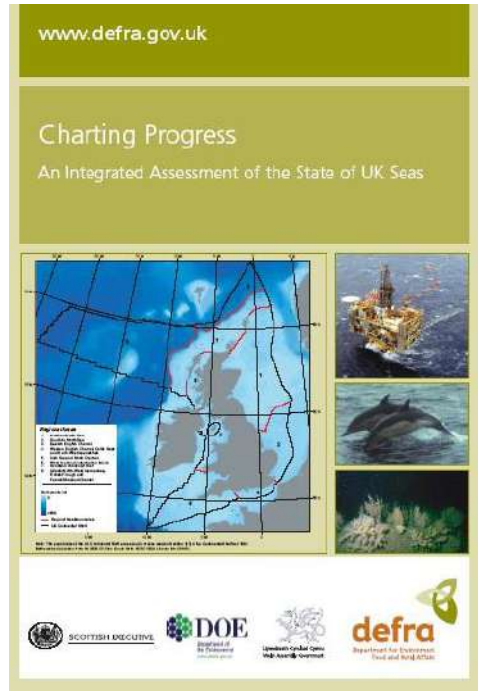


Ensuring our seas are cleaner, healthier, safer, more productive and biologically diverse,

while ensuring sustainable economic growth in the marine sector,

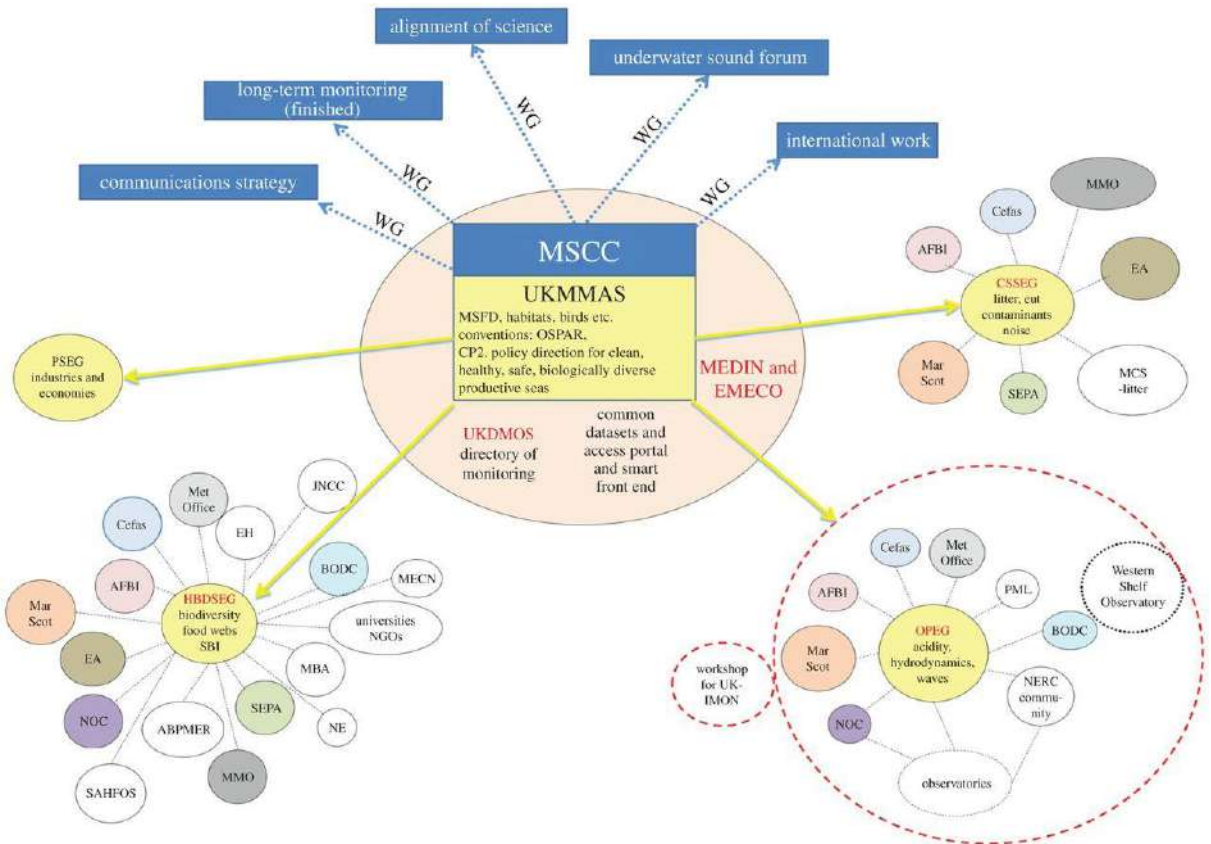
and a sustainable fisheries sector that continues to thrive and develop as we prepare to leave the EU.

2005: Charting Progress



- First integrated assessment of the state of the UK seas across the whole of the continental shelf
- Evidence from peer reviewed sector reports from key marine organisations

2007: Establishment of UKMMAS

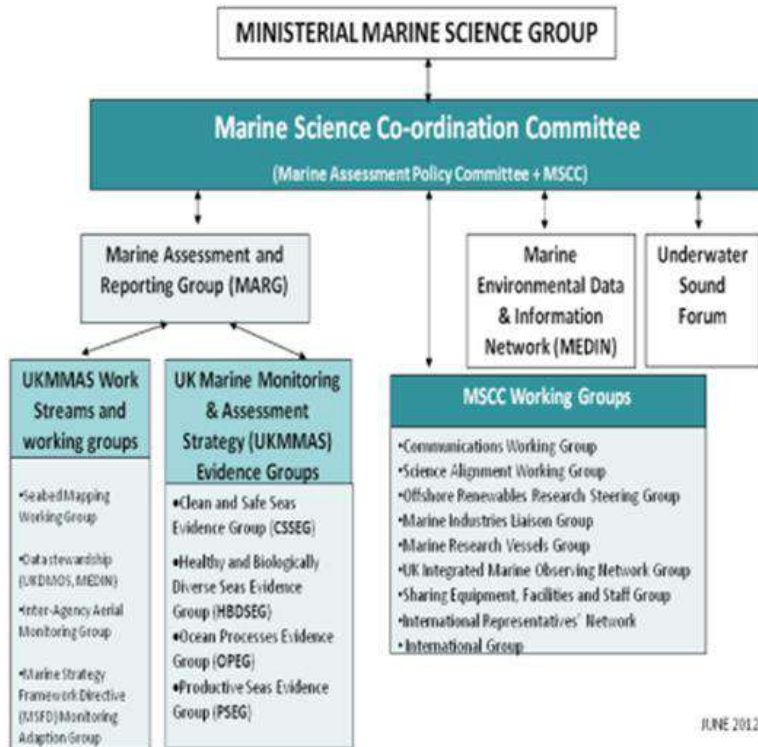


Four Cross UK Groups:

- Clean and Safe Seas (CSSEG)
- Healthy and Biologically Diverse Seas (HBDSEG)
- Productive Seas (PSEG)
- Ocean Processes (OPEG)

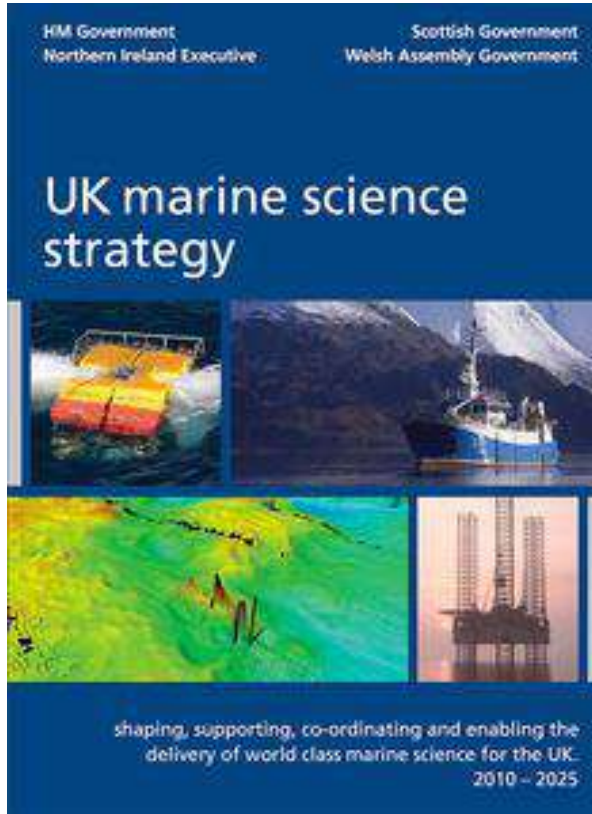
2007: Marine Science Co-ordination Committee

Structure of the Marine Science Co-ordination Committee



- Established following recommendation from HoC Science and Technology Committee
- ‘Investigating the Oceans’ proposed a body to assemble all public sector funders of marine research, stakeholders (including universities) and end users of marine science
- Recommended development of a UK marine science strategy

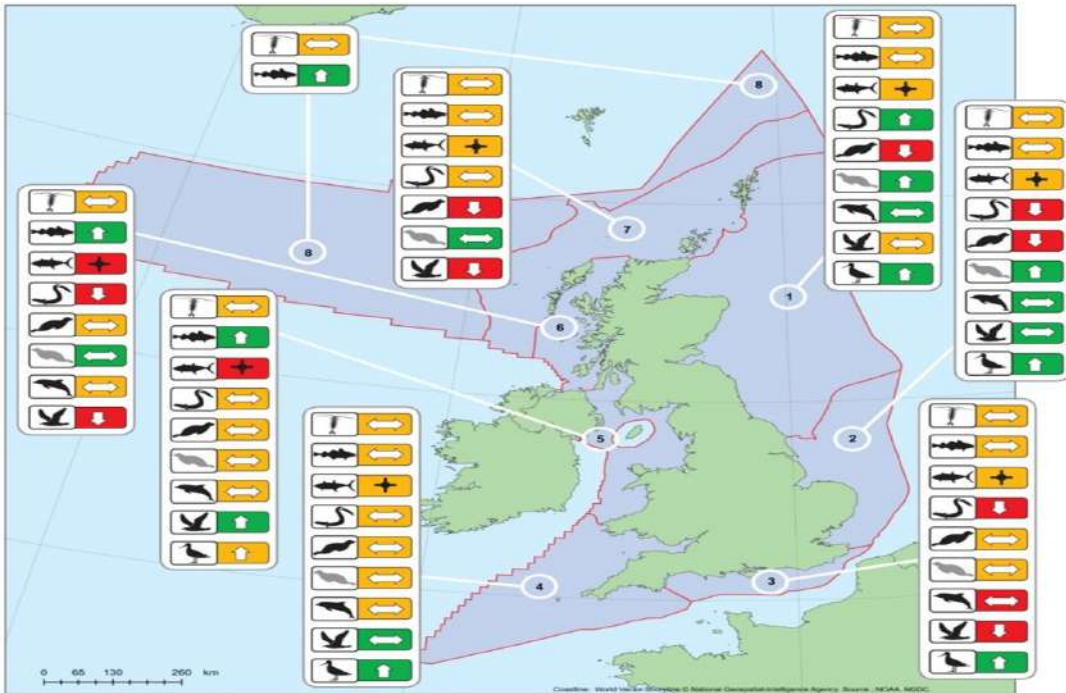
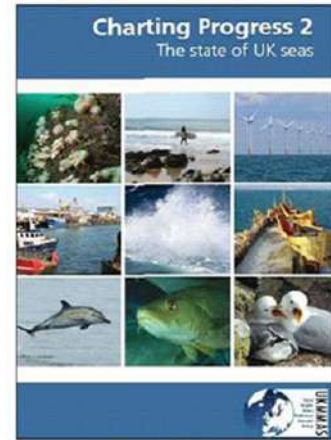
2010: First UK marine science strategy



Defined three high level priority areas:

- Understanding how the marine ecosystem functions;
- Responding to climate change and its interaction with the marine environment;
- Sustaining and increasing ecosystem benefits

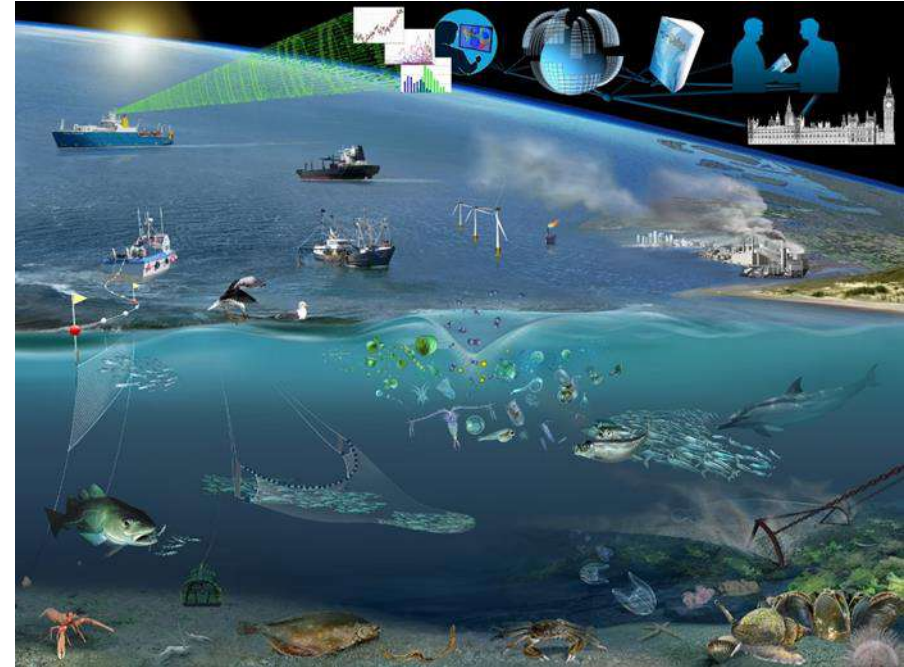
2010: Charting Progress 2



- Updated, and addressed knowledge gaps from Charting Progress One
- Provided the basis for Initial Assessment of Good Environmental Status under the MSFD
- Published as Part One of the UK Marine Strategy

2015: Marine Strategy Part 2

- Sets out the monitoring programmes for measuring progress towards GES in UK waters
- Works with Contracting Parties of OSPAR Convention to develop common indicators



2017: OSPAR Intermediate Assessment



- Illustrated progress by OSPAR Contracting Parties to goals of clean, safe, healthy and biologically diverse oceans and seas in NE Atlantic
- Used to assist EU member states with development of the updated MSFD initial assessments which are due autumn 2018.

2018: Updated assessment of Good Environmental Status

UK well advanced in preparing updated MSFD assessment:

- Will be based on over 50 different indicators
- Expecting to consult on findings and revised targets for achieving GES in summer 2018
- Assessment will be on-line, to allow navigation from high level findings to detailed indicator assessments.
- Will be target based against policy goals and will allow for reporting against the 25 Year Environment Plan

Monitoring 2002 to 2018

- Rich history of published reports and strategic documents
- The vision statement set out in Safeguarding Our Seas has endured throughout
- The UK's scientific and monitoring community has formed into a series of broad, expert and well defined working groups
- The reporting work has transitioned from reporting on state to reporting against targets
- Target based reporting important in understand progress towards sustainable development

2018: Future of the Sea

Government Office (GO-Science) Foresight Report 'Future of the Sea' due for publication early 2018

- Identifies future trends, challenges and opportunities for the UK from the sea
- Eleven feeder reports already available including:
 - Marine biodiversity
 - Sea level rise
 - Ocean acidification
 - Biological responses to warming
 - Plastic pollution
 - Trends in aquaculture
- Key recommendation for UK to take a more co-ordinated approach, especially between Government Departments



Increased Co-ordination

- At Defra Group level – publication of an evidence plan to indicate:
 - High level areas of research importance
 - Supported by a comprehensive statement of evidence required to inform policy and delivery across the group
- For UK funders of marine science – publication of the MSCC's updated strategy
- Across UK and Overseas Territories – initial discussions on development of an international marine strategy

Opportunities ahead

- Commonwealth Heads of Government Meeting in UK and progress with Blue Charter to guide sustainable ocean development
- Canada's presidency of the G7 and associated focus upon climate change, oceans and clean energy
- Forthcoming World Ocean Assessment II
- International Ocean Commission's Decade of Marine Science 2021-2030



Intergovernmental
Oceanographic
Commission

Conclusion

- Recent years have seen on-going progress in the way we monitor and report on the marine environment
- Also significant policy development including marine planning, MPAs, pollution controls and improved fisheries sustainability
- Overall there is a move towards measuring progress for environmental status against targets
- Increasing international interest in oceans. The UK's strengths in science, monitoring and sustainable development leave it well placed to contribute