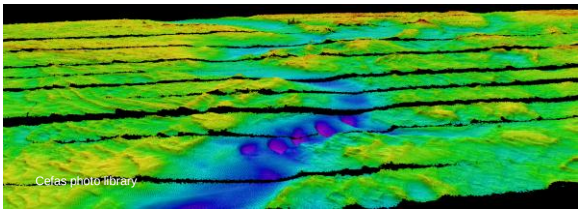
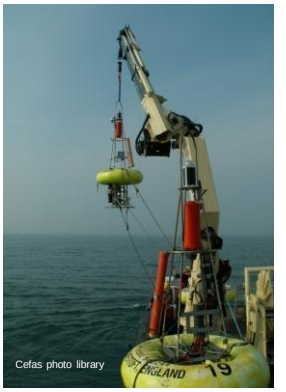
Department
for Environment
Food & Rural Affairs

Policy needs for new monitoring technologies

Presented by: Richard Emmerson
Defra
Date: 10 September 2013





UK Marine Vision

'Clean, healthy, safe, productive and biologically diverse oceans and seas'

Outcomes

- Good Environmental Status for UK seas by 2020
- Secure healthy food supplies from sustainable fisheries
- Sustainable growth in the wider marine economy

© Steve Hall (NOC)

© AMEC Border Wind

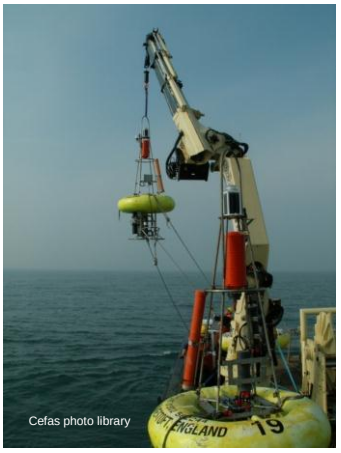
UK Marine Science Strategy

- evidence required to demonstrate sustainable development within the UK marine vision
- delivery of world class marine science
- fulfil statutory and international requirements for marine monitoring and assessment
- improve UK marine science co-ordination

Defra's investment in marine and fisheries evidence

Monitoring is a key area of activity for Defra.

- EU Data Collection Framework for fisheries data and monitoring
- Marine Strategy Framework Directive – targets and indicators
- Contaminants, eutrophication and biodiversity



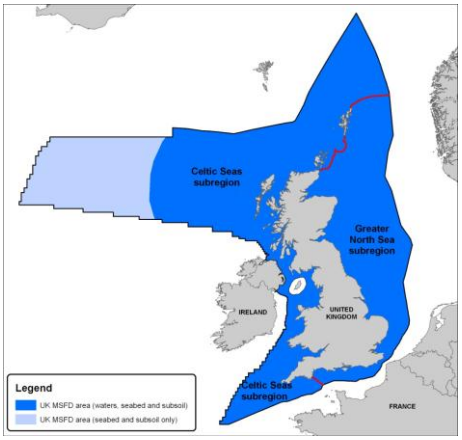
Defra's investment in marine and fisheries evidence

Evidence development

- Marine environment
  - understanding its state
  - pressures and impacts of marine activities
  - measures for sustainable management
- Marine biodiversity – including MPAs
- Sustainable fisheries – legislative requirements

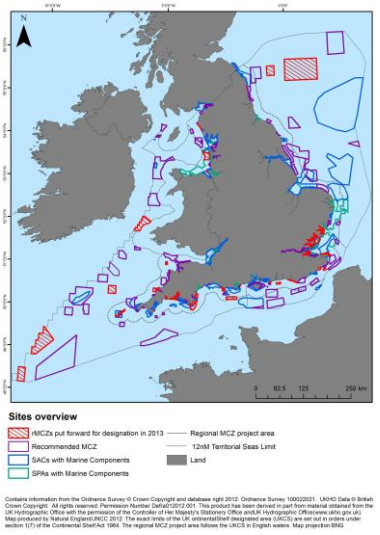
Marine Strategy Framework Directive Good Environmental Status in UK Seas

- Biodiversity
- Non-indigenous species
- Commercial fish
- Food webs
- Eutrophication
- Sea floor integrity
- Hydrographic conditions
- Contaminants
- Litter
- Underwater noise



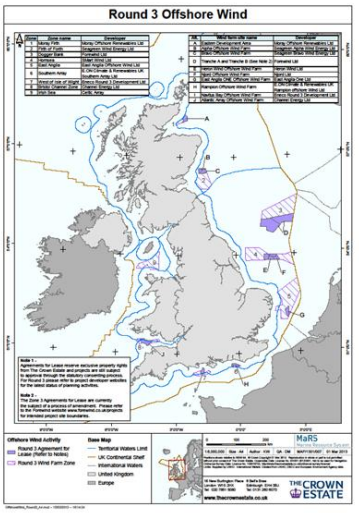
Marine Conservation

- An ecologically coherent network of marine protected areas
- Evidence requirements on habitats, species, ecological processes
- Identification, management and monitoring



Sustainable development of marine activities

- Significant new marine infrastructure development
- Improve evidence to manage consenting risk
- Need for evidence from pre-application survey and post-consent monitoring, on
  - Use of development areas by marine species
  - collision rates and collision risk
  - displacement



Working in partnership to deliver

- MSCC
- UK Marine Monitoring and Assessment Strategy
- MEDIN
- UK-IMON
- Jointly designed and funded programmes with:
  - Other EU Member States
  - Private Sector

Future challenges

- Decreasing budgets
- Smarter ways to gather, analyse and share data
- New technologies and approaches
- More innovative ways of gathering evidence
- Joint monitoring programmes with Europe.

Photo of NERC Autosub600 prior to deployment
© NOC

Questions to keep asking ourselves:

- Are new data needed?
- Are we being realistic about cost of new data requirements?
- Is our approach 'fit-for-purpose'?
- Are we future-proofing?
- Are we evaluating the impact and value of evidence?

© Natural History Museum

© Fotosearch

Key Priorities

- Short term (6 to 24 months)
  - cost-effectiveness of monitoring
  - smarter use of existing platforms
  - improved data on impacts of key infrastructure
  - evidence to influence European developments on monitoring tools
- Medium term priorities (2-5 years)
  - as above
  - improved monitoring data on species, habitats and ecological processes
- Longer term (5-10 years)
  - as above
  - better understanding of environmental change