Marine Policy in the UK and Overseas Territories

... and the Data and Information framework to support it

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The UK has the largest maritime sector in Europe – with a value £56 billion and employing half million people – more than double aerospace and agriculture combined.

A quarter of the population live within 10km of the coastline. Oceans directly influence our climate, agriculture and infrastructure.

The UK is reliant upon sea-trade and commerce for goods, energy supplies, raw materials and some of our food.

Issues include economic growth, energy security, biodiversity, climate change, sea level rise, species shift – a broad community of stakeholders to engage.
UK Marine Environment Policy

• In 2001 UK Government committed to new measures to improve marine conservation with a shared vision of “clean, healthy, safe, productive and biologically diverse oceans and seas”

• In 2005 UK published ‘Charting Progress’ – UK’s first integrated assessment of the State of UK seas, report updated in 2010 in ‘Charting Progress 2’

• In 2009 the Marine and Coastal Act passed into Law after close consultation with the community to support marine planning (Scot, Wales & NI devolved)

• The EU’s Marine Strategy Framework Directive is the latest driver which aims to achieve GES status by 2020
Marine Science Co-Ordination Committee

Reports to Government Ministers. Representatives from, and funded by, all relevant Ministries and Devolved Governments

Published the UK Marine Science Strategy in February 2010 – endorsed by Government after 2010 election

Intended to avoid wasteful duplication of effort and identify where there are gaps in capability

Initial work packages:
• Science Alignment
• Sustained Long-Term Monitoring
• Communications – to public and policy makers

Working groups include MEDIN for data and information, the Marine Industry Liaison Group and the Underwater Sound Forum
Irish Sea Pilot Project 2004

- Landuse
- Tourism
- Oil & Gas
- Mariculture
- Coastal Defence
- Ports & Navigation
- Military Activities
- Culture
- Conservation
- Dredging & Disposal
- Fishing
- Submarine Cables
- Renewable Energy
- Marine Recreation
- Mineral Extraction
Charting Progress

Evidence Groups e.g. Healthy and Biologically Diverse Seas
Marine Policy, Planning and Licensing

Marine Data and Information

• Science data and information will be needed to provide an evidence-based approach to policy within strategic planning and local marine management decisions

• ‘Collect once, use many times’ principle

• Marine Environmental Data and Information Network (MEDIN), UK Directory of Marine Observing Systems (UKDMOS) and UK Marine Monitoring and Assessment Strategy (UKMMMAS) will be vital suppliers of information
A Process Model for Marine Evidence

Sources / Methods

Reference Data
- Elevation
- Geology
- Infrastructure
- Shipwrecks
- Administrative units
- Management units

Application Data
- Weather and Climate
- Natural Resources
- Habitats and Biotopes
- Reproductive areas
- Feeding areas
- Migration routes

Human Activity Data
- Shipping
- Fishing
- Dredging
- Marine operations
- Chemical contamination
- Noise

Human Pressures*
- Physical loss
- Physical damage
- Non physical disturbance
- Toxic contamination
- Non-toxic contamination
- Biological disturbance

*Source: Eastwood et al, 2007
Marine Data Issues and Challenges

**People**
- Data inaccessible or restrictive licensing conditions
- Little or no requirement to collaborate or share data

**Standards**
- Data acquired or processed to differing standards
- Standards used are incomplete or misunderstood

**ICT**
- Creation and discovery of metadata difficult
- No basic data management or publishing facilities

**Data**
- Data captured from product and used inappropriately
- Data acquired or processed for single use
History of Marine Data

Marine Planning
Offshore Power
Fisheries & Aquaculture
Waste Disposal
Mineral Extraction
Coastal Protection
Security & Communication
Science & Discovery
Transportation
• Network to encourage and facilitate data sharing
• Data focal point for policy makers and planners
• Contractual clauses for data exchange
• Standard for metadata and tools for its creation
• Vocabularies for consistency and understanding
• Portal to discover data
• Support for the creation of reference data
Marine Data Action Plan

Objective
Support the creation of a well-managed marine reference datasets that can be easily discovered and accessed at reasonable cost which can be used in value added services

Examples
Improved wreck information held at English Heritage, review of conflicts between different sources of infrastructure data
Engaged with data holders to establish roles in publishing Reference Data
Encourage the creation of Quality Improvement Plans
Encourage and support data strengthening for priority data sets

Next Steps
Publish data more openly
Continue to resolve discrepancies between overlapping source datasets
Identify and address legacy issues working with data owners
Address interoperability issues especially boundaries and coastline
Link policy and legislation to geography
British Overseas Territories 2014
UK Overseas Territories

• High level of endemic species – 340 known, on 61 RAMSAR sites
• Challenge of invasive alien species – 2261 known so far across the BOTs
• Fisheries protection & management
• Marine Spatial planning
• Capacity building
• Knowledge base
• Resources available
To date MPAs designated by Chagos and Southern Ocean; plus locally designated areas on UKOTs

Over-fishing, local pollution, climate change, sea level rise, extreme events are major challenges

As UKOTs are predominantly small islands, waste management is a real issue, with Anguilla, the British Virgin Islands, Turks and Caicos, Anguilla, Tristan da Cunha, the Cayman Islands and Montserrat highlighting this as an issue of concern for their islands. Few UKOTs have developed a Waste Management Strategy to ensure effective sustainable waste management
Responsibility

• The responsibility for environmental management in the UKOTs has been devolved to the UKOTs’ governments, but the UK Government recognises that many UKOTs lack sufficient funding and/or personnel capacity to ensure the protection of the local environment and therefore require additional support.

• Each of the UKOTs has developed an Environmental Charter, which is a formal, individual agreement, listing commitments to develop and implement sound environmental management practices in the UKOTs and clarifying the roles and responsibilities of the UK Government, Overseas Territory Governments, the private sector, NGOs and local communities.
Responsibility in UKOTs

• “Territory Governments are constitutionally responsible for the protection and conservation of their natural environments. The UK Government’s role is to work in partnership with Territory Governments to provide them with the technical advice and support they need to enable them to fulfill this responsibility successfully.”

Source: House of Commons Environmental Audit Committee – Sustainability in the UKOTs, 2014
UK Primary Charting Areas

- SOLAS convention requires nation states to maintain nautical publications to protect the safety of life at sea.
- Includes UK home waters, UKOTs, The Channel Islands, and the Isle of Man.
- However, also includes nation states, such as the Republic of Ireland and Kenya due to historical and capacity reasons.
UK Primary Charting Areas

- Charts comprise many data layers which are of wider interest and are useful source of data
- Improved data management in HOs and/or re-engineering of HO data is required to support wider use

Source: UK Hydrographic Office, OceanWise
Summary

• Wide ranging national and international legislative framework which aims to achieve “clean, healthy, safe, productive and biologically diverse oceans and seas”

• Above enshrined in the UK’s Marine Policy Statement

• UK Marine Science Strategy addresses support needs of the UK and increasingly UK Overseas Territories

• Marine Data and Information is a key component of the evidence base that supports policy, planning and licensing

• MEDIN aims to improve the coordination of acquisition, management, processing and publishing of marine data

• Data management and publishing is fundamental to achieving these aims … and to the development of CMAs
Thank You!

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