



**UPDATE ON THE UK MARINE MONITORING AND ASSESSMENT STRATEGY  
(UKMMAS)  
June 2008**

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## **JOINT NATURE CONSERVATION COMMITTEE**

### **UPDATE ON THE UK MARINE MONITORING AND ASSESSMENT STRATEGY (UKMMAS)**

**Paper by Jane Hawkrige, David Connor, Ian Mitchell, Zoe Crutchfield, Mark Crick, Mark Tasker and Jim Reid with comments from the Country Agencies**

#### **1. Introduction**

- 1.1 This paper provides an overview and update on progress with implementing the UK Marine Monitoring and Assessment Strategy<sup>1</sup> (UKMMAS), a UK-wide Government initiative. It outlines JNCC's current and future involvement in the work, with particular emphasis on contributions to:
- i. opportunities for shared resources across Government,
  - ii. the development of Contributory Marine Objectives (CMOs) and indicators for monitoring,
  - iii. the next State of UK Seas report, 'Charting Progress 2' (CP2), and
  - iii. proposals to develop a UK Marine Biodiversity Surveillance Strategy.

#### **2. Background**

- 2.1 'Safeguarding Our Seas'<sup>2</sup> committed the UK to an ecosystem-based approach to the management of the marine environment. The 2005 report 'Charting Progress'<sup>3</sup> concluded that current monitoring programmes were insufficient for this purpose and the UK Marine Monitoring and Assessment Strategy was developed as a result.
- 2.2 The overall aim of the UKMMAS is to shape the UK's capability, within national and international waters, to:

*'provide, and respond, within a changing climate, to, the evidence required for sustainable development within a clean, healthy, safe, productive and biologically diverse marine ecosystem and within one generation to make a real difference.'*

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<sup>1</sup> <http://www.defra.gov.uk/Environment/water/marine/uk/science/monitoring.htm>

<sup>2</sup> Safeguarding Our Seas, Defra 2002 report: <http://www.defra.gov.uk/Environment/water/marine/uk/stewardship/index.htm>

<sup>3</sup> Charting Progress, Defra 2005 report: <http://www.defra.gov.uk/ENVIRONMENT/water/marine/uk/stateofsea/index.htm>

- 2.3 The UKMMAS is delivered through a number of groups (see Annex 1 for structure and supporting detail). A high-level policy committee, (Marine Assessment Policy Committee or MAPC) defines policy requirements and provides direction to an implementation body: the Marine Assessment and Reporting Group (MARG) which oversees the work of a number of initiatives and has a sub-group 'mini-MARG' which meets inter-sessionally to discuss cross-cutting issues. These include groups to investigate and report on Objectives for the marine environment; preparation of Integrated Assessments; preparation of Protocols and a Monitoring Manual; Data Archiving via the Marine Environment Data Information Network (MEDIN); and three Evidence Groups to collate data on the themes of "Clean and Safe Seas" (CSSEG), "Healthy and Biologically Diverse Seas" (HBDSEG) and "Productive Seas" (PSEG) seas. See Annex 1 for more detail on the roles of the groups.
- 2.4 UKMMAS forms the marine contribution to the Environmental Observation Framework being developed by the Environment Researcher Funders' Forum (ERFF)<sup>4</sup>.

### **3. JNCC and Country Agency involvement in UKMMAS process**

#### ***MAPC and MARG***

- 3.1 MAPC is a cross-departmental and Devolved Administration policy group, and the country agencies are not represented on this Committee. The Government's response to the *House of Commons Select Committee on Science and Technology* report, 'Investigating the Oceans'<sup>5,6</sup>, proposed the formation of a new Marine Science Coordinating Committee (MSCC) that will replace the Inter-Agency Committee on Marine Science and Technology (IACMST). This response tasks MSCC with, among other things, developing a UK Marine Science Strategy. Current indications are that the role of MAPC will need to be reviewed to prevent duplication of work and streamline the decision-making process; however, in the first instance MAPC will work in parallel with MSCC and overlap is thought to be minimal. It is not expected that JNCC will be a member of a Support Group reporting to MSCC.
- 3.2 All the country agencies are represented on MARG. The role of this group is likely to shift from overseeing the initial implementation phase of the Strategy to one of more active integration across programmes and integrated assessments. In the longer-term, this will have a direct impact on individual Agency monitoring programmes with, arguably, monitoring undertaken by JNCC and the country agencies most likely to benefit from the integration process, particularly in offshore areas.

#### ***Evidence Groups***

- 3.3 JNCC currently Chairs and participates on the Healthy and Biologically Diverse Seas Evidence Group (HBDSEG), which is responsible for 'ecosystem' monitoring and

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<sup>4</sup> ERFF: <http://www.erff.org.uk/>

<sup>5</sup> Government response: <http://www.parliament.uk/documents/upload/itogovtresp.pdf>

<sup>6</sup> Investigating the Oceans report: <http://www.publications.parliament.uk/pa/cm200607/cmselect/cmsctech/470/47002.htm>

assessment (biological, seabed morphology and oceanography). The country agencies are represented in their own right due to the technical nature of some of the work and the need for local knowledge to assist with effective integration of monitoring across all Agencies and monitoring organisations (e.g. NERC, NGOs etc). There is an on-going discussion about splitting the group in two due to the breadth of its remit, which currently includes links to the Global Monitoring for Environment and Security (GMES) Marine Networking Group and the former Global Ocean Observing System Action Group remit. There is, however, considerable recognition of the significant benefits the oceanographic community brings to understanding the ecosystem so strong links are being encouraged regardless of the outcome.

- 3.4 In addition, JNCC participates in the work programme of the 'Productive Seas Evidence Group'. This group has representation from industry groups (oil and gas, marine renewables, aggregates etc) and a remit for developing socio-economic and sustainability objectives and indicators, and collating information on the impacts of industries on the marine environment. Improved access to this information is particularly important to JNCC and the country agencies for supporting management and advice work, and the future development of risk models for monitoring and surveillance (as agreed by the Chief Scientist Group in January 2008). This is the longer-term goal; initially, JNCC is trying to influence industry to use the tools being developed through the UKMMAS process e.g. protocols and data archiving.
- 3.5 At present, JNCC and the country agencies are not directly involved in the work of the 'Clean and Safe Seas Evidence Group'. JNCC considers the data gathered by this group to be as valuable to the Agencies as that gathered by PSEG but it is generally more available so at present the limited staff resources are being focused in other areas of the process. This will be periodically reviewed.
- 3.6 The Chairs of the Evidence Groups have been tasked with identifying overlapping issues across the groups and participate in a forum, mini-MARG, to integrate where possible.
- 3.7 All Government Agencies are contributing to the production of a searchable metadatabase of marine monitoring (repeat measurements; one-off surveys are *not* included) conducted by UK organisations, (UKDMOS or the United Kingdom Directory of the Marine-observing Systems<sup>7</sup>). The Strategy requires this metadata catalogue, and a complementary Marine Monitoring Manual<sup>8</sup>, to be populated and kept up-to-date to facilitate joint working and maximise the use of shared operating platforms such as boats. JNCC and the country agencies are working to ensure that the metadata descriptions of biodiversity monitoring activities are accurately presented and easily updated; in some cases this may require some adjustments to existing country agencies metadata management practices. MEDIN is responsible for overseeing the development of the necessary standards and tools to ensure that actual data derived from the monitoring activities can be rapidly mobilised alongside the actual metadata to allow more detailed and cross-sectoral analysis as required; JNCC is helping to direct this work.

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<sup>7</sup> UKDMOS: <http://www.ukdmos.org/>

<sup>8</sup> Monitoring Manual: <http://www.wrcplc.co.uk/marineprotocols/default.aspx>

- 3.8 In addition to these key groups, two sub-groups have been formed with specific remits to improve the geographic coverage and efficiency achieved by aircraft and ships undertaking aerial surveillance and seabed survey.
- i. *Seabed Mapping Working Group*: This new group is tasked with the assessment of existing survey data, and the identification and co-ordination of new survey work (in collaboration with the Committee on Shipping Hydrography (COSH)) to meet current and emerging requirements. The work of this group will be crucial in ensuring a more effective use of current resources and will help deliver seabed data and information suitable for use within the UKMMAS. JNCC took a joint-lead in forming this group (which is now chaired by NERC's British Geological Survey) due to anticipated benefits associated with a strategic geographic approach to seabed surveys and associated identification of benthic habitats; this is particularly important as improved seabed maps will be essential in future monitoring and surveillance.
  - ii. *Inter-Agency Aerial Monitoring Group*: JNCC also participates on this group with a view to influencing where, how and to what resolution aerially-acquired data are collected so that it can be used for coastal habitat, bird and potentially cetacean surveillance. The group is currently undertaking a capability mapping exercise across all the agencies involved to consider options for sharing resources and reducing costs. Initial indications are that the focus of this group is on 'industry' aerial monitoring e.g. oil spills etc, with little consideration of conservation-relevant aerial surveillance, but it is early days and there may still be an opportunity to widen the scope.

These groups are relatively new and will only meet a couple of times a year.

#### **4. Development of Contributory Marine Objectives and Indicators**

##### *Objectives*

- 4.1 In the last twelve months, Defra has led a cross-government initiative to develop High Level Objectives for the marine environments; these are currently with Ministers for approval. In parallel, the Evidence Groups were tasked with developing Contributory Marine Objectives (CMOs) that will provide the overall policy framework to guide the UKMMAS. The CMOs need to be suitable for measuring progress towards the vision of '*clean, healthy, safe, productive and biologically diverse oceans and seas*'.
- 4.2 JNCC led the initial development of the 'Healthy and Biologically Diverse' objectives with input from all UK Agencies, including the country agencies. This work is on-going with a need for continued diligence to ensure that the final objectives are aligned with marine biodiversity objectives.

## **Indicators**

- 4.3 JNCC has taken a very active role in developing OSPAR Ecological Quality Objectives (EcoQOS) for Region II (North Sea) and now leads for grey seals, common seals, and by-catch of harbour porpoise. These three were amongst a group of eleven EcoQOs that were adopted in 2006 and implemented in 2007 as part of OSPAR's North Sea Pilot Project (Region II)<sup>9</sup>. In March 2008, JNCC and ICES organised a workshop to develop an EcoQO for seabird population trends<sup>10</sup>. The recommendations of the workshop will be considered by OSPAR later this year.
- 4.4 In 2007, Defra asked JNCC to develop suitable EcoQOs for the Celtic Seas (OSPAR Region III), in conjunction with Ireland (see Committee Paper, JNCC 07 N10). In addition, included in HBDSEG's 2007/8 work programme was the need to identify indicators against the CMOs to assist with state of UK seas reporting. To prevent duplication and ensure that this work is cost-effectively delivered and can be integrated into national monitoring initiatives, it was agreed the work would be done by HBDSEG. A series of critical reviews are being undertaken by HBDSEG members with JNCC taking a lead on habitats, birds, cetaceans and turtles. JNCC will continue to progress this work programme through HBDSEG but due to resource limitations over the next year, priority will be given to undertaking the assessments described in the next section.
- 4.5 PSEG has recently provided input to a report commissioned by Crown Estates, Oil and Gas UK and BMAPA on socio-economic indicators for industry. This report will be used to help write the PSEG Feeder Report for CP2.

## **5. Assessments of the marine environment**

- 5.1 As noted in Committee Paper JNCC 07 N10 (Dec. 2007), the UKMMAS process is expected to deliver periodic assessments of the state of UK seas in order to inform Government policy and improve management. The next assessment, Charting Progress 2, is due in 2010. The Scottish Government has just published a fore-runner to Charting Progress 2: 'Scotland's Seas: towards understanding their state'<sup>11</sup>. It is understood that their current intention is to publish a sub-set of the data used to produce Charting Progress 2 as a State of Scotland Seas report with both reports being launched on the same day. At present there is no indication that the other Devolved Administrations will do the same, with the possible exception of Wales who are giving it further consideration.
- 5.2 Work has started on CP2, draft Evidence Group Feeder Reports needing completion by 31 March 2009, ready for Peer Review and publication by May 2010. In addition, work has started on ensuring that assessments undertaken for Charting Progress 2 contribute

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<sup>9</sup> OSPAR Commission 2007. EcoQO Handbook: Handbook for the application of Ecological Quality Objectives in the North Sea. OSPAR 2007/307.

<sup>10</sup> ICES 2008. Report of the Workshop on Seabird Ecological Quality Indicator, 8-9 March 2008, Lisbon, Portugal. ICES CM 2008/LRC:06. 57 pp.

<sup>11</sup> Report: <http://www.scotland.gov.uk/News/Releases/2008/04/09100100>

effectively to the OSPAR Quality Status Report for the Northeast Atlantic and which is being produced in parallel with CP2 for publication in 2010. UK Government is using these assessments as an opportunity both to develop thinking and to undertake the Initial Assessment for the Marine Strategy Framework Directive.

- 5.3 Charting Progress 2 will draw on the recent Favourable Conservation Status and Common Standards for Monitoring reports, BAP, RAMSAR assessments and outputs from the pending Water Framework Directive Initial Assessment due in March 2009. This is seen as a good opportunity for JNCC and the country agencies to identify monitoring and assessment synergies between the Directives and to promote the use of recent habitat mapping tools: UKSeaMap, MESH and HabMap. JNCC also sees this as an opportunity to identify suitable datasets to contribute to the development of a marine biodiversity surveillance strategy (see section 6 below) and the 'Wildlife Statistics' evidence work programme.
- 5.4 JNCC is providing lead-authorship for several key chapters: habitats (including saltmarshes), birds (seabirds and waterbirds), cetaceans and turtles, and consequently, likely to be involved in producing the Integrated Assessment for CP2. This work is supported by data and interpretation provided by the country agencies and other relevant bodies including the Regulatory Agencies.
- 5.5 In addition, JNCC has lead on the development of the methods for the Regional Assessments required for the OSPAR QSR (see JNCC 07 N10) which will form the basis of the Regional Assessments for CP2.

## **6. Developing a marine biodiversity surveillance strategy**

- 6.1 Given the multiple policy needs for effective monitoring/surveillance and assessment of the marine environment, the significant gaps in our current biodiversity monitoring effort and the overall high costs of marine monitoring programmes, it is desirable to work towards a single monitoring framework which will meet all national and international policy and legal commitments, whilst ensuring adequate scientific evidence is available to assess the state of the marine environment fully and any changes over time.
- 6.2 In September 2007, JNCC and Natural England prepared an outline funding proposal to Defra (at their request) aimed at meeting key statutory and policy obligations for marine biodiversity surveillance and assessment in inshore (England only) and offshore waters (UK). The proposal was revised in January 2008 to provide a more detailed plan. In the light of potential infraction proceedings, following submission of the Article 17 report to the European Commission in December 2007, the proposal was particularly focused on meeting requirements under the Habitats and Birds Directives.
- 6.3 As part of the UKMMAS process, linked to development of biodiversity monitoring requirements for the OSPAR Convention (JNCC 07 N10), JNCC has been developing a more strategic framework for marine biodiversity monitoring. This aims to encompass all policy and statutory obligations in the most effective and cost efficient manner, and to focus on the most important adverse impacts from human activities as a means of prioritising effort. At OSPAR's Biodiversity Committee in February 2008, this strategic

approach was encompassed within a four-year programme geared towards developing the biodiversity aspects of the newly-adopted Marine Strategy Framework Directive. Given that the MSFD requires a substantial element of biodiversity assessment and monitoring, that its requirements will need to embrace those of other Directives, and that the UK is well positioned to influence implementation of the Directive through OSPAR, JNCC and Natural England, after consultation with Defra, consider a more holistic and forward-looking approach would now be more appropriate. The original proposal was therefore revised in May 2008 to provide a developmental phase spanning two years (a more realistic lead-in time before implementation) with the following aims:

- i. clearly encompassing aspects which will contribute to MSFD implementation (GES, indicators, pressures assessments);
- ii. working with OSPAR and EC mechanisms to promote approaches which would be in the UK's interests (e.g. align with UKMMAS);
- iii. preparation of an integrated monitoring/surveillance plan which encompasses the UK's statutory and policy requirements;
- iv. coordination of effort, wherever feasible, across survey programmes for habitats, birds, cetaceans and other features;
- v. cooperation and integration of monitoring effort with other agencies within the UKMMAS system (including but not restricted to all country agencies);
- vi. incorporation of priority needs for the initial implementation phase (i.e. Habitats Directive).

Costs submitted were as follows:

<b>Item</b>	<b>FY0809</b>	<b>FY0910</b>	<b>FY1011</b>
Development phase - staffing & office equipment	£100K	£145K	
Development phase - contracts & T&S	£105K	£240K	
Pilot implementation - cetaceans & seabirds		£120K	Estimated £700K
Integrated implementation trial		To be advised	Estimated in region of £3m
<b>Total</b>	<b>£205K</b>	<b>£505K</b>	

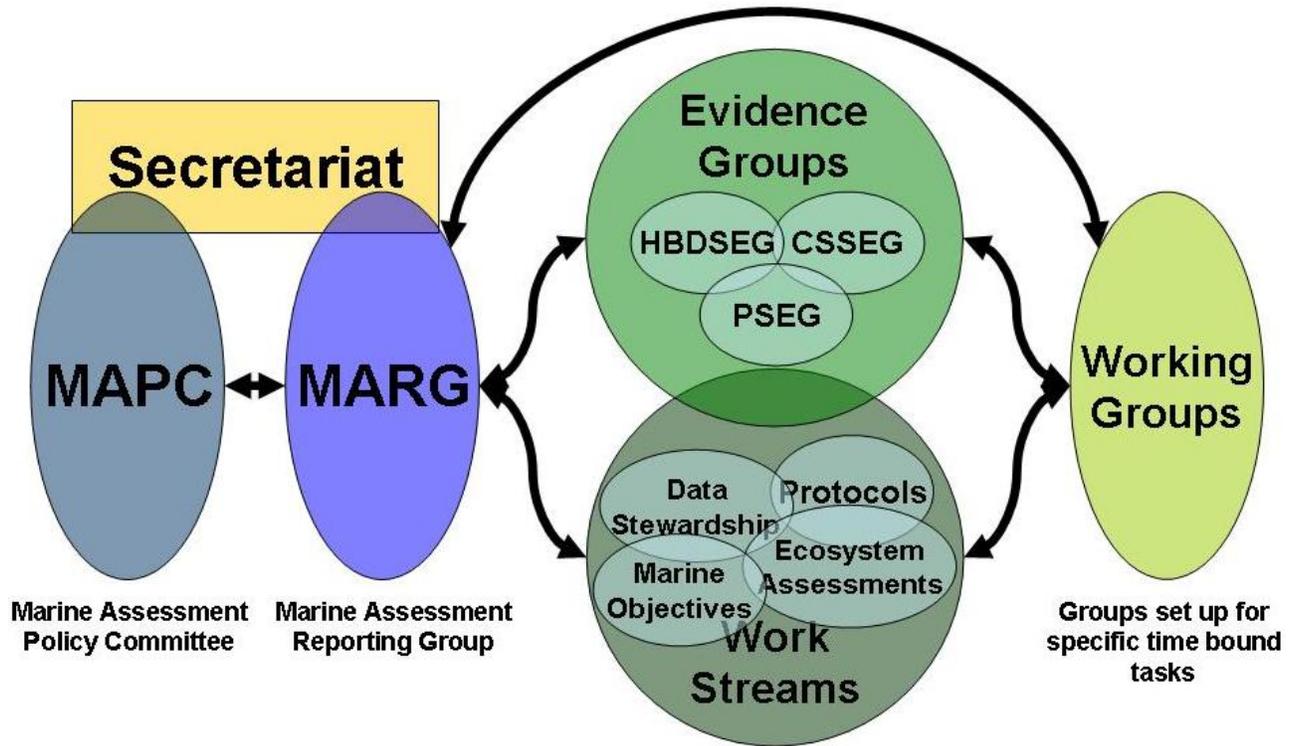
- 6.4 At the moment, Defra has not informed JNCC and Natural England what additional resources may be made available in 2008/09 or following years, so the rate of progress to implement this work is currently uncertain.

## **7. Conclusion**

- 7.1 The thrust of the UKMMAS is to make most efficient use of UK resources in delivering existing obligations and to be prepared for emerging requirements, e.g. the EC Marine Strategy Framework Directive. The process also incorporates research communities involved in real time observations and modelling of ecosystems, so it also has the potential to improve our knowledge of how factors such as climate change and ocean acidification could be affecting UK marine biodiversity, in particular aspects of ecosystem functioning that have to date alluded us.
- 7.2 Over the next 18 months, the work programme of the groups involved in delivering the UK Marine Monitoring and Assessment Strategy will prioritise on producing Charting Progress 2, the UK's contribution to the OSPAR QSR and ensuring the work is suitably aligned to the Marine Strategy Framework Directive. JNCC will play a significant part in delivering this work.
- 7.3 Successful implementation of the UKMMAS will result in improved coordination and efficiency of programmes for marine monitoring and assessment. A better shared understanding of the scope of current programmes will facilitate cooperation between agencies and groups involved in marine monitoring and enable us to respond more effectively to pressures affecting biodiversity.

## Annex 1

### Current UKMMAS Structure



#### 1. Marine Assessment Policy Committee (MAPC)

##### *1.1 Roles and responsibilities*

The Marine Assessment Policy Committee (MAPC) assume overall ownership of the strategy and its members are responsible for the management and policy measures needed to achieve the vision, i.e. to shape the UK's capability to provide, and respond to, the evidence required for sustainable development within a "clean, safe, healthy, productive and biologically diverse" marine ecosystem.

The Marine Assessment Policy Committee (MAPC) achieve this by ensuring delivery of the UK's Marine Monitoring and Assessment Strategy, through the:

- Identification of international, European and national obligations for marine monitoring and assessment.
- Maximisation of efficiency and effectiveness of UK resources devoted to marine monitoring and assessment.
- Provision of a cross departmental forum for clearance of integrated marine assessments prior to publication.

- Identification of policy implications arising from marine assessments and ensuring these are communicated to those able to take action.

A key function of the Marine Assessment Policy Committee (MAPC) is to define the policy requirements for UK marine monitoring and assessment and provide direction on these matters to the Marine Assessment Reporting Group (MARG). The committee is required to endorse those monitoring proposals put forward by the Marine Assessment Reporting Group (MARG) and to ensure appropriate resources are made available where necessary. The committee is also expected to maintain a dialogue with the Marine Assessment Reporting Group (MARG) on any changes in either national statutory requirements or EU and other international treaty obligations and the potential implications of any such changes for the future of the monitoring programmes. The Marine Assessment Policy Committee (MAPC) also 'own' the integrated assessments and provide, where appropriate, a proactive lead towards adaptive management.

The Marine Assessment Policy Committee (MAPC) is served by the UKMMAS Secretariat which facilitates and co-ordinates the exchange of information between the two groups.

### ***1.2 Membership of MAPC***

The Marine Assessment Policy Committee (MAPC) is a senior policy decision-making committee made up of those individuals able to make decisions on marine assessments and resources. It comprises of representatives from Government Departments, (Defra, BERR, MOD, DCMS, DfT, DCLG), the Devolved Administrations, IACMST, NERC and other relevant experts (UK representatives of OSPAR, ASMO, EMMA and the IOC) with responsibility for International and National policy drivers that relate to the marine environment. Generally there is no direct Agency representation on the Marine Assessment Policy Committee (MAPC) since it is deemed they are represented by their sponsoring departments, however, they may be invited on an *ad hoc* basis if specific issues require their attendance.

Currently the Marine Assessment Policy Committee (MAPC) is co-chaired by the Marine Director of the Scottish Executive and the Director of Marine and Fisheries within Defra.

## **2. Marine Assessment Reporting Group (MARG)**

### ***2.1 Roles and responsibilities***

The requirements for Marine Monitoring and Assessment are implemented through a number of groups subject to overall direction by the Marine Assessment and Reporting Group (MARG). The role of these supporting groups are outlined later. Ultimately the purpose of the Marine Assessment and Reporting Group (MARG) is to:

- Ensure legislative and obligatory requirements are met through the delivery of co-ordinated programmes of monitoring.
- Provide overall direction to the monitoring programme, ensuring that the maximum efficiency and effectiveness is made of UK resources devoted to marine monitoring and assessments.
- Commission, manage and approve periodic integrated assessments for adoption by the Marine Assessment Policy Committee (MAPC).

- Identify and highlight to the Marine Assessment Policy Committee (MAPC) any emerging understanding which needs to be taken account of by policy and governance.
- Proactively assess the need to change monitoring programmes in light of new research and technology, providing advice to the Marine Assessment Policy Committee (MAPC) where necessary.

To achieve this the Marine Assessment Reporting Group (MARG) will ensure;

- A comprehensive description of who is monitoring what, where, when, why, and how in the seas around the UK (UKDMOS).
- A mechanism to optimise the way UK marine monitoring meets current and emergent national and international legislative and obligatory requirements.
- All data collection required for integrated assessments or to demonstrate the meeting of any objectives is undertaken within the monitoring programmes.
- A collaborative and co-ordinated approach to data gathering, and the interchange of data, between existing monitoring programmes and assessments.
- A closer integration of marine environmental monitoring, replacing existing groups where appropriate, to deliver on both monitoring commitments and the ecosystem-based approach outlined in Charting Progress.
- Efficient management of assessments of the state of the marine environment in order to produce periodic reviews of the current state of the marine ecosystem; e.g. OSPAR QSR 2010, Charting Progress 2.
- Provision of advice on the production of annual reports of the results.
- Production of an annual review of the group's work programme and definition of future work and resource requirements.
- A watching brief on technological and scientific innovations that could be incorporated into monitoring programmes.
- A watching brief on legislative requirements that need to be accounted for in the monitoring programmes.
- Overseeing of the process of dissemination and development of awareness of the UKMMAS.
- Overseeing of the production of relevant UKMMAS deliverables and supporting documents.

The Marine Assessment Reporting Group (MARG) is supported in its delivery of the UKMMAS by a number of additional Groups and Work Streams:

- Three **Evidence Collection Groups** (Clean and Safe Seas, Healthy and Biologically Diverse Seas, and Productive Seas) who are responsible for implementing and coordinating the practical monitoring programmes, and producing an initial assessment of the results.
- **Marine Monitoring Protocols Work Stream** responsible for collating and, where necessary, establishing data collection standards and protocols and assimilating these into a Marine Monitoring Manual.
- **Marine Monitoring Data Co-ordination Work Stream**, achieved through close working with the Marine Environment Data Information Network (MEDIN) to disseminate, archive and make available the data and metadata.
- **Marine Objectives Work Stream** to articulate the Objectives of marine monitoring and feed into the development of the Marine Policy Statement.

- **Integrated assessments Work Stream** to contribute to the production of marine assessments as required, for example, Charting Progress 2 in conjunction with significant input from the Evidence Collection Groups (ECG's).

## 2.2 Membership of MARG

The Marine Assessment Reporting Group (MARG) is a decision making body comprising of Scientific, technical and policy representatives drawn from Agencies and Institutes responsible for the resourcing and practical implementation of marine monitoring programmes.

As with the Marine Assessment Policy Committee (MAPC), the Secretariat is provided by Defra with technical support from additional members as required.

## 3. Evidence Groups (EGs)

### 3.1 Roles and responsibilities

The operational activity of marine monitoring is 'championed' and undertaken by the three Evidence Groups (ECG's). The distribution of monitoring responsibilities into these three groups are defined in Table 1. The data collected is driven by the need to demonstrate that the vision for our seas is being achieved i.e. "Are our seas clean and safe? Are our seas healthy and biologically diverse? Are our seas productive?" and the data needed to comply with all drivers.

**Table 1: Distribution of monitoring responsibilities**

<b>Evidence Group</b>	<b>Work Areas</b>
<b>Clean and Safe Seas (CSSEG)</b>	Enhance and conserve the overall quality of our seas, their natural processes and their biodiversity. To contribute to the enhancement and conservation of the overall quality of our seas, their natural processes and their biodiversity.
<b>Healthy and Biologically Diverse Seas (HBDSEG)</b>	Enhance and conserve the overall quality of our seas, their natural processes and their biodiversity. To contribute to the enhancement and conservation of the overall quality of our seas, their natural processes and their biodiversity.
<b>Productive Seas (PSEG)</b>	To use marine resources in a sustainable and environmentally sensitive manner in order to conserve ecosystems and achieve optimum environmental, social and economic benefit from the marine environment.  To promote and encourage economically and environmentally sustainable use of natural resources to ensure long term economic benefits and sustainable employment.

Such requirements cover all temporal scales from the operational forecast data needed in real time to that needed to make the overall assessments of ecosystem state over the longer term.

The Evidence Groups, via discussion between the key agencies collecting data of similar type, provide:

- Annual work programmes defining the co-ordinated monitoring programmes.
- Thematic and specific assessments of the results e.g. data reports to ICES, EC, GOOS, assessments for specific Directives and parts of OSPAR, CFP, WFD, etc.
- Quality controlled data adhering to the agreed monitoring standards and protocols (supported by the Marine Protocols Group and the Analytical Quality Control Groups).
- Efficiencies and coordination within programmes of monitoring.
- A focal point for the collection of evidence related to their remit.
- A forum to facilitate agency participation and detailed discussion.

The cohesion between these programmes of work and other activities underway within and related to the Strategy (e.g. AQC groups, MEDIN, etc.) will be managed by the Marine Assessment and Reporting Group (MARG).

### ***3.2 Membership of Evidence Groups***

Evidence Groups have the autonomy to select an appropriate membership based on the expertise and experience required to meet the evidence needs.