



Business Plan

2006-2010

September 2008

MCCIP Business Plan, 2006-2010

Marine Climate Change Impacts Partnership Secretariat, Lowestoft, 28pp
September 2008

Contents

Background and aim of the Partnership.....	1
Introduction	1
Structure of the partnership	2
Objectives of the Partnership.....	3
Execution Plan.....	4
Milestones	4
MCCIP activities and outputs	5
Finances	6
Funding in kind.....	7
Business strategy for 08/09	7
ANNEX A – MCCIP Structure	11
ANNEX B - Steering Group (SG) - Terms of Reference	17
ANNEX C - Annual Report Card Working Group (ARCWG) - Terms of Reference	19
ANNEX D - Communications and Outreach Working Group (COWG) - Terms of Reference	22
ANNEX E - Expert Advisory Panel (EAP) - Terms of Reference	24
ANNEX F - Detailed task list for each Objective and current delivery status	25

Background and aim of the Partnership

The Marine Climate Change Impacts Partnership (MCCIP) was announced and launched in March 2005 as one of the actions in *Charting Progress: An Integrated Assessment of the State of the UK Seas*¹ identified climate change and unsustainable fishing as the two main threats facing the UK's marine environment.

The Aim of MCCIP is **to provide a co-ordinating framework for the UK, so as to be able to transfer high quality evidence on marine climate change impacts, and related advice, to policy advisors and decision-makers.**

The intended target audience, of the Annual Report Card in particular, are policy makers and other marine stakeholders requiring marine climate change knowledge in an accessible format, enabling them to make informed decisions based upon quality assured science.

In addition, MCCIP goes wider than the partnership members and their staff and wider than policy advisors and decision makers. MCCIP has set itself the task of helping “*to assemble community views and partner requirements for climate change tools and information*”, extending the coverage of the term stakeholder.

Introduction

This Business Plan contains:

- An administrative structure for MCCIP
- A Work Programme to deliver the objectives
- A forward look and strategy to deliver the key elements of the plan
- Terms of Reference for the Steering Group and Working Groups
- A Financial Structure

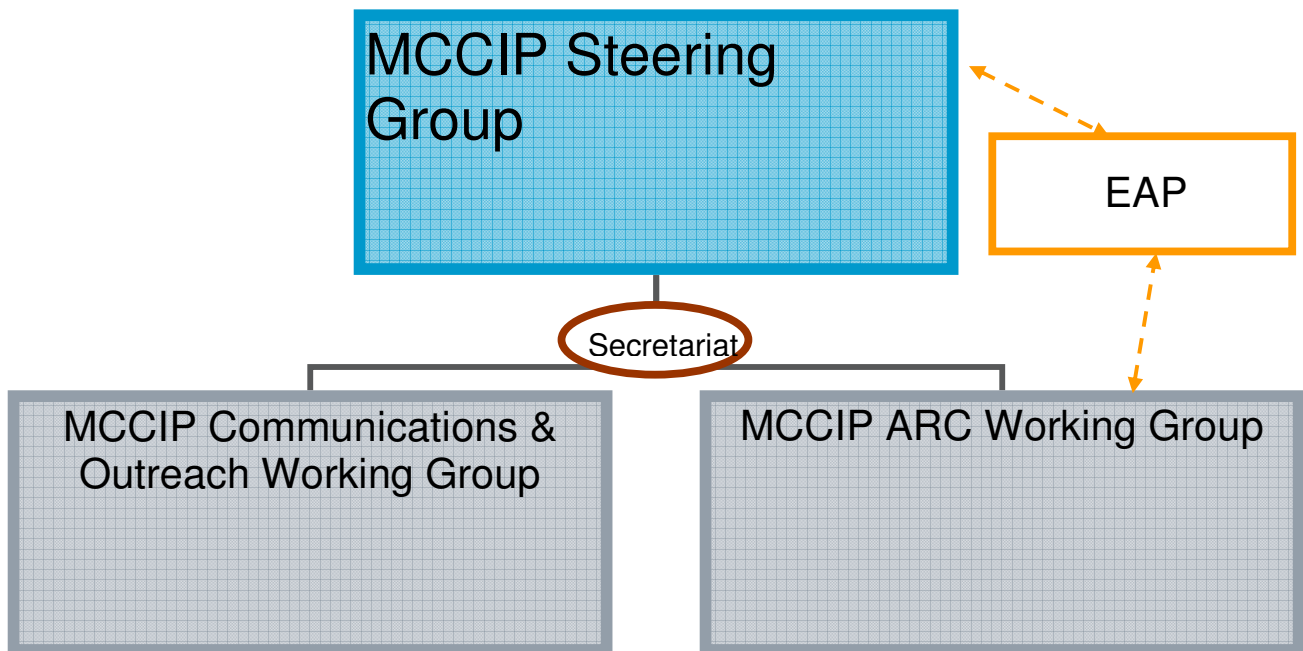
A key component for the success of MCCIP is the role, standing and commitment of both the Steering Group and the Working Groups, and the Expert Advisory Panel, which together will ensure that MCCIP achieves its overall aim.

As MCCIP develops further initiatives will include:

- A regular newsletter
- Workshops and seminars
- Developing links with industry
- Response centre for marine climate change enquiries
- Web site development
- Exploring applications of future UKCIP marine climate change scenarios.

¹ Department for Environment, Food and Rural Affairs (Defra) (2005). *Charting Progress: An Integrated Assessment of the State of UK Seas*. 120pp

Structure of the partnership



Overview of roles by Group

Steering Group

The primary purpose of the **Steering Group (SG)** is to deliver the MCCIP aim. The SG Terms of Reference are included in Annex B

The SG recognises 3 working groups that will be commissioned and empowered to deliver the MCCIPs objectives. This will be within a framework agreed, monitored and directed by the SG.

The 3 working groups proposed are as follows:

Annual Report Card Working Group (ARCWG)

The aim of the ARC working group of the SG will be to deliver the ARC (or similar related products).

Communications and Outreach Working Group (COWG)

MCCIP's prime aim is the communication of sound science to policy advisors and decision makers. The CO-WG will develop communications and outreach strategies on behalf of MCCIP.

Expert Advisory Panel (EAP)

Will review the scientific content of MCCIP outputs. Enabling MCCIP to maintain science quality as its foundation for relevance and credibility. The chair of the

EAP will report back to the SG on its activities and request inputs from the SG members as appropriate.

Secretariat

MCCIP is to be supported by a **Secretariat**, which will be a central source of information and focal point. It will be responsible for the daily running of MCCIP, gathering information and producing a clear overview of effort and outcomes.

Objectives of the Partnership

The objectives for MCCIP are to:

- A. Develop and maintain a coordinating framework for marine partners in the UK.
- B. Build the knowledge base and consolidate evidence of marine climate change impacts.
- C. Create effective mechanisms for the efficient transfer of marine climate change knowledge from the scientific community to policy advisers and decision makers.
- D. Facilitate uptake of tools and strategies to assist stakeholders in developing and assessing adaptation strategies.

It is anticipated that the partnership will also help to:

- E. Identify gaps in knowledge and recommend priority areas for research.
- F. Assemble community views and partner requirements for climate change tools and information (e.g. marine scenarios of climate change).
- G. Advise on the development of an integrated marine climate impacts monitoring programme.

It is expected that over the lifetime of the partnership these objectives will evolve and be reviewed at times to be agreed by the SG. It is intended that other stakeholders will add to these objectives and, where appropriate, initiate new research or monitoring programmes that are in line with the aims of MCCIP.

Execution Plan Milestones

The initial deliverables and milestones are summarised below. Milestones are directly related to individual tasks outlined in Annex D (e.g. 1.1, 1.2 etc.).

Task	Description of Task	Deliverable	Who delivers	Milestone (Month)	Date
1	Establish and maintain a fully operational Secretariat ensuring resources are available for delivery.	Operating Secretariat	Secretariat	Month 1 and ongoing	Dec 2005
2	Launch and maintain interactive web site.	Web site	Secretariat	Month 4 and regular updates	March 2006
3a	Develop terms of reference and recruit membership of an appropriately balanced SG and EAP.	Operating SG & EAP	Secretariat	Month 3	February 2006
3b ²	Develop terms of reference and recruit membership of an ARC WG and Comms WG	ARC	Secretariat		Autumn 2007
4	Organise and report on three MCCIP workshops to be advised and discussed (to help deliver objectives E and F).	Reports	Secretariat	To be discussed	
5	Organise and coordinate meetings and consultations to assemble community views.	Community Views	Secretariat	Month 4 and ongoing on an ad hoc basis.	March 2006
6	Compile briefing notes on key issues and other frequently asked questions.	Briefing notes	Secretariat (Stakeholder / EAP input)	Month 4 and as required.	March 2006
7	Demonstrate proactive and effective ongoing communications with marine stakeholders.	To be discussed	Secretariat	Month 4 and bi-annual evaluation.	March 2006 initially

² Additional to original set of milestones

8	Synthesise data and information to provide an accepted view on the impacts of climate change on all aspects of the marine environment (i.e. an Annual Report Card for marine climate change impacts).	Annual Report Card / Special Topic	Secretariat with input from stakeholders, SG and EAP	Month 11 and yearly afterwards	November 2007
9	Gather, test and publicise guidance and other tools for assessing climate change vulnerability and adaptation to impacts in a marine context.	Guidance	Secretariat	Month 12 with yearly updates	November 2006
10	Respond to requests for coordinated advice on monitoring the marine environment to measure climate change impacts. (i.e. to underpin the ARC).	Give advice	Secretariat with input from EAP	Month 21	August 2007
11	Revise the MCCIP business plan and produce a report of Secretariat progress towards MCCIP objectives.	Revised business plan	Secretariat to coordinate with SG input	Month 12 and yearly updates	November 2006
12	Deliver recommendation on priority areas for research based on workshops, literature review and expert input.	Recommendations for research	Secretariat with input from	Month 24 and 48	November 2007/2009
13	Produce a strategic integrated assessment of risks and impacts of climate change on the marine environment.	Strategic integrated assessment	Secretariat (input from SG / EAP)	Year 4/ 5	2009/2010

MCCIP activities and outputs

As MCCIP develops, other deliverables will be taken forward. These have included / will include

- The development of a dedicated newsletter.
- The production of an Annual Report Card (or similar related products).
- The development and implementation of a communications strategy.
- Topic specific workshop and seminars to explore marine climate change in more detail.

- Developing links with industry
- Acting as a response centre for marine climate change enquires
- Exploring applications of future UKCIP marine change scenarios
- Explore inputs of MCCIP into current processes (QSR, Charting Progress 2, IPCC, UKMMAS etc)

These will be developed as time permits and the need is identified.

Finances

The following provides a summary of total expenditure per annum and combined income from partners over the current lifetime of the project.

Table 1
EXPENDITURE TO DATE (Nov 05 to Apr 2009) AND FUTURE BUDGET:

	Expenditure and future budget	Expenditure Aggregate	Confirmed Income	Confirmed Income Aggregate	Running balance
FY05/08	£281,575	£281,575	£261,480	£261,480	-£20,095
FY08/09	£93,682	£375,257	£150,255	£411,735	£36,478
FY09/10	£112,182	£487,439	£110,500	£522,235	£34,796
FY10/11	£57,500	£544,939	£21,500	£543,735	-£1,204
Total	£544,939			£543,735	-£1,204

1. This table was updated at the end of the 2008/2009 financial year to take into account agreed budgets for FYs 08-09, 09-10 and 10-11 from 2008 SG financial papers. The future budget was revised based upon actual spend during 05-09 and estimated costs for prioritised deliverables. Previous versions of the business plan had been based upon the original tender document.

2. MCCIP Secretariat has the financial capability / mechanisms to manage project funding over lifetime of the project to allow for over / under commitment in a given financial year.

Funding in kind

It is noted that many agencies provide in-kind support. It should also be noted that the success of the key outputs of the partnership are through multiple in-kind contributions by individuals. For example for the production of the ARC over 70 leading scientists provide approximately 1 day of their time (a conservative estimate) in proving outputs through an iterative process. This contribution alone could be estimated in the tens of thousands of pounds in monetary terms.

Key personnel of the various partner organisations and of other expert organisations have provided in-kind contributions by way of staff time to allow for attendance at MCCIP meetings, advice on MCCIP outputs and other general advice / input as necessary. For MCCIP to succeed and for stakeholders to be engaged fully, further contributions of a non-financial nature are also required and welcomed. Any partner or organisation wishing to contribute in this way should contact the Secretariat.

Business strategy for 08/09

The business strategy exists to define what elements of the agreed objectives that MCCIP is delivering well, or no delivering on as yet and support the consensus approach on which activities to deliver on into the future.

For a full list of completed, ongoing, repeat and future proposed tasks please refer to Annex C.

Future proposed Tasks

Coherent with the project activities defined in the original Task list for MCCIP the following Tasks have reviewed as not having been developed / implemented.

Task	Description of task
B1	Identify the best mechanisms of identifying change and assessing the significance of impacts
B2	Identify links between knowledge on terrestrial and the marine environment
B3	Integrate terrestrial evidence with marine change
E1	Assess the evidence (including a gap analysis) with regard to environmental objectives
E2	Develop work to gain evidence to fill the (significant) knowledge gaps
E3	Integrate evidence for terrestrial and deep marine change with that for shelf seas (conceptual and computer models)
E4	Identify needs to meet objectives
E5	Assess strategies
E6	Monitor progress against the objectives
D1	Provision of a guidance document/web-site "Principles of good climate

	adaptation” based on UKCIP example.
D2	Provision of a guidance document/web-site “How will marine climate change affect your organisation”.
D3	Provision of a guidance document/web-site “How will marine climate change affect your region”.
D4	Provision of a marine scenarios ‘gateway’ on the MCCIP web site.
D5	Construction of a database complimentary to the existing UKCIP ‘searchable’ database of adaptation case-studies’. Population of the database with suitable marine examples.
D6	Adaptation of UKCIP tools (‘Adaptation-Wizard’, costing methodology, risk-uncertainty & decision making framework) specifically for marine purposes.
G1	Assess the breadth and effectiveness of existing marine and climate monitoring programmes, including an audit of who does what and where?
G2	Examine the potential for knowledge transfer from terrestrial climate change monitoring programmes to the marine environment, and relevant international maritime experience elsewhere.
G3	Prepare a report for the MCCIP to outline costed options and recommendations for the development of an integrated marine climate impacts programme for the UK.

In considering the need to pursue these Tasks it is important to ensure these activities are still relevant in the present day. The degree of relevancy may be determined by previously existing or new processes that incorporate climate (or marine climate) related themes, e.g.:

- IPCC
- Charting Progress 2
- UKMMAS
- OSPAR QSR
- Climate Change Bill
- Marine Bill

These Tasks (and their deliverables) will be reviewed in relation to their proposed timing with the above processes and making sure that they will add value by regular communications with relevant focal points.

Outreach activities

Where are we now?

High level policy makers and scientists engaged.

Where do we want to get to?

Increase impact and uptake of outputs into decision-making processes around the UK.

How will we achieve this?

Targeted strategic engagement at:

- UKCIP-MCCIP workshop with regional climate change co-ordinators (March 2008) and representation at the Regional Climate Change Co-ordinators meeting (June 2008).
- MCCIP adaptation workshop (Autumn 2008)
- Communications tied in with launch of UKCIP08 marine scenarios in November 2008

Engagement with industry

Where are we now?

Opportunities for increased engagement through conferences and inclusion of industry in partnership.

Where do we want to get to?

- To engage with industry with regard to their active involvement in MCCIP.

How will we achieve this?

Targeted strategic engagement at:

- MCCIP branded stakeholder workshop on adaptation to include industry proposed in the communication strategy for late 2008.
- Targeted conference presentations and papers for Bob Earll conferences (strong industry presence)
- 'Impacts of Climate Change on the Maritime Industry' conference ideal for developing those aspects of 'commercially productive seas', esp. shipping where our knowledge base is currently weak.
- Effects of climate change on the Worlds Ocean International Symposium

Fundraising for development of current / new products

Where are we now?

Currently MCCIP has not generated enough income to support all of its original proposed activities until the end of its proposed lifespan (see Finances section, page 6).

Where do we want to get to?

It would be favourable to ensure income for all of the project outputs / activities as defined by the SG.

How will we achieve this?

Potential solutions could include:

- Increased financial / in-kind support from existing members through strengthened lobbying for funds from the Secretariat.
- Financial / in-kind support from new members.

This/these solutions may be better achieved by:

Use of 'One page summary of benefits' to attract new partners, potentially from industry.

Mandating fundraising activities to an individual/group of individuals to plan and co-ordinate future internal and external fundraising.

ANNEX A – MCCIP Structure

Terminology

Partnership

The use of the word partnership for MCCIP does not constitute a partnership in law. Partner organisations are those organisations that commit time and resource to the project.

Current Partnership membership list

The MCCIP sponsoring partners (at June 2008) are:

- British Energy
- Countryside Council for Wales
- Department for Environment, Food and Rural Affairs
- Department of the Environment, Northern Ireland
- Environment Agency
- JNCC
- Natural England
- Scottish Environment Protection Agency
- Scottish Government
- Scottish Natural Heritage
- States of Guernsey
- States of Jersey
- Welsh Assembly Government

The following organisations contribute to the work of MCCIP through the provision of technical and scientific expertise on marine climate change issues:

- Centre for the Environment, Fisheries and Aquaculture Science
- Climatic Research Unit, UEA
- Department for Business, Enterprise & Regulatory Reform
- Fisheries Research Services
- Joint Nature Conservation Committee
- Marine Environmental Change Network
- Natural Environment Research Council
- Royal Society for the Protection of Birds
- Sir Alistair Hardy Foundation for Ocean Science
- The Crown Estate
- UK Climate Change Impacts Programme

Partnership Agreement

Contractual obligations of the partner organisations have been documented either in a Partnership Agreement document or Letter of Agreement, as

appropriate. The duties of Cefas (as the MCCIP Secretariat) and the partner organisations are specified in these. To co-operate and foster the implementation of MCCIP, the partners commit to doing everything in their reasonable power to achieve the implementation and successful outcome of the project. Partner organisations also have equal member status with each other and with in-kind contributing organisations.

Steering Group

The primary purpose of the Steering Group (SG) is to deliver the MCCIP aim. For detail of the SG terms of reference please refer to Annex B.

The SG recognises 3 working groups that will be commissioned and empowered to deliver the MCCIPs objectives. This will be within a framework agreed, monitored and directed by the SG.

General points regarding the Working Groups (WGs)

1. The chair of each group will report to the full SG meetings that it is envisaged will take place twice per year.
2. Administration. The MCCIP secretariat will continue to provide administrative functions as identified in the business plan, including programme management, finance co-ordination, action tracking and presentation and circulation of papers to the SG.
3. The Secretariat, chair of SG and chairs of WGs will meet on an ad hoc basis as necessary to ensure smooth running and completion of any actions required.

The formation of distinct groups will require and should provide significant opportunity for current SG members to maintain hands on involvement where desired. In addition, it is envisaged that each working group will co-opt other members to the group on an ad hoc basis as required. For example, particular input may be requested from communication experts for the ARC-WG or CO-WG.

The 3 working groups are as follows:

Annual Report Card Working Group (ARC-WG)

The aim of the ARC working group of the SG will be to deliver the ARC (or similar related products). The ARC-WG will take direction from the SG and invite the scientific submissions. They will review and amend the synthesis of the first Secretariat edits to the submissions with particular reference to the presentation/Clear English of the output ready for submission to peer review and scientific editorial by the EAP. This Secretariat developed the Special Topic for agreement by the full SG. The chair of the ARC-WG will report back to the SG on the activities of the WG and agree activities and direction for development of the ARC and request inputs from the SG members as appropriate.

The ARC-WG will consist of the Secretariat, and other members drawn from the SG. (Total time commitment to be approx 6 days per year [consisting of 4 meetings + 2 days prep outside meetings] with potential for additional 2 days per year on particular tasks outside meetings).

Current membership: Matt Frost (MECN), John Baxter (EAP chair), Paul Buckley (MCCIP secretariat), Martyn Cox (Scottish Government), Stephen Dye (MCCIP Secretariat), Andy Greaves (Defra, MCCIP chair), Dan Laffoley (Natural England), Emily Lewis-Brown (WWF), Matt Service (AFBINI), Craig Wallace (NERC), Emma Verling (JNCC)

For details of the ARC-WG terms of reference please refer to Annex C.

Communications and Outreach Working Group (CO-WG)

MCCIP's prime aim is the communication of sound science on observed and projected climate change impacts in the marine environment to policy advisors and decision makers. The CO-WG will oversee the Secretariat communications and outreach tasks and ensure that outreach tasks maintain a high profile within the activities of MCCIP. To include but not be limited to: managing communications strategy, overseeing website, newsletter, any conference and workshop activities. It will oversee launch planning for major MCCIP outputs. It will assess and comment on the impact/value of MCCIP communications. The chair of the CO-WG will report back to the SG on the activities of the WG and agree activities and direction for and request inputs from the SG members as appropriate.

The CO-WG will consist of the Secretariat Officer, and appropriate members drawn from the SG. (Total time commitment to be approx 4-5 days per year (2 meetings + input between meetings)).

Current membership: Paul Buckley (MCCIP Secretariat), Olly Watts (RSPB), Peter Tangney (EA) and Jo Sampson (Defra).

For details of the CO-WG terms of reference please refer to Annex D.

Expert Advisory Panel (EAP)

Will review the scientific content of MCCIP outputs. Enabling MCCIP to maintain science quality as its foundation for relevance and credibility. The chair of the EAP will report back to the SG on its activities and request inputs from the SG members as appropriate.

An Expert Advisory Panel (EAP) will provide advice on specific scientific issues. In considering the appointment of an effective EAP, the following criteria are essential:

- Key role to provide Science Quality Assurance to briefing notes and the Annual Report Card (concept of 'quality' and 'rigour').
- Consider varying the membership depending on the development of issues/focus of MCCIP outputs
- Make use of technology for group activities, i.e. email rather than a succession of meetings.
- Members to be geographically spread.
- Make use of the networks of the core group to develop a directory of key specialists (using 'journal review model')
- Use open calls for gathering information relevant to briefing notes (which should be specific in nature so filtered information is supplied).
- Small group of scientists who will be paid an honorarium for their input.

For details of the EAP terms of reference please refer to Annex E.

Secretariat

MCCIP is to be supported by a Secretariat, which will be a central source of information and focal point. It will be responsible for the daily running of MCCIP, gathering information and producing a clear overview of effort and outcomes.

The permanent Secretariat began 01 December 2005 and will continue until 30 November 2010. A review is scheduled for Year 3 (2008), details of which are yet to be agreed, however, the intention is to maintain the partnership through to at least 2010.

The MCCIP Secretariat has the following staff resources available to it for the period December 2005 – November 2010:

1. Paul Buckley MCCIP programme manager (100 days pa)
2. Stephen Dye MCCIP secretariat scientific focal point (60 days per annum)
3. Technical Support Pool Cefas staff (40 days pa)

As estimated by tender in November 2005 (with the addition of the new project manager). As the partnership matures and its requirements from the Secretariat change the resources will need to respond flexibly as determined by regular reviews of staffing profile.

Roles and responsibilities of the MCCIP Secretariat will be to:

- Ensure aims and objectives for MCCIP are met.
- Prepare papers and products for and attend meetings with SG and draft minutes of these meetings.
- Ensure completion of all deliverables within the Business Plan, to include:
 - Producing relevant reports, briefing packs and annual report cards.
 - Gathering information on research & monitoring gaps and disseminating such information.
 - Developing and maintaining the MCCIP web site.
- As the MCCIP matures, new opportunities, challenges and priorities will arise, and it will be the role of the Secretariat to respond to them, by synthesising, transferring and sharing knowledge and information as required.

Activities that the Secretariat leads on:

- Service secretariat: co-ordinate planning of meetings, production of minutes, key documents (relating to an agreed business plan).
- Report on finances, planning and risk.
- Support and co-ordination in the delivery of agreed products (currently the ARC, newsletter).
- Production of and dissemination of key documents.
- MCCIP website: Updating / production of newsletter.
- Attendance at conferences and production of conference papers.
- Production of MCCIP posters at conferences and in Defra buildings.
- Respond to requests for parliamentary level advice
- Respond to and co-ordinate requests for climate data and impacts/adaptation information.
- Participation in other related initiatives e.g. UKCIP / MECN / CarbonOps.
- Planning and participation of workshops.
- Promotion of MCCIP. Through writing of articles / conference attendance and presentations, through regional Partnerships and at Cefas facilitated meetings.
- Production of database of stakeholders for dissemination of products etc.
- Co-ordinate and participate in the production of MCCIP related articles to other media outlets.

Activities that the secretariat is not responsible for/does not lead on:

- The secretariat cannot operate outside of the costed and itemised ToR/contract. For example, to produce ad-hoc reports.
- The secretariat is not the decision maker body for e.g. dates / venues for launch of products, initiation/cessation of products, direction of MCCIP, who attends meetings, who joins Partnership, who are on the WGs or EAP (the status of orgs and their applicability to join MCCIP).
- The secretariat is not the sole / principal fundraiser.
- The secretariat does not provide data or additional research.
- The secretariat does not have a MoU with other organisations within the Partnership to respond to additional requests for services / products.
- The secretariat is not an external lobbying group. Internally the secretariat will provide suggested approaches and solutions to procedural and process related matters.

ANNEX B - Steering Group (SG) - Terms of Reference

1. **AIM**

The primary aim of the SG is to provide a mechanism to deliver the MCCIP aim.

The SG's role is to own MCCIP, to drive and develop the MCCIP vision and facilitate and co-ordinate the work of the partners and secretariat.

2. **OBJECTIVES**

The objectives of the Steering Group are to:

- Oversee the development of the Partnership.
- Receive progress updates on MCCIP products and Expert Advisory Group discussions.
- Provide Communication Quality Assurance for the Annual Report Card and Briefing Notes, to ensure messages are clearly communicated and fit for purpose.
- Oversee the arrangements for partner and stakeholder engagement.
- Provide feedback on the performance of the MCCIP Secretariat.
- Provide a forum for partners in climate / marine related developments.
- Assign tasks to working groups as appropriate.
- Agree to required updates in the Business Plan.
- Monitor and evaluate implementation of the Business Plan.

3. **MEMBERSHIP**

Each Partner organisation will be entitled to be represented on the Steering Group. Partners comprise those stakeholders who have contributed financially to the partnership and/or are committed to providing a significant contribution "in kind".

The Steering Group will be chaired by Defra and supported by the MCCIP Secretariat.

Each member should be able to commit long-term the necessary time to Steering Group activities to maintain stability and functionality. In the event of a member not being available for a meeting, they may nominate one deputy who will have full delegation for the meeting. Additional people may only be invited to the meeting with the Chairman's permission.

4. **REPORTING ARRANGEMENTS**

The SG will report to policy makers and decision makers across Government Departments and the Devolved Administrations.

5. MEETING

Steering Group Meetings will be held approximately twice per year – one in Spring/Summer to consider priorities for the coming FY and one in Autumn/Winter for reviewing and forward planning. Meetings will usually be hosted by one or more members at different venues across the UK.

Meeting papers will be co-ordinated by the MCCIP Secretariat and sent to members at least 2 weeks in advance of the meeting wherever possible.

6. COMMUNICATION AND REVIEW

Minutes of the SG will be made available on the website.

These Terms of Reference will be reviewed at least once a year at the Spring/Summer Steering Group meeting.

ANNEX C - Annual Report Card Working Group (ARCWG) - Terms of Reference

1. **AIM**

The primary aim of the ARC-WG is to oversee the operational delivery of MCCIP scientific products, including the Annual Report Card and Special Topic.

The ARC-WG liaises with the Expert Advisory Panel (EAP) to provide quality assurance to scientific products, ensuring they are based upon the best available science and presented in a balanced way.

2. **OBJECTIVES**

The objectives of the ARCWG are to:

1. Develop concepts for MCCIP scientific products as requested by the SG.
2. Oversee the production of major MCCIP science outputs (ARC; Special topic).
3. Identify scientific experts who are most appropriate to provide input to the scientific evidence base for MCCIP products.
4. Develop ideas for the format and style of final deliverables.
5. Liaise with the EAP, through the EAP chair, to agree on appropriate peer review structures for MCCIP scientific products.
6. Develop briefing material for contributing authors.
7. Develop briefing material for the EAP.
8. Ensure that the messages provided in our scientific products are concise and easily understandable by our audience.
9. Contribute to proof reading of final products.
10. Respond to requests from the media following the launch of MCCIP scientific products.

3. **REPORTING ARRANGEMENTS**

The ARCWG will report back to the SG as an agenda item at every SG meeting. For all scientific products, the ARCWG will present a production plan for sign off by the SG. Once the production process is completed, the SG will be requested to sign off final products for launch.

4. **MEMBERSHIP**

Each member should be able to commit long-term the necessary time to ARCWG activities to maintain stability and functionality. In the event of a member not being available for a meeting, they may nominate one deputy who will have full delegation for the meeting. Additional people may only be invited to the meeting with the Chair's permission. The chair of the EAP is considered to be a member of the ARCWG.

Chair: Matt Frost (MECN)

Members: Adam Mellor (AFBINI)
Dan Laffoley (Natural England)
Craig Wallace (NERC)
Andy Greaves (Defra – MCCIP Chair)
Martyn Cox (Scottish Government)
Emily-Lewis Brown (WWF)
Paul Buckley (MCCIP secretariat)
Stephen Dye (MCCIP secretariat)
Evanthia Karpouzli (Scottish Government)

EAP Chair: John Baxter (SNH)

5. **MEETINGS**

Meetings will be held approximately twice a year – once to set out the production plan for scientific products and once to prepare text for the final deliverables.

The ARCWG chair, EAP chair, MCCIP chair and MCCIP Secretariat will be required to attend a further meeting to finalise text for our scientific products.

It is anticipated that the time commitment for ARCWG members will be 4 days per year (2 days for meetings and 2 days for preparation before meetings – mostly to pull out headline messages).

The ARCWG chair will be required to commit an extra 2 days per year (1 day for the Chairs meeting with 1 days preparation).

Meeting papers will be co-ordinated by the MCCIP programme officer in consultation with the ARCWG chair.

ANNEX D - Communications and Outreach Working Group (COWG) - Terms of Reference

1. **AIM**

The primary aim of the MCCIP is to provide a co-ordinating framework for UK for the transfer of high-quality marine climate change impacts evidence and advice to all those with interests in the marine environment, including policy advisors, decision-makers and those with direct, practical interests.

The role of the CO-WG is to oversee MCCIP communications and outreach tasks and ensure that outreach tasks maintain a high profile within the activities of MCCIP and are in line with resource availability.

Individual partner organisations will continue to be responsible for carrying messages to their various audiences.

2. **OBJECTIVES**

The objectives of the COWG are to:

1. Oversee the launch of major MCCIP outputs (ARC; Special topic).
2. Provide feedback on how messages for MCCIP are penetrating and being acted upon by the marine stakeholder community.
3. Develop a communications strategy (to incorporate a media handling strategy).
4. Develop the website and review the outputs of MCCIP news.
5. Highlight events where MCCIP is being represented by our partner organisations through an MCCIP 'events calendar'.

3. **REPORTING ARRANGEMENTS**

The COWG will report back to the SG as an agenda item at SG meetings.

4. MEMBERSHIP

Each member should be able to commit long-term the necessary time to COWG activities to maintain stability and functionality. In the event of a member not being available for a meeting, they may nominate one deputy who will have full delegation for the meeting. Additional people may only be invited to the meeting with the Chair's permission.

Members: Paul Buckley (MCCIP programme officer)
Olly Watts (RSPB)
Jo Sampson (Defra)
Peter Tangney (EA)
Kathryn Humphrey (Defra CEOSA)

5. MEETINGS

Meetings will be held approximately three times a year as decided by the chair and will be used to set out the communications agenda for the year and to finalise the launch plans for MCCIP products (ARC; special topic).

Meeting papers will be co-ordinated by the MCCIP programme officer in consultation with the COWG chair.

ANNEX E - Expert Advisory Panel (EAP) - Terms of Reference

1. **AIM**

The EAP of MCCIP will provide scientific support to the SG.

2. **OBJECTIVES**

The objectives of the EAP are to:

- Provide strategic scientific direction and advice in support of the development of MCCIP products
- Provide scientific Quality Assurance for MCCIP products to ensure messages are based on the best available science and presented in a balanced way.
- In the longer term, EAP members will be encouraged to utilise their individual networks to develop a directory of key specialists to provide peer review of MCCIP scientific products.

3. **MEMBERSHIP**

Appointments to the EAP will be made by the MCCIP SG adopting the criteria detailed in annex B (page 15) of the Business Plan. Other factors to be considered include are:

- that EAP members will be internationally recognised experts based within the UK and are likely to be operating at director level within their respective organisations.
- the EAP will have an independent Chair, who will be appointed to provide leadership and continuity, and who will be accountable to the SG.
- EAP membership is likely to change depending on the development of Marine Climate Change issues and the focus of briefing notes and other MCCIP outputs.

The EAP administrative aspects will be supported by the MCCIP Secretariat who, for instance, will provide written summaries of their activities.

4. **REMUNERATION**

EAP members will not receive payment in lieu of their time for EAP activities. However, reasonable travel and subsistence expenses plus a small honorarium will be considered.

5. **COMMUNICATION AND REVIEW**

- Use of email and video conferencing will be encouraged to minimise the need for additional meetings.
- Papers of the EAP will be made available on the website, with the exception of working drafts relating to peer reviewing.
- These Terms of Reference will be reviewed at least once a year by the MCCIP SG.

ANNEX F - Detailed task list for each objective and current delivery status

Key Objective A

To develop and maintain a coordinating framework for marine partners in Great Britain and Ireland.

(Supplementary Objective F)

To assemble community views and partner requirements for climate change tools and information (e.g. marine scenarios of climate change).

Task	Description	Status	Notes
A1	Preliminary discussions and institutional strengthening.	Complete	The SG needs to consider whether it is at a stage where the partnership can (or financially needs to) grow
A2	Establishment and running of Secretariat.	Ongoing	Cefas has been running the secretariat since March 2005
A3	Progress establishment of an operational Steering Committee.	Complete	SG meet 2-3 times per year and working groups have been established.
A4	Set-up and service of an Expert Advisory Panel.	Ongoing	EAP have been peer-reviewing the ARCs and will review the special topic.
A5	Building on the work already undertaken by the MCCIP Interim Managers, by developing a well-recognised 'brand' and communications protocol for the initiative.	Ongoing	MCCIP branding established mid-2006 and communication strategy frequently updated.
A6	Design, launch and maintain an interactive website.	Ongoing	Website re-designed in Mid-2006 and revamped Jan 2008. Supports online ARC with full reviews and will support the special topic.
F	Ongoing objective met via the effective administration and running of the Secretariat.	Ongoing	In 2007, communication and scientific product working groups established to focus resource and improve administration of these key activities.

Key Objective B

To build the knowledge base and consolidate evidence of marine climate change impacts.

(Supplementary Objective E)

To identify gaps in knowledge and recommend priority areas for research.

Task	Description	Status	Notes
B1	Identify the best mechanisms of identifying change and assessing the significance of impacts.	Ongoing	Proposals set out on future format of ARCs and delivery of other products at March 2008 SG. Special Topic production plan signed off - May 2008 SG.
B2	Identify links between knowledge on terrestrial and the marine environment.	Outstanding	Some information on this through coastal ARC topics. MECN – ECN workshop could feed into this. Future work with UKCIP. Coastal interface to be explored in special topic.
B3	Integrate terrestrial evidence with marine change.	Outstanding	MECN – ECN workshop could feed into this. Future work with UKCIP. Coastal interface to be explored in special topic.
B4	Disseminate evidence, receive feedback and monitor progress.	Ongoing	ARC 2006 / 2007-2008 delivered and questionnaire surveys conducted. Website maintained, newsletter every two months and representation at conferences and workshops.
E1	Assess the evidence (including a gap analysis) with regard to environmental objectives.	Outstanding	Matt Frost and Stephen Dye to produce a preliminary paper on research priorities.
E2	Develop work to gain evidence to fill the (significant) knowledge gaps.	Outstanding	There is a section in all ARC2007 reviews on knowledge gaps but this needs a more considered approach. Special topic will help to identify knowledge gaps through exploring ecosystem linkages. Adaptation workshop?

E3	Integrate evidence for terrestrial and deep marine change with that for shelf seas (conceptual and computer models).	Outstanding	Longer term objective.
E4	Identify needs to meet objectives.	Outstanding	Longer term objective.
E5	Assess strategies.	Outstanding	Longer term objective.
E6	Monitor progress against the objectives.	Outstanding	Longer term objective.

Key Objective C

To create effective mechanisms for the synthesis and transfer of marine climate change knowledge and information from the scientific community to policy advisers and decision-makers.

Task	Description	Status	Notes
C1	Consult wider MCCIP network about preferred mechanisms (e.g. web pages, bulletin boards, seminars) for synthesis and transfer of knowledge from the scientific community to policy advisers and decision-makers. To include the format and content of the stipulated Annual Report Card.	Ongoing	Task met through Papers submitted for SG meetings, feedback from working groups and questionnaire surveys for the SG and wider network. ARC production plan and final product signed off by the SG. Special Topic production plan signed off at the May 2008 SG. Evidence on MCCIP work submitted to the parliamentary select committee
C2	Agree preferred mechanisms with MCCIP Steering Committee.	Ongoing	Responsibility for identifying preferred mechanisms given to the communications working group who feedback to the SG and update the MCCIP communication strategy for sign off by the SG.
C3	Explore relationships and linkages with other related programmes (e.g. MECN).	Ongoing	Links established particularly between MCCIP and MECN, NERC Rapid, Regional CC partnerships, EA CC adaptation work and UKCIP through joint workshops and involvement in product delivery (e.g. UKCIP08). ROI invited to the SG and joint report with carbon-ops in progress.
C4	Produce preferred products to	Ongoing	MCCIP branding signed off by

	agreed project brand and standards (in line with Communications Strategy).		SG in mid-2006 and applied to delivery of ARCs. Website re-designed in line with branding standards. Proposals set out on future format of ARCs and delivery of other products (including the special topic) at the March / May 2008 SGs.
C5	Review regularly to agreed quality standards, especially regarding scientific rigour and translation for policy community.	Ongoing	EAP review the scientific rigour of the ARC and feedback to the SG on the review process. ARC questionnaires to stakeholder community and discussed at targeted workshops / conferences.

Key Objective D

To facilitate uptake of tools and strategies to assist stakeholders in developing and assessing adaptation strategies.

(Supplementary Objective G)

To advise on the development of an integrated marine climate impacts monitoring programme.

Task	Description	Status	Notes
D1	Provision of a guidance document/web-site "Principles of good climate adaptation" based on UKCIP example.	Outstanding	Biodiversity Strategy's climate Change Adaptation (CCA) workgroup to feed into this in 2008. Guidance to be sought from UKCIP. MCCIP adaptation survey and workshop to inform cross-sectoral adaptation and highlight good practice.
D2	Provision of a guidance document/web-site "How will marine climate change affect your organisation".	Outstanding	Currently work is focussed on impacts evidence, adaptation strategies to follow later in the programme. Guidance to be sought from UKCIP. Adaptation workshop given go ahead to proceed (if self-funding) at the May 2008 SG. MCCIP adaptation survey and workshop to inform within

			sector adaptation and highlight good practice.
D3	Provision of a guidance document/web-site "How will marine climate change affect your region".	Outstanding	Currently work is focussed on impacts evidence, adaptation strategies to follow later in the programme. MCCIP-UKCIP Regional workshop (March 2008) helped identify regional adaptation issues and MCCIP presented at the regional co-ordinators meeting June 2008. MCCIP adaptation survey and workshop to inform regional adaptation and highlight good practice.
D4	Provision of a marine scenarios 'gateway' on the MCCIP web site.	Outstanding	Gateway likely to be available late in 2008 with completion of UKCIP08. Need to see how the gateway from UKCIP works for marine users and if it needs adapting in any way.
D5	Construction of a database complimentary to the existing UKCIP 'searchable' database of adaptation case-studies'. Population of the database with suitable marine examples.	Outstanding	UKCIP are looking to identify a marine user (Cefas – through Stephen Dye have agreed to take forward), this was also considered as part of the march 2008 UKCIP-MCCIP regional co-ordinators workshop and at the March / May 2008 SG meetings. Could be part of an MCCIP adaptation workshop developed by the COWG. Case studies to be identified though adaptation survey and adaptation workshop.
D6	Adaptation of UKCIP tools ('Adaptation-Wizard', costing methodology, risk-uncertainty & decision making framework) specifically for marine purposes.	Outstanding	MCCIP working with UKCIP on user requirements for UKCIP08. Tools workshop for UKCIP marine users possible in late 2008.
G1	Assess the breadth and effectiveness of existing	Outstanding	Longer term objective.

	marine and climate monitoring programmes, including an audit of who does what and where?		
G2	Examine the potential for knowledge transfer from terrestrial climate change monitoring programmes to the marine environment, and relevant international maritime experience elsewhere.	Outstanding	Longer term objective.
G3	Prepare a report for the MCCIP to outline costed options and recommendations for the development of an integrated marine climate impacts programme for the UK.	Outstanding	Longer term objective.