UK- Environmental Observation Framework

14th Management Group Meeting 10.00-15.30 14th October 2011 Room J, Polaris House, Swindon

Meeting aims:

- 1. Discuss and agree the direction and focus of UK-EOF and the thematic areas to scope.
- 2. Agree the governance and practical mechanisms for delivering UK-EOF priorities over the next 18-24 months.

DRAFT Note of Meeting

Attendees:

Doug Wilson EA (Chair)
Cathy Johnson DECC

lan Davidson EEA / GMES / SEIS

Keith Porter/ Andy Nisbet NE **JNCC** Lawrence Way Lindsey Rogers WERH Liz Fox Defra Mary Barkham **LWEC** Michael Schultz/Sally Reid NERC Peter Stephenson **ERSC** Peter Costigan Defra

Richard Howe FC (10.00-13.30)

Richard Walmsley EA
Beth Greenaway UK-EOF

Amber Vater UK-EOF (notes)

Andrea Sharpe UK-EOF

Apologies

Ali Price Met Office
Bruce Truscott Met Office
Caryn Le Roux/ James Skates WG
David Allen CCW
Gwyn Rees NERC CEH
Nathan Critchlow-Watton SEPA

Joanna Drewitt SG

Ruth Boumphrey UK Space Agency

1. Welcome and introductions

1.1. The Chair welcomed Members to the 14th UK-EOF Management Group Meeting and introductions were given. Meeting aims were delivered with emphasis on the proposed new direction of work and how this would be governed.

2. Update and progress

2.1. Beth provided an overview of the work achieved, meetings attended and impacts of UK-EOF since the last meeting. UK-EOF has been involved in a variety of work across the partners and many of the UK-EOF tools were now being drawn upon. The

14th UK-EOF MGM

- Chair congratulated the secretariat on the work achieved and suggested Paper A was a useful summary of the scope, involvement and impacts of the UK-EOF.
- 2.2. Members were asked to note the UK-EOF Programme Manager position and consider what action needs to be taken to minimise the impacts on the programme when the secondment ends. Mary and Doug agreed to discuss offline.

ACTION 1: Mary and Doug to discuss the Programme Manager role, 16th December 2011

- 2.3. The Work Plan in Paper A must be considered and possibly revised in the light of the theme discussions to ensure work loads were achievable.
- 2.4. The UK-EOF finances were noted and Members referred to Central Desktop for full records. It was noted that NERC were currently reviewing finances and therefore the ability to carry forward under spend over between financial years may be an issue in the future. Beth explained the underspend was likely to be required for updates to the catalogue in the next 12 months which may involve a significant overhaul as a result of the INSPIRE Directive and therefore significant investment.

3. Agreeing Scoping study topics

- 3.1. Amber gave an overview of methods and tools used to identify potential themes.
- 3.2. Andrea gave an update of the existing Citizen Science theme with lessons learnt and recommendations for next steps. Members agreed in principle actions should be pursued. However existing reviews to understand volunteer motivations may be sufficient and this part may become an exercise in transferring that knowledge to a broader audience. It was agreed that the secretariat would reconsider the scope for the review and ensure that it answers the questions posed by the organisations who may not traditionally be working with volunteers. There can be many lessons learnt from the likes of JNCC and NE that other organisations could benefit from.

ACTION 2: Secretariat to reconsider existing work undertaken into motivations of volunteers and send the citizen science PID to the MG for review 31st October 2011

- 3.3. An overview of the analysis of information in the catalogue and the scoring against headline issues was presented. Members were given an opportunity to review some of the major conclusions from both analyses. There were some helpful discussions and Members felt that this was exactly the sort of role UK-EOF should be playing highlighting issues from the facts that Members can discuss.
- 3.4. The wealth of information held in the catalogue along with other evidence gathered has begun to be used in earnest. This has highlighted the gaps in data and where records are incomplete. Members agreed to review the list of outstanding records where the funder is unknown or where there is no start date. It was also agreed that the results from the catalogue analysis would be written up in a summary report celebrating the successes of the catalogue and what information it can begin to reveal and where the limitations are.
- 3.5. Members discussed whether the tools used in these analyses were fit for purpose. It was suggested that some of the analysis was not showing what members would expect and therefore this should be taken into consideration when choosing the themes. It was concluded that whichever themes were agreed, an effort should be

made by Members to ensure the relevant information required was accurate, whether it is catalogue metadata or organisational scores in the assessment against need.

ACTION 3: Secretariat to send a list of records without funders or start dates to Members for review, 4th November 2011

ACTION 4: Members to review the list of records with unknown funders and return to the secretariat to update the catalogue by 9th December 2011

ACTION 5: Secretariat to produce report summarising the conclusions that can now be drawn from the content of the catalogue, 16th December 2011

- 3.6. Theme A 'Maximising the value of Observations' and the potential outcomes of this theme were presented. The review has shown that all records can be scored against at least one Headline Issue and therefore could all be valuable for something. In addition there are very few which are only valuable for one issue. Members discussed the pros and cons of taking the lower scoring activities and looking at them in more detail to see how and why they are apparently not being used or valued much by members. The lack of scoring that had been undertaken by Members is a major obstacle since finding the lowest scoring activities depends on making many assumptions. It was suggested that effort should be focused on the more valued records greater gains are more likely to come from the larger or jointly funded programmes which can be more efficiently carried out, including sharing infrastructure, data collectors etc. In addition the low scores would be most useful to individual organisations to assess the usefulness of these less critical records. It was agreed that the finer detail was not as useful as the higher level programme information. The conclusion was this is not a useful theme to pursue at this time.
- 3.7. Theme B 'Finding efficiencies Headline Issue led themes' was presented by Andrea (Paper B). From the scoring it appears that nearly all the 8 headline issues have about 100 programmes or activities that are considered critical for answering that. In addition there are between 100 and 1100 that could be relevant. Members were vocal about the scope of the proposed issues to investigate under this theme.
- 3.8. Looking at these numbers and considering the priority issues, 3 themes should be considered:
 - The impacts of environmental change on marine and terrestrial biodiversity, ecosystems and ecosystem services (Issue 7)
 - Pressures on all environments in the light of population growth and associated pollution (Issue 1)
 - The consequence of environmental change on fisheries, agriculture, food security and water supply (Issue 4)
- 3.9. Although biodiversity stands out as having over 300 critical issues of relevance there is already a significant amount of work being done in the biodiversity area and there may not be scope for UK-EOF to add much value here.
- 3.10. Issue 4 is very broad and the scope needs to be narrowed. Water security was seen as an important issue where there was considerable work being undertaken at present and an area where UK-EOF could add value. Mary suggested that stronger links be made with the LWEC resource challenge steering group and the Water Research Information Framework so that UK-EOF could add value to this group.

- 3.11. There were no major drivers for a review of Issue 1 at this time and indeed this would require input from organisations external to the group. Focusing on the natural environmental sciences would be more useful to member at this time.
- 3.12. Theme C 'Legislative observations' was considered by Members as a useful but not priority, theme. Over 700 of the records in the catalogue are labelled 'legislative' or 'statutory' records of which 50% are publicly funded. 325 records are only used for this purpose, and many legislative records were not scored by members, suggesting they are not of the highest priority. Investigating these observations and establishing if they can either be made or useful or stopped could be a valuable exercise if there was a real driver for the results and / or there is a focus on specific legislation e.g. air pollution Ian suggested that an upcoming DG Environment White Paper and the ongoing SEIS implementation plan may provide an opportunity to raise this in Europe however others considered that it would take a long time to get any real conclusions from this sort of work with DG Environment. It was concluded that 'wins' would be hard to achieve through this theme but it could be taken forward if the evidence of how effective current legislative observations were fully understood and if a clear understanding of what is actually used for reporting was evident.
- 3.13. Theme D 'Climate Observations' and the potential theme outcomes were discussed. With over 970 records tagged as potentially relevant to this issue there is a wide scope for investigating if for example they are all relevant, which ones are really of climate 'quality' and which observations underpin the climate research. This is a real issue for the LWEC Climate Challenge group and since the UK-EOF had taken over the responsibility of reporting from GECC and the GCOS review had identified that many climate scientists lack knowledge of how their work fits into the wider landscape. UK-EOF could be useful in a knowledge exchange role. Some members were concerned that the scope may be too wide and there are already many activities in the climate area. Therefore there needs to be strong leadership from DECC who chair the LWEC Challenge Group.
- 3.14. Theme E 'Coincidence mapping & long term monitoring networks' was explored in two parts. Andy Nisbet presented NE work to identify a network of sites for long term biodiversity and climatic observations and then Amber outlined some options for how UK-EOF could build on the methodologies and tools to move towards different outcomes.
- 3.15. So far NE has acquired the network of sites for more than 60 monitoring activities. They have then prioritised 34 of these as most relevant to their aims of finding the locations of a network of long term biodiversity and climate monitoring. These sites would be the focus for collaborative work particularly data sharing such that the most science and understanding of environmental change can be understood.
- 3.16. The results (of the 34 activities), mapped on a 2km grid indicate that the most obvious next step is a dialogue between NE and EA since there are over 11,000 squares where they both have sites. Although this could be usefully expanded to cover the wider Defra network and fulfil actions from the ALB Review as a result. Many other conclusions can begin to be drawn but the next step is a dialogue between the activities owners. This could be facilitated by UK-EOF hosting a workshop. Lawrence added that JNCC are investigating where voluntary observations take place and proposed this could be useful to apply to the NE work. NE was also asked to consider using a nearest neighbour analysis to investigate if this was useful for focusing on site coincidences.

3.17. Members agreed this work should continue to be supported by UK-EOF and Members were willing to support NE in their long term monitoring network vision. The devolved administrations would be involved in later stages of the development of the theme but could still apply the methodologies and techniques to their own information.

ACTION 6: Lawrence to liaise with NE about adding voluntary observation sites to the coincidence mapping exercise, as appropriate

ACTION 7: NE to consider using nearest neighbour analysis in site coincidence work

ACTION 8: Secretariat, NE and EA to organise the coincident mapping workshop (with others from Defra Network) and to consider the next steps in a PID, 11th November 2011

- 3.18. The mapping coincidence tool and also be used for other purposes and Members were asked to consider the remit for looking at all/ other observations and/or other organisational priorities. The work would involve the secretariat mapping additional site data and investigating coincidences where sharing of data collection or infrastructure etc could be achieved.
- 3.19. Defra and EA were keen to use this to look for potential efficiencies in the collection of the data as opposed to the sharing of the data in the NE example. Ensuring all the Defra network sites were included in the initial NE mapping was seen as a priority. Members were encouraged by both proposals and supportive of the potential outcomes that could be achieved through this theme.
- 3.20. After lunch the group reviewed each theme against a set of criteria;
 - Is there a clear need?
 - Can UK-EOF add value?
 - Is the scope definable?
 - Is it tangible (time bound)?
 - What is the resource availability in UK-EOF and Member orgs?
 - Who can lead?
- 3.21. The following priorities were agreed;
 - 1. Coincidence mapping
 - a. for long term monitoring networks (NE and UK-EOF work) –led by NE Andy Nisbet and Rich Walmsley EA
 - b. for efficiencies in data collection across the Defra network
 - 2. Water security as an Issue led theme led by LWEC WRIF Dan Osborne via Mary Barkham
 - 3. Climate observations led by DECC and the Climate Challenge Steering Group Cathy Johnson / David Warrilow
 - 4. Legislative observations led by Peter Costigan Defra

Citizen Science should be taken forward as a high priority as this is already well advanced.

ACTION 9: The lead to develop a PID for each theme in priority order, 11th November 2011

ACTION 10: All Members to support the themes, if relevant, and ensure that requests for updates for supporting evidence, and calls for advice or to attend meetings, are answered (as required)

3.22. The work plan was discussed in light of these priorities. It is important that the core secretariat work should be maintained (e.g. the catalogue as the core evidence base) whilst pursuing the themes as appropriate. The catalogue could require significant updates and potentially an overhaul in the next 12 months to ensure it is INSPIRE compliant. A review of the future catalogue needs would be collated to cover options for development requirements. Members supported this action and were keen to ensure the catalogue is developed as a trusted source for environmental observation information.

ACTION 11: Secretariat to reissue the work plan with the 4 thematic scoping studies included as well as with an idea how resources are split for discussion at the 6th MG Teleconference

ACTION 12: Secretariat to review catalogue upgrade requirements and options for the next 12 month and document for Members consideration, 16th December 2011

3.23. The UK-EOF financing observations paper written with Sir John Beddington's office was discussed. Members agreed that further investigating the barriers to long-term funding of observations was necessary but they needed to have strong senior leadership. Members requested the John Beddington paper should be distributed within the group. The investment studies that UK-EOF had tried to gather information for in the past had not been successful and this is a separate issue.

ACTION 13: Secretariat to send paper written for John Beddington's office to Members, 11th November 2011

ACTION 14: Members to discuss funding mechanisms and the potential role for UK-EOF at the 15th MGM (date TBC)

- 4. Mechanisms for delivering UK-EOF priorities
- 4.1. General discussion about how the UK-EOF should be governed and maintained was lead by the Chair. There is an expectation from LWEC that the group can make decision and be the point of reference for all observation issues. At the launch of the UK-EOF there were a set of major issues to address and LWEC asked how some of the bigger challenges would be addressed.

Members felt that whilst it was easy to see how external players could think that there should be a simple solution and UKEOF can change the way all organisations think, the reality is not the same. Members were not always able to make decision on behalf of their organisations, but were willing to ensure the right people were contacted and informed of areas where their input was required. The group itself can not be the ones able to make spending decions but it can

- Provide the information for those decisions
- Facilitate the discussions in a neutral forum
- Encourage the right people to be involved
- 4.2. It was suggested that the expectations of the partners board should be lowered and that membership could be opened up to involve others within larger organisations

14th UK-EOF MGM

what may be able to contribute to the group. A note on how the UK-EOF will operate will be produced by the Secretariat.

ACTION 15: Secretariat and Chair to produce a note on how the UK-EOF will operate, 11th November 2011

Action 16: Defra to investigate if a climate representative wished to join the group, as appropriate

4.3. Andrea highlighted that Member co-funding agreements were taking months to be returned. This is a lengthy process, drawn out by procurement procedures but the agreement was the same as 2008. The 2011/12 agreement would be sent and discussed at the 6th MG Teleconference.

ACTION 17: Members to raise any issues with the new cofunding agreement at the 6th MG Teleconference (date TBC) so that issues can be ironed out before the start of the next financial year

4.4. Several communication issues that been raised recently to the UK-EOF secretariat. Beth reminded Members of their responsibility as Management Representatives to ensure UK-EOF messages were being filtered through their organisations, to both peers and senior colleagues.

5. Member updates

- 5.1. Michael provided a brief update of how the NERC National Capability review had progressed. Some decisions had already been made public and are available to view on the NERC website. Other decisions were still under review. Pat Nuttall would be attending the LWEC Partners Board meeting on 22nd November 2011.
- 5.2. UKSA review No update was provided.

ACTION 18: Secretariat to send UKSA update to Members, if received

- 5.3. Peter gave an overview of the outcomes and positive feedback from the Defra Cross Network collaborative workshop. The workshop emphasised Defra's drive for integration of evidence collection and use and the enthusiasm for working together. It was noted that the UK-EOF and NE mapping exercise were highlighted and well received as good examples.
- 5.4. Mary gave an LWEC update and distributed the scorecard. Mary explained how UK-EOF fitted directly into LWEC's objective 11, and where it crossed many other objectives. There will be an LWEC mid-term review (March 2013) and UKEOF were asked to consider how the impacts of UK-EOF could be captured and provide feedback for this process when necessary. The ongoing LWEC Envirobase review was also noted.
- 5.5. CAMERAS No update was provided.

6. International aspects

6.1. A GCOS update was provided by Cathy. Andrea was thanked for her extensive work on the consultation. The draft outcomes will be circulated in the near future and will be signed off by the LWEC Climate Change Steering Group.

- 6.2. Ian Davidson provided Members with an update from GMES, stressing recent issues regarding funding mechanisms post 2014 at European level but noting that delivering and developing services would continue as normal at least until 2014. The second user forum meeting was due to be held next month. Liz is seeking input from UK parties as there is a clear opportunity to improve what is input to GMES and how the GMES services could be improved. Members were also reminded of the 8th November meeting in London to discuss and the in-situ data the UK has been asked to contribute to GMES.
- 6.3. Liz provided a GEO update. How the UK will continue to coordinate its input into GEO in beyond March 2012 when the UKGEO project ends needs further discussion. One possible suggestion is for this to become a role of UKEOF and therefore this needs decisions from the UKEOF Members. It was agreed that Liz would provide a paper to discuss at the 15th MGM. The importance of joining up with the EIONET was also stressed. It was noted that Christine Holleran (Defra) was now responsible for SEIS and EIONET.

ACTION 19: Liz to produce a discussion paper for UK will coordinate its input into GEO after the UKGEO project ends in 2012 at the 15th MGM 15th January 2012

7. UK-EOF and the data world

- 7.1. Beth reviewed recent work undertaken by the secretariat to contribute to EIF. It was acknowledged that a significant amount of resource had been put into EIF from the secretariat and Members agreed that no further resources should be allocated until the business plan and/ or a way forward had been agreed by senior colleagues. There is an obvious role for UK-EOF to enable some of the work packages; however there is currently no resource to take this forward. The next EIF Steering Group will be held late October/ early November.
- 7.2. The UK-EOF had also been working with the EA and Kieran Millard from HR Wallingford to review the draft INSPIRE EMF Annex III specification. The results will be submitted to the EC as part of their consultation process. The next DAG meeting will discuss these comments and the opportunities and implications for UK organisations as well as for UK-EOF itself. The options will become part of the catalogue review to discuss at the next MGM (see Action 12).
- 7.3. Members discussed the need to have a critical look at the catalogue and establish which parts of the metadata collected from organisations is really used and needed by UKEOF or others and which are superfluous. There was also a discussion as to how this information is gathered in the future. All these aspects need to be considered alongside the INSPIRE implications.
- 7.4. Regarding GEO, UKEOF have been proactive (via Miles Gabriel) in global discussions regarding data license agreements and legal liability. The summary white papers are currently out for review. Ongoing input to the GEO data tasks is likely to be needed at more technical level to ensure the systems built are interoperable with the UK / European systems. Skills and resources needed should become clearer after the November plenary.

ACTION 20: Secretariat to drop EIF work until the business plan has been agreed (and further resources have been allocated to the team if work is to be undertaken by the secretariat in the future)

ACTION 21: Secretariat to critically review the metadata fields and the way data is injected into the catalogue in the light of the analysis of information and the INSPIRE EMF theme April 2012

8. Confirmation of direction and major messages

- 8.1. The Chair reviewed the major outcomes of the meeting and asked what messages members wanted to convey to Bob Watson on the 10th November and to the LWEC Partners Board. The following was agreed;
 - Update on work done so far
 - The proposed themes
 - Examples of success either direct or facilitated. The financial barriers letter for John Beddington would also be flagged as an important impact of UK-EOF
 - What is needed from Bob himself

It was agreed that it would be useful to highlight what we can now begin to answer with the tools available and that the issues can be narrowed down. However there was also a job to be done around expectation management. There could be an element of frustration that the UKEOF has not forced a real change in organisational thinking and the UKEOF Management group do not have all the answers around funding and using observations.

ACTION 22: Secretariat and chair to draft a short paper for Bob Watson, 3rd November 2011

ACTION 23: Members to consider examples of the impact of the UK-EOF internally and externally and provide these as one paragraph to the secretariat by 31st October

- 9. Actions, AOB, proposed dates / locations of next meeting(s)
- 9.1. Minutes from the 14th MGM and 5th MGT were agreed. Action 8 from the 14th MGM was acknowledged as ongoing due to the current LWEC Envirobase review. Action 7 from the 5th MGT was also carried forward.
- 9.2. It was agreed that the 6th MG Teleconference planned for the 30th November 2011 would be moved to avoid the Union strikes. The secretariat will send out a Doodle poll for new dates.
- 9.3. The Secretariat agreed to send out a Doodle poll for the 15th MGM to be held in January 2012.

ACTION 24: Secretariat to send out a Doodle poll for the 5th MG Teleconference that was scheduled for 30th November by 21st October 2011

ACTION 25: Secretariat to send out a Doodle poll for the 15th MG Meeting in January by 14th November 2011

Action	1	By Whom	By When
1	Mary and Doug to discuss the Programme Manager role,	Mary & Doug	16 th December 2011
2	Secretariat to reconsider existing work undertaken into motivations of volunteers and send the citizen science PID to the MG for review	Secretariat	31 st October 2011
3	Secretariat to send a list of records without funders or start dates to Members for review	Secretariat	4 th November 2011
4	Members to review the list of records with unknown funders and return to the secretariat to update the catalogue	All Members	9 th December 2011
5	Secretariat to produce report summarising the conclusions that can now be drawn from the content of the catalogue	Secretariat	16 th December 2011
6	Lawrence to liaise with NE about adding voluntary observation sites to the coincidence mapping exercise	Lawrence Way & Andy Nesbit	As appropriate
7	NE to consider using nearest neighbour analysis in site coincidence work	Andy Nesbit	As appropriate
8	Secretariat, NE and EA to organise the coincident mapping workshop (with others from Defra Network) and to consider the next steps in a PID	Secretariat, Andy Nesbit + others as required	2011
9	The lead to develop a PID for each theme in priority order	Peter Costigan, Rich Walmsley, Andy Nesbit, Ian Davidson, + non-EOF MG Members Rob Grew (EA), Dan Osborne (LWEC); David Warrilow (DECC)	2011
10	All Members to support the themes, if relevant, and ensure that requests for updates for supporting evidence, and calls for advice or to attend meetings, are answered	All Members	As appropriate
11	Secretariat to reissue the work plan with the 4 thematic scoping studies included as well as with an idea how resources are split for discussion at the 6 th MG Teleconference	Secretariat	6 th MG Teleconference
12	Secretariat to review catalogue upgrade requirements and options for the next 12 month and document for Members consideration	Secretariat	16 th December 2011
13	Secretariat to send paper written for John Beddington's office to Members	Secretariat	11 th November 2011
14	Members to discuss funding mechanisms and the potential role for UK-EOF at the 15th MGM	All Members	15th MGM
15	Secretariat and Chair to produce a note on how the UK-EOF will operate	Secretariat & Chair	11 th November 2011
16	Defra to investigate if a climate representative wished to join the group	Peter Costigan	As appropriate
17	Members to raise any issues with the new cofunding agreement at the 6 th MG Teleconference (date TBC) so that issues can be ironed out before the start of the next financial year	All Members	6 th MG Teleconference

18	Secretariat to send UKSA update to Members	Secretariat	As appropriate
19	Liz to produce a discussion paper for UK will coordinate its input into GEO after the UKGEO project ends in 2012 at the 15 th MGM	Liz Fox	15 th MGM
20	Secretariat to drop EIF work until the business plan has been agreed (and further resources have been allocated to the team if work is to be undertaken by the secretariat in the future)	Secretariat	As appropriate
21	Secretariat to critically review the metadata fields and the way data is injected into the catalogue in the light of the analysis of information and the INSPIRE EMF theme April 2012	Secretariat	April 2012
22	Secretariat and chair to draft a short paper for Bob Watson	Secretariat & Chair	3 rd November 2011
23	Members to consider examples of the impact of the UK-EOF internally and externally and provide these as one paragraph to the secretariat	All Members	31 st October
24	Secretariat to send out a Doodle poll for the 5 th MG Teleconference that was scheduled for 30 th November	Secretariat	21 st October 2011
25	Secretariat to send out a Doodle poll for the 15 th MG Meeting in January by 14 th November 2011	Secretariat	14 th November 2011

Theme Prioritisation

Theme		Is there a clear need?	Can UK-EOF add value?	Is the scope definable?	Resource availability in Member orgs?	Priority Given	Clear need = Clear lead
Citizen science (current theme) A - Maximising the value of Observations		Yes Yes	several examples of smaller area	Yes – initial scoping has provided several examples of smaller areas which can be looked at	?	= 1	EA Rob Grew
		No	?	Not at this stage	?	Do not peruse at this stage	
B - Headline Issue led themes:	i Issue 7 - The impacts of environmental change on marine and terrestrial biodiversity, ecosystems and ecosystem services	Yes	No	No		Do not peruse at this stage	
Finding efficiencies	ii Issue 1 - Pressures on all environments in the light of population growth and associated pollution	NO	?	?	?	Do not peruse at this stage	
	iii Issue 4 - The consequence of environmental change for human health, wealth and well being	yes	Yes – gap in knowledge of obs for water	Focus on water security		= 2	LWEC; Dan Osborne WRIF via Mary
C - Legislative observations		Marginal – from Europe and from reducing	Possible	Public sector funded observations for legislation only that are not highly valued		4	Defra Peter Costigan
D - Climate Observations Yes		Yes	Yes	GCOS focal point LWEC Challenge Steering Group needs		3	DECC/CCSG David Warrilow
E - Building a long term	i NE long term monitoring network	Yes	Yes – facilitation	Yes – NE project for long term obs		= 1	NE Andy Nisbet
monitoring site network for the UK	ii UK-EOF coincidence mapping for efficiencies	Yes	Yes – further analysis	Defra family activities first		= 2	EA Richard Walmsley