OUTCOME OF THE UK-EOF
'Sharing Environmental Observation Data "Think Tank"
9th September 2008 14.00 to 17.00 Nobel House London

[Please note that this meeting was held under the Chatham House rule so it has been drafted to preserve the principle of non-attribution and to capture the main conclusions and actions only.]

Consolidated Notes

Recognition of issues

1. The significant and complex issues facing environmental data sharing across the UK, (as set out in the background briefing paper, "Sharing Environmental Observation Data – the Issues", attached), were recognized and embellished. There were particular concerns over the lack of a top down, strategic approach to data management in the public sector as a whole, and lack of recognition of the role of data in enabling innovation. Data management is often treated as a "Cinderella" activity and poorly resourced in consequence. Overall this results in data being undervalued, poorly managed and not clearly licensed. In some cases there may be no recognition of what good data management even looks like.

2. Additional issues and examples were identified such as:
   (i) lack of a UK national spatial data infrastructure (SDI)
   (ii) a plethora of technical standards being developed without overall consolidation, ownership or overview.

What success looks like - better data, wider sharing

3. The panel generally agreed the vision of successful data management should be:

"people/organisations in UK plc actually share and reuse environmental data to inform policy decisions, expand knowledge, improve their responses to a changing environment, contribute to international activities and stimulate markets for innovation."

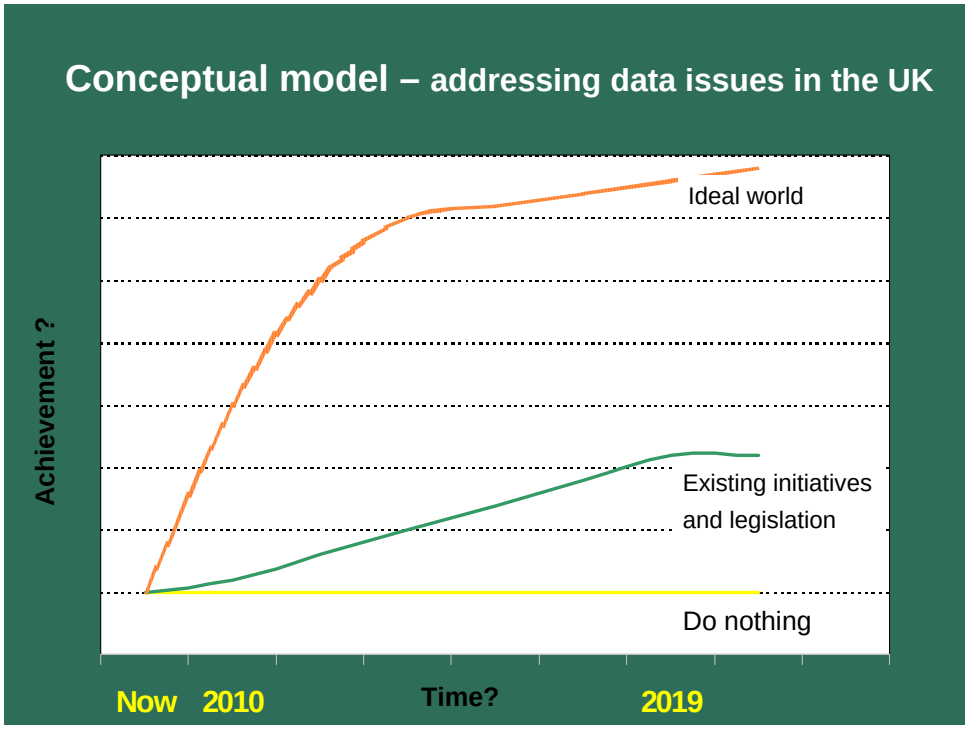
To achieve this there are three main criteria for success:

- *All data collectors adhere to best practice*
- *Each organisation has a transparent and well publicised data policy which balances open access with economic and societal pressures*
- *The data policy is underpinned by an infrastructure which allows data to be discovered simply and quickly*

4. The vision implies that a checklist of good data practice should be developed so that each organisation can take steps towards the ideal. An additional benefit of this list will be to help organisations maintain appropriate data security measures and contribute to enhanced information assurance.

5. The gap between where we are now and where we want to be when (as illustrated in Figure 1) was discussed.

Figure 1



Existing initiatives such as the INSPIRE Directive and SEIS should provide a powerful tool which applies to a large amount of public sector data and can accommodate long time series observation data (if resources are allocated to this). However, some environmental data is not required to be included until 2019, and the Directive does not apply to voluntary and private sector data; there is therefore a gap to be identified and filled. A business case for these activities should be written for Bob Watson to bring to the attention of Permanent Secretaries and other Chief Scientific Advisers.

6. The UK Location Strategy, once in operation, should also contribute to the achievement of improving overall UK data management, and the panel advised that close contacts should be maintained with INSPIRE, SEIS and the Location Strategy to exploit synergies and ensure the environmental data is fully considered.

7. Discovery, licensing issues and data quality must also be addressed. If discovery is easier, potential users will at least be able to make an assessment of its quality and suitability. It was acknowledged that practical solutions (such as a central catalogue of environmental observations, or each organisation having an Information Asset Register) depend on the continued supply of metadata and this can be resource intensive. These resources should be considered as part of each organisation's corporate governance.

8. Effective licensing is critical to success. If data is only available under licence, then the mechanism for generating licences should be resourced properly in order to deliver what the customer needs. Organisations should consider their licensing policy

and terms early in the process of data collection rather than treating them as an add-on.

9. The panel noted that the UK had much good quality data and there are many examples of good practice within various sectors of the community (eg the Atlantis initiative, National Biodiversity Network.) There is a clear role for UK-EOF in replicating and sharing good practice throughout the environmental observation community.

10. The panel emphasized that many data management and sharing issues were common across sectors and that environmental data was no different to any other type. A strategic approach to public sector data management - characterized as an "innovation agenda" involving big attitudinal and organizational changes - would bring benefits to environmental observation among others. Innovation in particular would benefit from the putting together of hitherto disparate data. Implementing good data policies, once written, is still discretionary and the business case for change should include how to enforce, regulate or monitor the uptake and delivery of data policies.

Questions and Answers – a steer on the best way forward

11. The panel was asked to consider a set of specific questions as a guide to future work, as follows:

Q1. If we should seek to construct an "ideal" data policy?

We should have a common understanding of how to manage and share data, and significant cultural change, from the top down, is needed to achieve this. Data policies will need to be developed as part of a suite of related activities. An "ideal" data policy on its own could not be implemented successfully without other significant changes. A check list could help.

Q2. If the scope of this work should cover all environmental data or be restricted to environmental observation data (including baseline surveys).

The scope should be kept broad. Environmental observations are only one part of the "managing data" picture. It is the putting together of disparate data – enabled by Enterprise Architectures and Web 2.0 technologies - that will produce new insights and innovation, and reuse of information will enable efficiency savings. However, the priority should be enabling discovery of environmental observation metadata.

Q3. Whether we should aim for minimum compliance by 2019 as required under INSPIRE – or whether we should be more proactive - such as 90% of data should be held under a transparent and effective data policy by 2013?

The UK's approach to INSPIRE is to go beyond mere compliance. We should look to bringing forward the inclusion of some environmentally related data categories into INSPIRE implementation. In addition, the Location Strategy will provide a vehicle for handling data with a geographic component and a potential governance model via the Location Council. However, these initiatives will not completely fill the gap between the present unsatisfactory situation and the "success" envisaged by the panel in Figure 1 (for example,

private and voluntary sector data will not be included.) A gap analysis is required to identify what still needs to be done and establish a mechanism for implementation.

Q4. If the environmental observation community (facilitated by UK-EOF) should seek clarification on where Government / Treasury intends the Trading Fund/Wider Markets Initiative model to apply, and where the "public good" model is preferred.

The Trading Fund model has significant implications for the environmental observation community. The BERR/Treasury review of the main Trading Funds is expected in autumn 2008, and the implications for the environmental observation community will be assessed then. Whatever the outcome, the community seeks greater transparency and clarification of contractual conditions. A particular need is to know which datasets are subject to downstream reuse restrictions (and what these are), and how much the licence costs.

Q5. How should charging policies be regulated? Are these issues better left to each funder of observations?

The meeting did not specify an answer to this question; but the general approach – that of seeking a high level strategic view – implies that a general change of the culture surrounding data management would bring about more transparent charging regimes. OPSI (Office of Public Sector Information) has a role in regulating the public sector information traders and this may be a vehicle for examining charging policies.

Q6. If we should seek to challenge and/or help enforce existing policies and best practice?

There was universal agreement that there are significant problems to be resolved and a Business Case should be developed to challenge the status quo. There are also beacons of good practice which can be shared. Sharing good practice within the environmental observation community is a fundamental part of UK-EOF's work.

Q7. If we should be proactive in the international and European areas, setting data standards such that the UK is seen as leading the way?

Yes. The UK is seen as being in the lead in several areas and this proactive approach should continue and be extended to other areas where appropriate and where resources are available.

Q8. If there should be a champion for this work at senior level – i.e. we establish an annual reporting process to show progress towards any agreed vision?

Senior support should be mobilised to make the case for the value of data and the risks associated with not managing it effectively. Chief Scientific Advisers and Permanent Secretaries should advise Ministers accordingly. One "champion" will not be enough as there needs to be a more general change of approach. However, in the first instance the meeting looked to CSA Defra to lead the senior engagement process. An appropriate reporting mechanism should be identified as part of developing the Business Case.

Q9 *Which organisations should be asked to take forward the actions identified in the discussion? Should this work be facilitated by UK-EOF? Should individual organisations lead on each action?*

Actions (see attached list) are brigaded into two key areas:

- developing a business case for changing the cultural and organisational value of public sector data
- improving discovery and sharing best practice.

A range of organisations and individuals are needed to take this work forward. Prof Bob Watson to follow up actions as part of his role as Champion of UK-EOF. Miles Parker to facilitate actions in his role as chair of the Location Council. Other participants to help UK-EOF identify and share best practice.

UK-EOF Secretariat
September 2008

See also:
Presentation slides
Background briefing paper, "Sharing Environmental Observation Data – the Issues"

List of Actions from the UK-EOF Data 'Think Tank'

Creating a Business Case for Change

ACTION 1. Develop a Business Case for 'Recognising and harnessing the value of environmental data' for presentation to Permanent Secretaries and Chief Scientific Advisers' Committee.

This should enable change in two main areas:

(i) enforcement and reporting of data stewardship at senior level in organisations;

(ii) a contract clause for new data procurement which ensures technical standards are used; IPR and ownership is resolved before collection; data is archived but accessible for future reuse; and legacy and physical datasets are protected.

The costs of the associated infrastructure needed will be considered in the business case. *(Bob Watson to present case, OS to assist with existing strawman, UK-EOF to draft)*

ACTION 1a. Undertake a gap analysis to clarify what may need to be done in addition to implementation of INSPIRE and the Location Strategy. *(UK-EOF and Phillipa Swanton; by end 12/08)*

ACTION 1b. Identify key data which need to be shared and accelerate them through INSPIRE programme *(UK-EOF and environmental observation community, Defra INSPIRE team)*

ACTION 1c. Assess Norwegian model of public data management *(Bob Watson, Miles Parker, Phillipa Swanton)*

Improving discovery and sharing best practice

ACTION 2. Develop a metadata catalogue of environmental observations. *(UK-EOF with ongoing support from organisations supplying metadata)*

ACTION 3. Identify and share good practice and replicate through organisations including via a community workshop in June 2009 including:

- Produce a checklist for "taking your data seriously"
- Host mini forums to discuss issues
- Promote development of Information Asset Registers;
- Adopt user friendly language and terminology
- Seek clarification and consolidation of technical standards from collection of environmental data to sharing spatial data.

(UK-EOF with support from organisations)

ACTION 4. Develop common understanding of IPR and licensing issues among community starting with an in-depth discussion at senior level *(Miles Parker, Richard Hughes, Charlie Pattinson, UK-EOF and partner organisations)*

ACTION 5. Place background briefing paper "Sharing Environmental Observation Data – the Issues", on web for general discussion and widening debate. *(UK-EOF)*

Attendees

Prof Bob Watson	(Chief Scientific Adviser, Defra) - **chair**
David Askew	(Manager of Science Services, Natural England)
Miles Parker	(Director, Evidence Programme Defra
Ray Boguslawski	(Deputy Director, Business Solutions, Defra)
John Custance	(Head of Environmental Statistics, Defra)
Ian Davidson	(Deputy Director, Evidence Programme, Defra
Phillipa Swanton	(Data Sharing Team,Defra)
David Lee	(SEIS Team, Defra)
Beth Greenaway	(Programme Manager, UK-EOF)
Debbie King	(Data Policy Advisor, UK-EOF)
Mary Barkham	(Head of Secretariat, ERFF)
Charlie Pattinson	(Head of Resources and Information Management, Environment Agency)
David Fry	(Data & Infrastructure Divisional Manager, DCLG)
Jordan Giddings	(Deputy Chief Scientific Adviser/Head of the CSAU, DfT)
Helen Jones	(Scientific Adviser, Scottish Government)
Richard Hughes	(Director of Information and Knowledge Exchange, British Geological Survey, NERC on behalf of Alan Thorpe CE NERC)
Mark Thorley	(Data Management Co-ordinator, NERC)
Vanessa Lawrence	(Director General and CEO, Ordnance Survey and advisor to Government on GI, surveying and mapping)