

Metadata for UK-EOF

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Aim



- To make sure everyone is aware that metadata means different things to different people.
- To show what metadata is needed for UK-EOF activities.

Metadata definitions

- Metadata – Data about data.
- Dataset – A set of data. Usual to group data into collections and describe them as a whole.
- Data – **noun**
 - **1** facts and statistics used for reference or analysis.
 - **2** the quantities, characters, or symbols on which operations are performed by a computer.
- **These are very general definitions!**
- **Key word is “about”. Metadata links and gives context to data.**

Types of metadata

- Discovery metadata
- Quality metadata
- Navigation metadata
- Fixity metadata
- Structure metadata
- Aggregation metadata
- Spatial / Temporal
- Bibliographic metadata
- Semantic metadata
- Context metadata
- Provenance metadata
- Reference metadata
- Annotation
- Documentation
- Usage metadata

These specific types of metadata are linked to particular uses or applications

More metadata definitions

- **Metadata schema** – a information template for describing things. For example, a contact has a name, fax, address, telephone number and email address.
- **Metadata application profile** – Extensions and restrictions to tailor the schema for a particular use. For example, in my address book I only care about name, address and birthday for my contacts.
- **Metadata encoding** – A way of writing the metadata

What's driving *UK-EOF* collection of metadata

- UK-EOF is trying to promote discovery and data sharing by cataloguing the UK environmental datasets and the projects that produce them.
- UK-EOF is trying assess the UK data management of its environmental data assets.

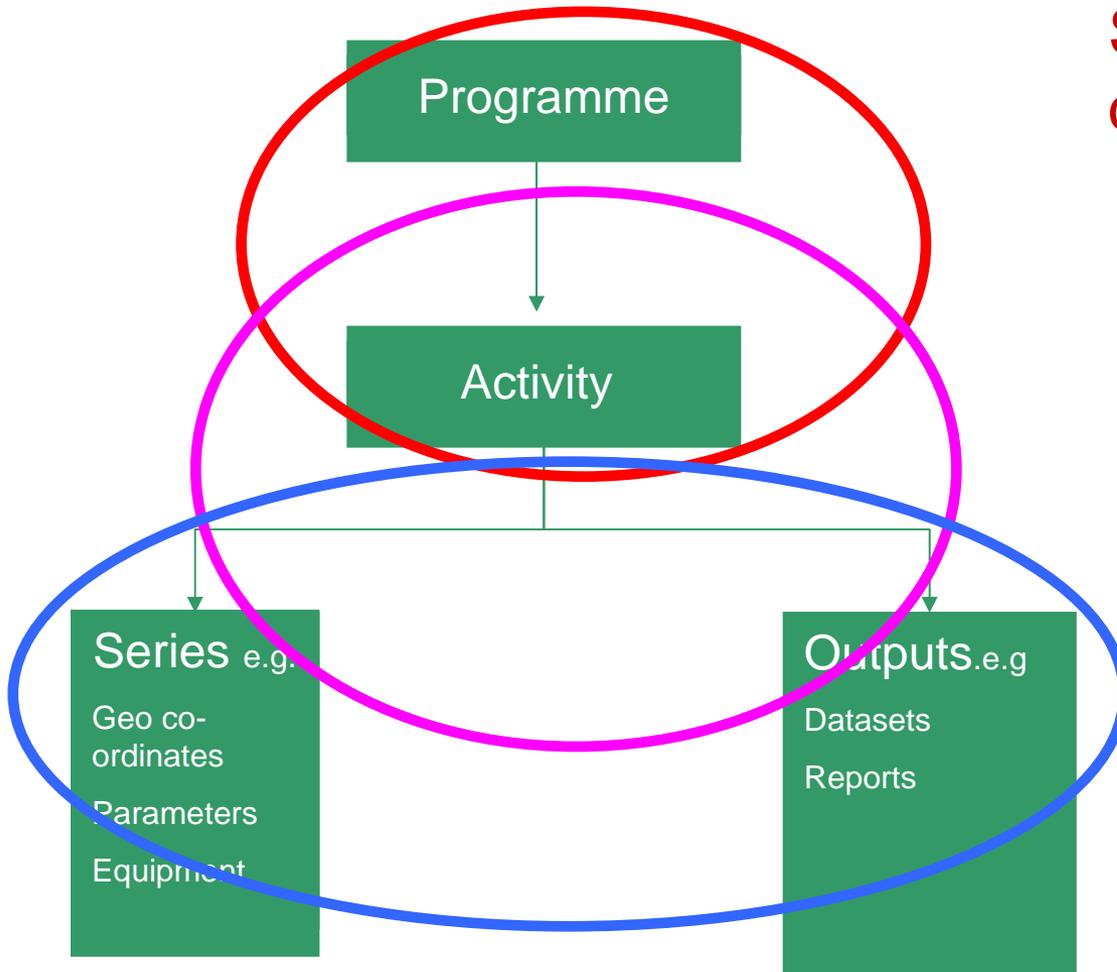


The UK-EOF uses

- **Scenario 1:** The UK-EOF secretariat is tasked with carrying out an **analysis of the environmental observation capabilities** of the UK to report to the ERFF Main Board and Defra Chief Scientist Bob Watson.
- **Scenario 2:** You are the manager of a programme that has identified a requirement to plan environmental observations. You will probably require investment for some new expensive equipment to do this or may be able to **coordinate this work with other similar activities**.
- **Scenario 3:** You are an environmental consultant carrying out an Environmental Impact Assessment and **need to know what previous surveys have been carried** out in a particular area and whether you can use the data area to inform any future planning applications.



Environmental Observations Catalogue



Scenario 1: analysis
of UK capabilities.

Scenario 2: coordinate
work with similar
activities.

Scenario 3:
discover previously
collected data.

Type of information	Requirements
1. Main information	
Unique id	A unique reference within organisation.
ERFF id	Unique ERFF ID (given)
Title	Full title of activity
Objectives	Provide the main objectives of the activity.
Description	General description of the activity.
Type of funding	Main source of funding e.g. Public/Private/Voluntary
Status	e.g. ongoing, proposed
Future funding status	Not secured/secured amount unknown etc
Environmental Domain	Of measurement or focus of activity specify the available options
Parameters measured	General should include measurement/s and matrix in which measured
Reasons for collection	General e.g. statutory, research, policy
Legislative drivers	Where appropriate any legislation driving the observation activity.
2. People – main contact	
3. Organisations associated with the activity/programme	
4. Financial Information	
5. Timings - start date & end date	
6. Data availability	
7. Data suitability	
Frequency of observations (temporal resolution)	Aspect of data suitability
Spatial resolution of observations	Aspect of data suitability
8. Geographical Information	
Geographical area data collected	Area over which data collection occurs
Geographical co-ordinates	Data collection co-ordinates covered by activity (i.e. for series level)

UK GEMINI metadata elements

- Title
- Alternative title
- Dataset language
- **Abstract**
- Topic category
- Keyword
- Date
- Dataset reference date
- **Lineage**
- West bounding longitude
- East bounding longitude
- North bounding latitude
- South bounding latitude
- Extent
- Vertical extent information
- Spatial reference system
- Spatial resolution
- Resource locator
- Data format
- Responsible organisation
- Frequency of update
- Limitations on public access
- Access and use constraints
- Additional information source
- Date of update of metadata
- Metadata language
- Metadata point of contact
- Unique resource identifier
- Spatial data service type
- Coupled resource
- Resource type
- Originating controlled
- Vocabulary Conformity
- Specification

Standards exist. Are they sufficient for this purpose



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Questions for the metadata breakout

- What information is needed to assess the UK capabilities?
- Does this information help you coordinate observation activities?
- Is this the right information to assess data suitability of data reuse?
- As a metadata provider do you have this information?

Summary

- Metadata is a broad term. Don't assume everyone is talking about the same thing.
- UK-EOF is trying to collate metadata about datasets, activities and programmes to promote data discovery and assess the UK data management of its environmental data assets.
- The breakout group is an opportunities to talk about the metadata needed and what issues there are in acquiring metadata.