The UK Marine Environmental Data and Information Network – MEDIN

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Content

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MEDIN in a nutshell

Not just another marine application or initiative that meets a specific need or driver!

Coordinates and encourages good management of data and information holdings across organisations and other thematic initiatives.

‘Working to Deliver Improved Access to and Stewardship of UK Marine Data and Information’

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Why is data management in marine sector so important?

Confidence in assessments and ability to detect trends limited
   By lack of access to data
   By lack of time to use existing data

MEDIN has grown from previous work that have been in operation since 1996 but new push as MEDIN since 2007

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How will MEDIN do it?

Seven interlinked work streams:
1. Network of marine Data Archive Centres (DACs)
2. Suite of standards for data and metadata, together with guidelines and tools.
3. Web portal, products and services
4. International awareness, coordination and data delivery to global data-bases
5. Resource and application development
6. Communications: outreach, forums, publicity
7. Management, planning and coordination
Discovery Metadata Standard

Compliant with the ISO19115 (Geographic information – Metadata), INSPIRE and UK metadata standards and uses the ISO 19139 schema set for encoding xml

Standard specifies use of certain vocabularies to make it ‘marine flavoured’

To test xml constraints a Schematron has been developed (compliant with ISO 19757 (Part 3) Information technology -- Document Schema Definition Languages (DSDL) -- Part 3: Rule-based validation – Schematron).
Discovery Metadata Standard

- On-line metadata generation tool
- ESRI Arc Catalogue plug in
- Submitting the standard to a joint oceanographic/meteorological commission

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Data Guidelines

Specific data types

Not as detailed as INSPIRE data specifications but where relevant ones are drafted we will ensure compatibility

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<th>MEDIN data guideline for sediment sampling by grab or core for benthos</th>
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<td>MEDIN Code</td>
<td>B01</td>
</tr>
<tr>
<td>Author(s)</td>
<td>M. Charleworth, B. Seeley, S. Wilkinson</td>
</tr>
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<tr>
<td>Reviewed by</td>
<td>MEDIN Data Standards Group</td>
</tr>
<tr>
<td>Date reviewed</td>
<td>1.2</td>
</tr>
<tr>
<td>Date approved and published on MEDIN website</td>
<td>11 June 2009</td>
</tr>
<tr>
<td>Data last checked for accuracy</td>
<td>30 July 2009</td>
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<td>This guideline defines the format of data and information produced from the collection of benthic samples using a grab or core. It used correctly the data will be readily used and reused. An xlsx template is provided if required. Sediment, Benthos, Grab, Core</td>
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Data Guidelines

Outcomes:

• Instil good practice amongst organisations
• Improve interoperability by organisations being able to import, export using this format
• Aid ingestion into DACs
• Be used in contracts
Controlled Vocabs

Promoting use of vocabs in specific themes via data guidelines and deriving new vocabs where required

Vocabs are available through 3rd parties or alternatively ‘served’ using the NERC vocab server developed in coordination with the european project SeaDataNet.

An API returning XML documents conforming to a standard schema (SKOS (Simple Knowledge Organisation system)) allowing interaction with generic tools

Governance and application follows the guiding principles of ISO19135 (Geographic information -- Procedures for item registration)

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Controlled Vocabs

Vocab thesaurus: http://seadatanet.maris2.nl/v_bodc_vocab/vocabrelations.aspx
Standard Governance

- MEDIN Standards WG meets every 4-5 months and in interim by e-mail, phone conference as required

- Range of people (geographically, organisationally and technically)

- Sets and oversees work programme following input from other WGs
The MEDIN Approach

Resources and Services

Metadata

Data

Discovery Portal

Application 1
(thermodynamic metadata)

Application 2
(end user spatial information)

Application 3
(thermodynamic evaluation metadata)

Application 4
(thermodynamic raw data)

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