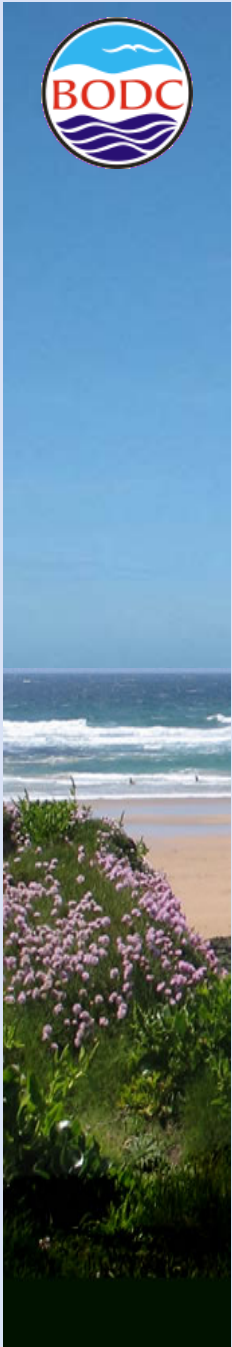




Vocabularies and EDIOS

Roy Lowry, Lise Quesnel, Terry Allen
BODC

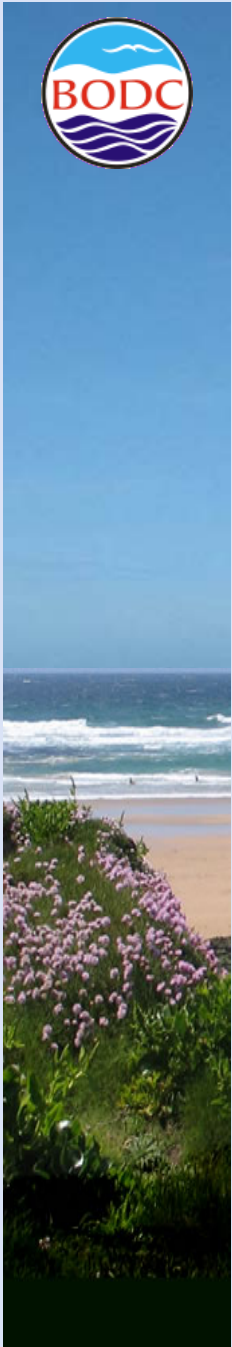




Vocabularies

➤ Content

- **Vocabularies now covering SeaDataNet, EMODNET and Geo-Seas**
- **Massive content development in 2010, particularly P011 (born 1987)**
 - * 1987-July 1st 2010 – 21,000 entries created
 - * July-November 2010 – 4,000 entries added





Vocabularies

- **Content Issues**

- **P011 size is causing server issues**

- Ways to reduce growth rate

- Recent push for method-independent codes (need formalised parameter-linked methods documentation to support this)

- SeaDataNet netCDF (e.g. spectra as 2-D arrays)

- Format that treats species as a parameter (could be done in netCDF, but biologists and netCDF may not mix!!)

- **P021 size is causing parameter discovery issues**

- Systematic term broadening and deprecation needed

- Input into this exercise will be appreciated

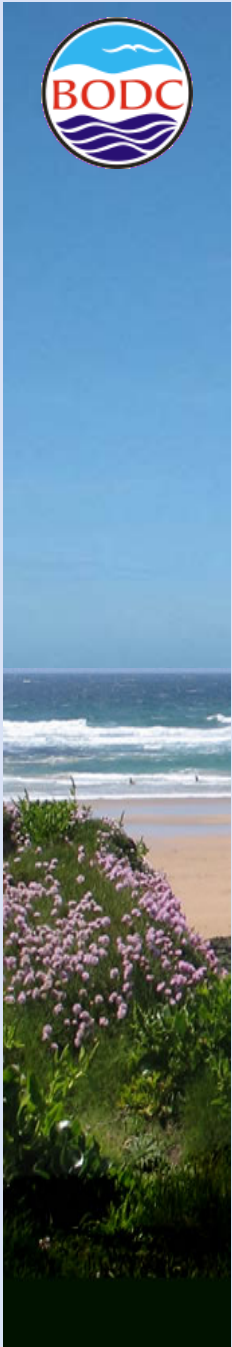


Vocabularies

➤ Content Issues

- **Maintenance Load**

- * Quite often 5-6 e-mail vocabulary requests per day
 - The simplest can take an hour to service
 - Some e-mail responses can take a couple of hours to prepare
 - A list of 300 'unmappable' geological parameters from IFREMER is taking a lot longer
 - Move into new domains can involve 20-30 e-mails to sort out the codes required for a handful of parameters
 - Many partners obviously cannot (or do not want to) undertake mapping to something the scale of P011

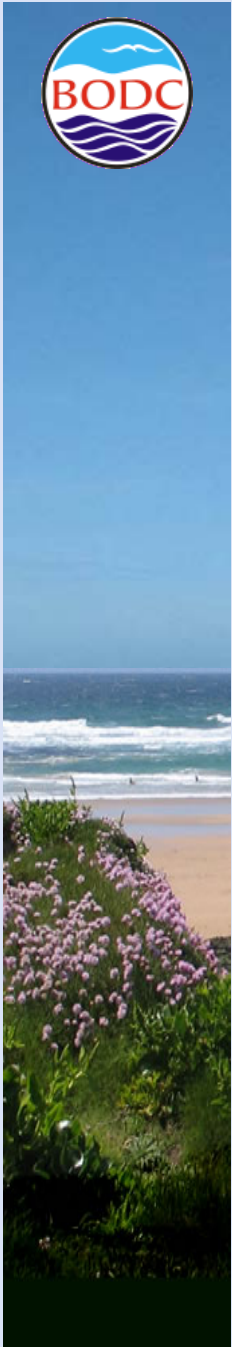




Vocabularies

➤ Maintenance Load

- **Not sustainable in current form**
 - I've got other work to do
 - * I am also partially retiring December 31st 2011
 - No travel
 - Very little external project work
 - * Need to find an alternative
 - User desk involvement?
 - » Triage queries, develop expertise, work with BODC vocabulary group
 - » Develop FAQ resources
 - User training?





Vocabularies

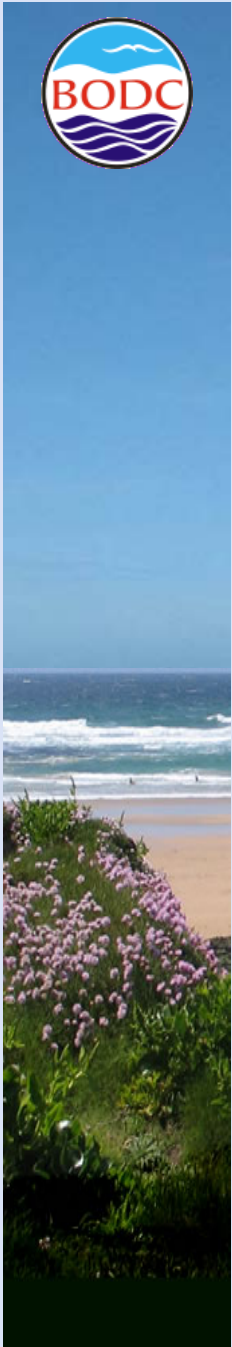
➤ Technology

- **Back Office Developments**

- * Support for:
 - External mappings
 - SKOS Top Concept
 - Multi-lingual concepts
 - External vocabulary editing

- **Front Office Developments**

- * Fully RESTful URLs (parallel namespace)
- * V2.0 API (totally independent to current version)
- * External editor extensions

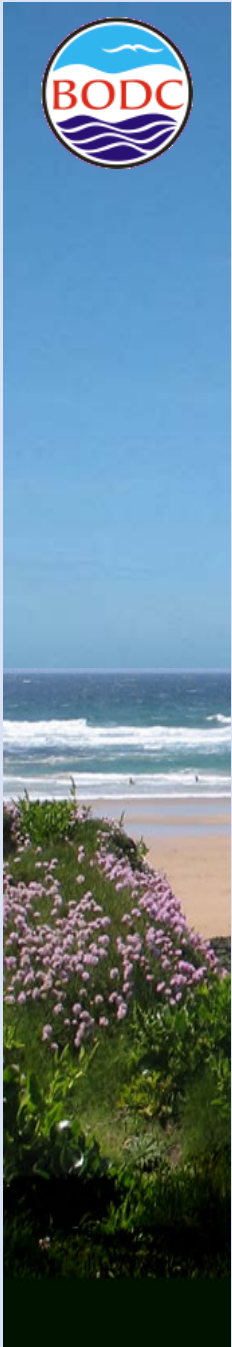




EDIOS

- **History**

- **First BODC SeaDataNet work was to upgrade the EDIOS master database schema (2006)**
- **Many unsuccessful attempts to shoe-horn EDIOS model into ISO19115**
- **Database schema used for UKDMOS (UK EDIOS: 268 programmes)**
- **A ‘best-fit’ XML schema was produced in 2010**
- **Import/export analysis between Oracle and XML schemas in Nov-Dec 2010**





EDIOS

- **Problem**

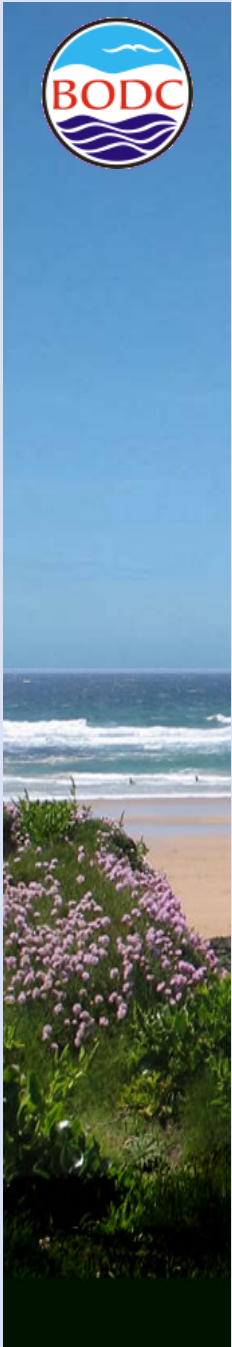
- **Oracle XML analysis revealed monster detail devils**

- Oracle columns unsupported by XML
 - Entity-relationship mismatches
 - XML elements unsupported by Oracle

- **Solution**

- **Major redesign of Oracle Schema**

- Unsupported Oracle columns left intact (managed outside XML)
 - Oracle entity-relationships redesigned to match XML
 - Oracle columns added to match XML





EDIOS

- **Work to be Done**
 - Oracle redesign (done Dec 2010)
 - Build new Oracle schema on development server (in progress)
 - Develop XML import/export against this (in progress)
 - Migrate Oracle schema to production server
 - Migrate UKDMOS content to new schema
 - Update storage to display schema migration script
 - Hopefully leave display schema unchanged

