

The BODC SeaDataNet Experience

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Benefits to BODC from SeaDataNet

Benefits fall into three categories

- SeaDataNet as an 'Agent of change'
- Infrastructure development
 - Developments supported by SeaDataNet
 - Infrastructure supplied by SeaDataNet
- Core business expansion



SeaDataNet as an Agent of Change

SeaDataNet has enhanced BODC's technical awareness

- International communication and collaboration, especially through the Technical Task Group

SeaDataNet has driven our addressing of legacy issues

- SeaDataNet develops a standard
- Systems developed subsequently conform to that standard
- Established systems inevitably contain holdings that don't conform
 - Some BODC examples:
 - » Contact details stored in a single plaintext field
 - » CSRs with no spatial information (Marsden Squares)
 - » Data issues described in documents but not flagged in the data
 - Addressing these issues has significantly strengthened BODC



Infrastructure Development

Developing infrastructure in collaboration with SeaDataNet has led to enhanced capability with a substantial cost saving for BODC

Specific examples:

- UKDMOS (EDIOS infrastructure)
- A tool that:
 - Assists the coordination of UK monitoring programmes for the UK Marine Monitoring and Assessment Strategy (UKMMAS)
 - Allows policy makers and organisations to maintain an overview of monitoring programmes for which they are responsible
 - Allows organisations to identify whether resources may be better coordinated
 - Allows analysis of whether data from UK monitoring programmes are sufficient to provide robust assessments of the marine environment for national and international legislation (e.g. MSFD and other Directives)



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Infrastructure Development

Specific examples

- EDMED
- A catalogue that delivers
 - BODC's primary data collection discovery
 - The basis for NERC marine and MEDIN data collection discovery
 - The means to deliver BODC and MEDIN discovery metadata to INSPIRE via UK data.gov
- NVS
- Controlled vocabulary management incorporating
 - Content development and governance
 - Back office storage
 - Standards-compliant distribution (SKOS and RDF)
 - A basis for intercontinental semantic interoperability through ODIP
 - Search client tools



Infrastructure Development

SeaDataNet software tools

- Further cost savings result from using rather than writing software
- Specific examples:
 - Mikado - heavily used in both data input form and batch modes in BODC's workflows
 - ODV - Visualisation tool brought closer to BODC's needs through work funded by SeaDataNet
 - odvSDNCFPOINT - the key to BODC's moving to delivery of data in CF-compliant NetCDF



Core Business Expansion

BODC's core business is facilitating additional science by making data available for reuse

SeaDataNet exposes BODC's data holdings to a wider audience

- **Through incorporation in EMODnet products**
 - Massive increase in the impact of BODC's data
- **Through downloads from the CDI interface**
 - Up to 7 transactions per month (May-August 2015)
 - Approximately 1000 CDI granules - data that cost around £1,000,000 to collect - per month (mean January 2014 to August 2015)



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Could SeaDataNet Have Done More?

SeaDataNet technical management communication has been based on

- Face-to-face meetings of the TTG
- TTG e-mail list server
- Communications outside the TTG
 - Technical changes resulting from conversations during meeting coffee breaks
 - Technical issues debated and decisions made in the SSC rather than the TTG
 - Could be described as opaque management



Could SeaDataNet Have Done More?

Problems with opaque management

- Issues can fall off the radar because progress isn't monitored
- Potentially valuable team input can be missed because the consultation base is too narrow

BODC's current internal technical management

- Introduced by Graham Allen in 2014
- Wiki-based
 - All can see what is happening
 - All can contribute
- Thought I'd hate it, but I love it

Might be worth a look for SeaDataNet III TTG

Hopes for the Future

SeaDataNet could help BODC develop further by:

Providing data publication support

- Strict versioning of data granules
- Access to previous versions

Developing usage metadata standards

- Development of a usage metadata content standard
- ISO19156 profiling for Observation Processes

Supporting automated CDI aggregation based on EDMED collections



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Conclusion

BODC today is a significantly stronger organisation than it would have been had it not been involved in SeaDataNet

Thanks for Your Attention



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