



National Oceanography Centre
British Oceanographic Data
Centre BODC

FAIRness assessment of vocabularies: Insights from the British Oceanographic Data Centre (BODC)

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What is the NERC Vocabulary Server (NVS)?


A semantic repository for standardised hierarchical terminologies used for the management of data in the marine and related domains

It stores and serves vocabularies, terms and relationships between terms in a human and machine-readable format.


Collections

Concepts

mappings



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[NVS Home](#) | [Vocabularies](#) | [Thesauri](#) | [Search NVS](#) | [SPARQL](#) | [Other Tools](#) | [About NVS](#)

NVS:

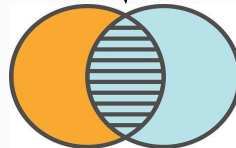
- Is managed by BODC at NOC
- Receives funding from NERC
- EU projects
 - (inactive) NETMAR, SeaDataNet, SeaDataCloud, ENVRI-FAIR
 - (active)
 - FAIR-EASE
 - Blue-Cloud
 - ENVRI-Hub-Next
 - LandSeaLot

Make data FAIR with FAIR vocabularies

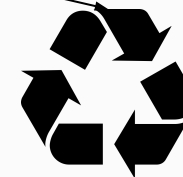
Annotate (encode) data with standardised
FAIR terminologies



Improve
Findable



Facilitate
Interoperable



Optimise
Re-usable

Participants

- Alexandra Kokkinaki - RDA VSSIG
- Gwenaëlle Moncoiffe -RDA -iadopt
- Violetta Paba

VMG

Support Action

FAIRness Assessment Challenge.

- 3 months
- 3 virtual workshops
- self-assess and incrementally improve the FAIRness of their selected outputs.
- mentors representing the various FAIRness assessment tools and methods

Participated in evaluating FAIRness via the Task Group FAIR Semantics of the RDA Vocabulary Semantic Services group.NVS with **Recommendations for Making a Vocabulary FAIR**, Feedback to the authors of the recommendations

Approach

Assessed the FAIRness of NVS using the following while keeping notes to provide feedback to the tool creators

- 10 Simple Rules:
 - Good starting point for inexperienced users
 - That are looking to publish a vocabulary
 - Minimum requirements
- Recommendations for Making a Vocabulary FAIR
 - Much more technical than 10 simple results
 - Suitable for already published and managed vocabularies
 - Advanced technical interoperability
- O'FAIRe:
 - Detailed assessment of semantic artefacts hosted by Ontoportal
 - Increased FAIRness **ONLY** by being part of the ontoportal through metadata provision
 - Importing your artefact in Ontoportal is a beneficial FAIRness exercise
- FOOPS:
 - Specialised for ontologies but not SKOS

Challenges encountered:

- Persistent URLs and Handles:
 - No Handle no PID ???
 - What other conditions and metadata should be present to consider a URL as a PID?
 - Handles will introduce confusion in our community
 - External dependencies -> Performance issues and availability
- Levels of Exposure of Semantic Artefacts:
 - Some tools are designed to expect metadata to be present at the lowest levels of an element. However, this metadata can often be derived from higher levels and does not necessarily need to be duplicated at every level of a resource

Impact

- FAIRness evaluation of our resources with others was very useful:
 - We confirmed that NVS is very well aligned with many of the FAIR principles for semantics
 - But we also realised that there is room for improvement
 - Align NVS concept schemes with the Ontoportal approach
 - Fix collection versioning
 - Addition of more metadata
- There is a gap in the automatic assessment of the FAIRness of vocabularies that needs to be filled



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Thank you