

Making SeaDataNet more fit for handling biological data

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So far, SeaDataNet has focused on data management and access for physical oceanography, marine chemistry (to support also the EMODNet Chemistry pilot), bathymetry (to support the EMODNet Hydrography and Seabed Mapping pilots), and geology and geophysics (to support the Geo-Seas project and the EMODNet Geology pilot). Many partners in SeaDataNet are also involved in data acquisition and management for marine biology. A number are member of the Marine Biodiversity and Ecosystem Function (MarBEF) network of excellence and contributing to EurOBIS (European Ocean Biogeographic Information System), managed by the Flanders Marine Institute (VLIZ).

One of the objectives of SeaDataNet II is to undertake actions to make SeaDataNet better fit for handling marine biological data sets and establishing interoperability with biology infrastructure developments (Fig. 1). Therefore an analysis is undertaken in SeaDataNet II together with actors from the initiatives mentioned above as to how SeaDataNet can be best adapted for also handling marine biological data sets.

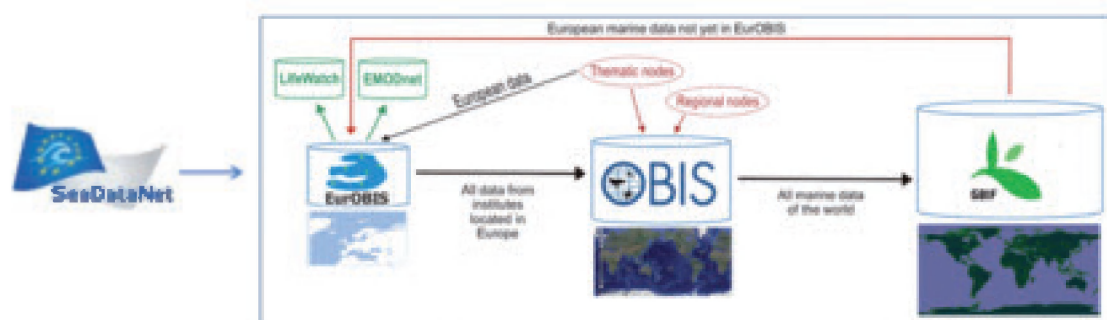


Fig. 1 - Data flow of SeaDataNet contributing to biology data infrastructure developments.

Based on an analysis of the present situation and currently existing biology data standards and initiatives, such as the Ocean Biogeographic Information System (OBIS), Global Biodiversity

Information Facility (GBIF), Working Group on Biodiversity Standards (TDWG) and World Register of Marine Species (WoRMS) standards, a recommended format for data exchange of biological data is being developed.

Key issues that steer the format development are:

- Requirements posed by the intended use and application of the data format (data flows, density calculations, biodiversity index calculations, community analysis, etc...)
- Availability of suitable vocabularies (World Register of Marine Species, SDN Parameter list, SDN Unit list, etc...)
- Requirements for compatibility with existing tools and software (WoRMS taxon match services, EurOBIS QC services, Lifewatch workflows, Ocean Data View, etc...)

This presentation describes the performed analysis and proposes format templates for several types of marine biological data.