

Limited distribution

IOC/IODE-XVIII/10.5

6 April 2005

Original: English

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

**Eighteenth Session of the IOC Committee on International Oceanographic Data and Information
Exchange (IODE-XVIII)
Oostende, Belgium, 26-30 April 2005**

**IODE NATIONAL REPORT ON OCEANOGRAPHIC
DATA MANAGEMENT AND EXCHANGE
FOR BELGIUM (FLANDERS)**

IODE NATIONAL REPORT ON OCEANOGRAPHIC DATA MANAGEMENT AND EXCHANGE FOR BELGIUM (FLANDERS)

1. Name of Data Centre:

Flanders Marine Data and Information Centre (Vlaams Marien Data- en Informatiecentrum, VMDC), located at the Flanders Marine Institute (Vlaams Instituut voor de Zee, VLIZ)

2. National IODE Coordinator:

Name: Edward Vanden Berghe
Address: Vismijn, Pakhuizen 45-52, B8400 Oostende, Belgium
Tel: +32 59 342130
Fax: +32 59 342131
E-mail: wardvdb@vliz.be

3. Data Center Address:

Address: Vismijn, Pakhuizen 45-52, B8400 Oostende, Belgium
Tel: +32 59 342130
Fax: +32 59 342131
E-mail: wardvdb@vliz.be

4. Data Center URL:

www.vliz.be/vmcdedata

5. IODE Data Center Designation Date:

2000

6. Description of national data flow:

How does data flow operate in your country (if possible illustrate by means of one or more diagrams)? This should cover:

1. Metadata management:

- At the discovery level (e.g. do you contribute to IOC/IODE MEDI, GCMD, EDMED, another system, none?)

VMDC has created and maintains its own information system, Integrated Marine Data Management System (IMIS), which is used to keep track of, amongst others, datasets. From within this data system, it is possible to make contributions to other metadata systems. This has not been done since some time, but could be done at short notice.

VMDC is responsible for data management in the EU-sponsored Network 'Marine Biodiversity and Ecosystem Functioning' (MarBEF). In this context, VLIZ actively seeks information on datasets relevant to marine biodiversity in European waters. The same datasystem, IMIS, is used for this activity as for the general VLIZ metadata; data in IMIS can be made visible selectively, depending on context, so MarBEF users will only be confronted with records relevant to biodiversity.

- At the Cruise level (e.g. do you contribute to IOC/IODE Cruise Summary Reports (ROSCOPs), other in-house system, none)

So far, no records have been made available to the Cruise Summary Report Database. All information is available in the cruise planning datasystem Marine Data Acquisition System (MIDAS), which is available online; tools to generate CSRs are planned.

- For monitoring/operational systems (e.g. EDIOS, regional GOOS systems, etc)

So far, VMDC has no relevant records to contribute to EDIOS, since we are for the time being not involved in operational activities.

2. Data tracking:

- What systems are in place to track data through from collecting organisations to through to data dissemination?

There is an in-house tracking system of data that is contributed to VMDC. This system is connected with the IMIS database to provide metadata (including ownership/stewardship), and is used to organize the data archive kept at VMDC.

There are only limited systems of data tracking from data providers. Some datasets are collected in the framework of national projects, and have a legal obligation to submit data yearly to the National (Belgian) data centre BMDC. Data expected from these projects are deliverables within the project; VMDC is data manager for several of these national projects.

Within the MarBEF network, several projects have been defined. Also here, some of the deliverables are datasets. As data manager for MarBEF, VMDC will follow up on delivery of these data.

Some but not all data in the VMDC databases are made available through the web site, or as separate datasets on request. Data is only redistributed with the explicit permission of the data provider.

7. What is the structure of marine data management in your country:

1. How many organisations are involved?

About 60 scientific teams and other organizations are involved in marine sciences in Belgium. Most of these are generating primary data, and are to a certain extent involved in data management.

Two organizations, VLIZ and MUMM, have a formal mandate to manage data and host a data centre managing data that were collected by other organisations. MUMM hosts the Belgian Marine Data Centre, which is National Oceanographic Data Centre for Belgium, VLIZ does the same for the VMDC, Data Centre for Flanders.

2. Who does what?

BMDC is the repository for data collected using national funding; it redistributes data that are older than the moratorium period. VMDC is intermediary for several of the data provider; it collates data from several nationally-funded projects, and submits them to BMDC on behalf of the data originators. VMDC maintains several databases with biological data. Both the European Register of Marine Species (ERMS) and the European Node of the Ocean Biogeographic Information System (EurOBIS) are maintained and made available online by VMDC, as one of the tasks as MarBEF data manager. VMDC also has created and manages the Taxonomic Information System for the Belgian coastal area (TISBE) and the Marine Species Database for Eastern Africa (MASDEA).

The Flemish Government maintains a monitoring network of the Belgian EEZ, mainly to assist in safety at sea and weather prediction. VMDC maintains a copy of the data, and is responsible for the web interface; VMDC is also responsible for redistribution of the data on behalf of the Flemish Government.

3. What data goes where?

All datasets submitted to VMDC is archived; management of the archive is through the IMIS database. Relevant data is extracted, and included in an integrated database, Integrated Marine Environmental Readings and Samples (IMERS). From here, data can be submitted to BMDC (data that were collected with national funding), and/or made public to the VMDC website (only for those datasets where we have permission).

4. Are there data for which there is no home?

All data submitted to VLIZ can be archived, to guarantee long-term physical integrity of the data, and avoid data loss. Not all data, however, are integrated in IMERS or redistributed through the VLIZ web site.

We assume that there are still data that are not known to either BMDC or VMDC; continuous efforts will be done by both organizations to locate these, and try to at least document these datasets in the metadata system.

5. What gets passed on to other organisations?

Data for which partners have a national obligation to submit to BMDC, and for which VMDC does the data management.

VMDC also, on many occasions, uses its expertise in data management to extract data from global archives (such as WDC-A) as a service to collaborating scientists.

6. What regional links and data centres are there?

VLIZ works together with several other IODE data centres in the framework of projects or of working groups: IODE GE/BICH and GE/MIM; ICES Marine Data Management Working Group, Study Group on Marine XML, North Sea Benthos Project, Benthos Ecology Working Group

There are obvious links with the BMDC for data collected with national funding (see above). As data manager for MarBEF network, VMDC collaborates with several non-IODE data centres/data providers.

8. What are the strengths and problems of the present arrangements nationally, regionally and internationally?:

There is no official arrangement between the two Belgian NODC's. Practical co-operation exists though and will be expanded. Discussions on technical issues of data transfer have been started.

9. What improvements could be made nationally, regionally and internationally?:

Further strengthening/adoption of standards for data exchange and quality control; expanding these standards to biological and chemical ocean data management.

Creating incentives for scientists to make data widely available, by e.g. facilitating a mechanism of dataset citation.

Creating Open Archives to communicate scientific results, as an alternative to commercial publishing.

Offering training in Marine Data Management, including instruction in the use of existing standards as adopted by the IODE community.

10. What future national activities are planned?:

See above.

Collaboration with IODE Project Office

11. What national, regional or international projects is your NODC involved in (both IODE and non-IODE) . Examples: Argo, GTSPP, EDMED, EDIOS, Sea-Search, GODAR,...

National: TROPHOS, ENDIS-RISKS, DIMAS, BEWREMABI, Beach suppletions, Valuation map of the Belgian North Sea...

Regional: SeaDataNet, SAIL, Stardust, MarBEF (including ERMS and EurOBIS), Marbena, MarineXML, ODINAfrica, Species 2000 Europe, Scheldemonitor, SCAR-MarBIN

International: ETDMP projects, ODIMeX, OBIS