
(MDI-DE and MSFD)
Agenda

- MDI-DE
- Reporting in Germany - WasserBLICK
- MDI-DE and MSFD
- INSPIRE-compliant Data for MSFD
- Miscellaneous
- Questions and comments
**MDI-DE**

- MDI-DE = Marine Data Infrastructure - Germany
- Supra-institutional network for the integration of marine data from all relevant data sources
  - Federal Institutions
  - State Institutions
  - Research Organizations
- National marine and coastal information system
  - Central geoportal
  - Central metadata catalogue
  - Local infrastructure nodes providing data
- Project was funded by the German Ministry of Education and Research
- Cooperation arrangement between the partners for permanent operation
**MDI-DE Network**

- Service Oriented Architecture
- Decentralized network of data providing services
- Data and Services documented with metadata
- Focus on interoperability
MDI-DE Portal

Data Search
Data Visualisation
Data Access

https://www.mdi-de.org
Information and data flow

- **Europea**
- **National**
- **Länder**
- **Lokal**

**International Context**

**Data granularity**

**Need for standardisation**
Information and Data Flow

Users: authorities, science, politics, economy, public

INSPIRE

WISE

WISE-Marine

OSPAR HELCOM (ICES)

MUDAB

TMAP

GDI-DE

Wasser BLick

Users: authorities, science, politics, economy, public

Workshop on INSPIRE MIG-P/MSCPs and Reporting, Ispra, Italy

27-28 January 2015
Information and Data Flow

**INSPIRE**

**WISE**

**WISE-Marine**

**OSPAR HELCOM (ICES)**

**GDI-DE**

**WasserBLICK**

**MDI-DE**

**MUDAB**

**TMAP**

**Users:** authorities, science, politics, economy, public
Reported-Cycles of MSFD

July 2012

Initial Assessment

July 2012

Description: What does GES mean

July 2012

Establishment of environmental targets

latest 2015

Measures to achieve/maintain GES

July 2014

Monitoring-programs

Update every 6 Years
D5 Human-induced Eutrophication of the Seas

- D1 Biological Diversity
- D2 Non-indigenous Species
- D3 Commercially exploited fish and shellfish
- D4 marine food webs
- D5 utrophication
- D6 Sea-floor integrity
- D7 hydrographical conditions

D8 Concentrations of Contaminants and pollution effects

- D8 Concentrations of Contaminants and pollution effects
- D9 Contaminants in fish and other seafood
- D10 Marine litter
- D11 Energy and Noise
Harmonization: Example Eutrophication

The Nitrite-N-Layer of different agencies with their own styles

The harmonized Nitrite-N-Layer with unified symbols and legend
The relevant data held and maintained at different sources needs to be harmonized.
Which INSPIRE Themes contain MSRL-D5 Data?

Annex III:

Environmental Monitoring Facilities

Bio-geographical Regions
Modified INSPIRE/MSRL Data-Model.
Modeling:
INSPIRE Consolidated UML Model
INSPIRE data specifications:
• Environmental Monitoring Facilities
• Bio-geographical Regions
ISO-Standard Observation and Measurements
Harmonisation of Parameter-Names

Use of same Units

Names of responsible Parties
• Mapping CSW metadata to Atom Feeds = Dataset-Feed + Service-Feeds + OpenSearch-Description
• Uses coupled resources (SRV_ \rightarrow MD_)
• Implements OpenSearch-Client
• Implements client for comfortable download
• Example: [http://mdi.niedersachsen.de/atomFeed/](http://mdi.niedersachsen.de/atomFeed/)
• Free to use! (GPL v3)
• Download: [http://projekt.mdi-de.org/downloads/atomFeedGenerator.zip](http://projekt.mdi-de.org/downloads/atomFeedGenerator.zip)
Summary and Outlook

- Use of a System like MDI-DE can simplify reporting processes – for both ends!
- Data remains with its originators
- Minimal Alteration to existing data structures
- Automated (or semi-automated) creation of reporting sheets
- Data could be used to report to multiple Directives
- Marine Pilot -> ???
Thank you for your attention.

Questions?

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