

Towards Open Monitoring Data within marine monitoring projects

The PMR-NCV case
Port of Rotterdam is carrying out the Project Mainport Development Rotterdam, PMR, expanding the port with 1,000 hectares net of industrial ground, located directly on deep water, through suppletion of sand in the shallow coastal Voordelta area in the North Sea. As the Voordelta has the status of protected nature reserve (Natura2000 area), European laws dictate that the loss of habitat, caused by the expansion of the port, must be compensated for. As part of the compensating measures, the Dutch national government established a series of protected areas in the Voordelta region.

Partners of RWS-Deltares

- IMARES	- Arcadis Alkyon
- Bureau Waardenburg	- CSO Adviesbureau
- INBO	- NIOZ Yerseke

The challenge

1. How to combine datasets from all partners involved, so that truly multidisciplinary research is facilitated?
2. Can this also be done combining datasets from different marine projects?
3. Can this be done at the European level?

The solution
Open Earth (<http://openearth.eu>)
OpenEarth is a free and open source initiative to deal with Data, Models and Tools in marine & coastal science & engineering projects.

The software stack
Various partners store data in the central repository and provide data managers with tools to read the data into an easy digestible format (i.e. csv, xls, mdb). Data is then checked (for metadata, vocabularies) and uploaded. Depending on the nature of the data either feature data or raster data is saved into the stack PostgreSQL/PostGIS and NetCDF/OPeNDAP.
The software stack can be distributed among partners, so data stays where it is collected and maintained

Repository
Data and tools for uploading into the data portal (central or distributed) and also tools for visualization are QA/QC stored.
Every time a dataset changes data can be appended/corrected from the central repository

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