Sea Basin Checkpoint Arctic

The Arctic Ocean including Baffin Bay, Barents Sea, Beaufort Sea, Chukchi Sea, East Siberian Sea, Greenland Sea, Hudson Bay, Hudson Strait, Kara Sea, Laptev Sea, Northwest Passage, and other tributary water bodies.

The challenge

To examine the current data collection, observation, sampling and data assembly programmes in the sea basin Arctic, analyse how they can be optimized, and deliver the findings through an internet portal.

Our team

Or team exists of experts coming from six companies:

- ARCADIS The Netherlands
- IMARES (The Netherlands)
- SINTEF (Norway)
- ARCADIS USA
- SENES Canada
- MARIS (The Netherlands)

Client Name

EASME (DG MARE)

Period

2015-2018

Elements in the project

Portal

Challenges

- Wind farm siting
- Marine Protected Areas
- Oil leak platform
- Climate Change
- Coasts
- Fisheries management
- Fisheries impact
- River input
- Bathymetry
- Alien species

Activities

- Literature review
- Data adequacy reports
- Stakeholder workshop
- Panels
- Project management

Problem description

Up to now observations of the sea have been made for specific purposes. For example, seabeds are surveyed to ensure safe navigation, fish are sampled to estimate the size of the stock and pollution concentration is measured to meet regulations on bathing water or agriculture production. In order to save costs and improve marine knowledge, the EU is now actively moving towards a new paradigm where data are collected once and are used for many purposes. But as everybody understands, once the direct link between the collection of data and its application is broken, it becomes hard to determine what the priorities are for monitoring and who should monitor what. Furthermore, in order to avoid gaps and duplications, it is essential that each coastal state knows what its neighbours are doing. The "Marine Knowledge 2020 concept of sea-basin checkpoints was introduced within the "Marine Knowledge 2020" Communication and refined in the Roadmap.

Approach

In our approach we will focus on ‘knowledge management’. Because we believe that data in themselves are useless, and will become more useless when the link between the gathering of data for specific purposes and the general use of and access to these data is broken. The ‘human interface’ between gathering and use will become even more important. Data need to be collected and organized by people, so who is collecting and organizing what? How to stimulate the sharing of data? In order to turn data into information, people need to summarize and analyse the existing data collection. Based on what kind of research questions and purposes will they do this? And in order to turn information into knowledge, people will need to interpret, synthesise, use the information and enrich the information with their own knowledge, discuss the original data with colleagues, decision makers and opponents, turn the information into research reports, policy papers etc..

Organisation

The project is organised around ten data collecting and analysing challenges. The results of the challenges are presented with via the webportal. The data collection and analysis is suppported by several activities, like literature review and stakeholder consultation. The quality is guarded by a panel of experts on the Arctic area.