

# Comprehensive Databases for Seabed Environment

**Kari Strande (Norway)**

**Key words:** Coastal Zone Management; Geoinformation/GI; GSDI; Hydrography; Marine Knowledge and Management, Sustainable Ocean business, Cross sector cooperation

## **SUMMARY**

Sustainable management of the ocean and value creation linked to the sea will play a vital role for the world's ability to realize the totality of the Sustainable Development Goals (SDGs) by 2030. The SDG specifically addressing the ocean, SDG 14, stresses the urgent need to “conserve and sustainably use the ocean, seas and marine resources for sustainable development”.

Norway has a vast marine territory and harvests great wealth from the sea. The fishing industry has been the heart of the Norwegian economy for centuries, and revenue from the oil and gas industry now contributes immensely. Despite this dependency on the sea, our knowledge of the seabed environment has remained poor. Discoveries over the last decade, such as the presence of numerous large coral reefs on the continental shelf off central Norway, highlight how much remain unknown. The Government has set out to fill the gaps in our knowledge through the seabed-mapping programme MAREANO. (Marine areal database for Norwegian Sea areas)

MAREANO maps depth and topography, sediment composition, biodiversity, habitats and biotopes as well as pollution in the seabed in Norwegian offshore areas. The Programme aims to provide answers to questions such as:

How is the seascape of the Norwegian continental shelf?

What does the seabed consist of?

How is biodiversity distributed on the seabed?

How are habitats and biotopes distributed on the

seabed?

What is the relationship between the physical environment, biodiversity and biological resources?

How much contaminants are stored in the bottom sediments.

MAREANO has a Steering Board from five ministries that, among other tasks, approve annual executive plans and reports. The Programme Group from nine "directory-levelled" Government institutions is coordinating MAREANO's annual tasks and planning of activities. The Executive Group undertake the practical and scientific work in MAREANO inclusive of planning and reporting services. The Executive Group comprise of Institute of Marine Research, Geological Survey of Norway and Norwegian Mapping Authority, Hydrographic Service.

Webpage for the programme <http://www.mareano.no>

---

Comprehensive Databases for Seabed Environment (10074)  
Kari Strande (Norway)

FIG Working Week 2019  
Geospatial information for a smarter life and environmental resilience  
Hanoi, Vietnam, April 22–26, 2019