# Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands (management plan)

On 31st March 2006 the Government presented its integrated management plan for the Barents Sea and the sea areas off the Lofoten Islands (subsequently referred to as the Barents Sea – Lofoten area). This is the first regional management plan for a Norwegian sea area, and a milestone in the work towards establishing an ecosystem-based management in all Norwegian seas areas.

## What is the management plan?

The management plan sets the overall framework for both existing and new activities in these waters, and facilitates the co-existence of different industries, particularly the fisheries industry, maritime transport and petroleum industry.

The aim of the plan is to establish a holistic and ecosystembased management of the activities in the Barents Sea – Lofoten area. This means that all activities in the area should be managed within a single context and that the total environmental pressure from activities should not threaten the structure, functioning and productivity of the ecosystems.

The management of the sea area will be based on ambitious goals that have been set for the desired environmental quality of the area. These goals are intended to ensure that the state of the environment is maintained where it is good and is improved where problems have been identified. The achievement of the goals will then be measured through a coordinated and systematic monitoring of the state of the environment in the sea area. Should the monitoring detect negative changes in environmental quality, the need for further measures will be assessed.

Nesting cliff with Brünnich's Guillemot at Bear Island. Photo: Hallvard Strøm, Norwegian Polar Institute.

# Why a management plan?

The Barents Sea and the sea areas off the Lofoten Islands are still clean and rich. The ecosystems are of very high environmental value and are rich in living natural resources that are the basis for a considerable level of economic activity. These ecosystems have to be protected for the future as a basis for continued welfare and wealth. The area also inhabits internationally important stocks of

seabirds and sea mammals, some of which are extremely vulnerable. At the seafloor a diversity of habitats such as coral reefs and sponge aggregations constitute what could be named as Norway's underwater rain forest. This is also a world heritage that should be secured for the future. The fisheries resources in the area are amongst the world's richest. The challenge is to ensure that existing fisheries activities together with increasing maritime transport and new petroleum activities do not constitute a too large pressure on the environment.

What are the main measures to achieve a holistic and ecosystem-based management?

- Area-based management, where activities and measures are adjusted to the environmental quality of the ecosystems.
- Protection of the most valuable and vulnerable areas against negative pressures, included oil pollution.
- Reduction of long-range pollution.
- Strengthening of the fisheries management.
- Securing control with the development of the state of the environment in the Barents Sea Lofoten area through a more coordinated and systematic environmental monitoring.
- Strengthening the knowledge base through better surveys and increased research.

#### Area based management

The management plan prepares for an area-based management, where activities and measures should be adjusted to the environmental qualities of the areas. Through the work with this management plan, areas which stand out as particularly valuable and vulnerable from an environmental and resource point of view have been identified. These areas are;

- The sea areas off the Lofoten Islands to the Tromsøflaket bank area
- The Tromsøflaket bank area
- Eggakanten
- A zone off Finnmark stretching 50 km outwards from the baseline
- Svalbard with Bjørnøya
- The marginal ice zone
- The polar front

#### Protection of the particularly valuable and vulnerable areas

In particularly valuable and vulnerable areas, the requirements to and limitations in activity should be given special consideration.

This implies inter alia that petroleum activity should not be undertaken in the areas Nordland VI and VII, Troms II, by the ice edge and the polar front, along the edge of the continental shelf from the Tromsøflaket bank area and northwards, or in a 65km zone around the Bear Island. There should neither be any new petroleum activity undertaken in a 50km zone from the coastal baseline along the coast of Troms and Finnmark. In the area between 35 and 50km from the baseline the following exemptions will be made: petroleum activity in already awarded licences, including the 19th licensing round, will be carried out, new announcements and awards in the APA-area will be allowed, and development of additional resources to existing production licenses will be permitted. The question regarding petroleum activity in the area from 35 to 50km from the baseline will be evaluated again in connection with the revision of the management plan in 2010.

A range of preventive measures have been undertaken to increase safety at sea and oil-spill preparedness. This work will be further strengthened and initiative has already been taken to establish new mandatory shipping lanes for high risk transportation at around 30 nautical miles from land. In 2007 a traffic central for Northern Norway will be established in Vardø to monitor sea transport.

## **Environmental toxins**

International efforts to reduce long -range pollution of environmental toxins will be strengthened

through a systematic increase of knowledge and by taking new initiatives in international fora. In view of the strict zero emissions requirements that already apply to this sea area, it is not expected that pollution levels will increase as a result of petroleum activities in the area.

## Strengthened fisheries management

Fisheries represents the most important man-made influence to the ecosystem. It is possible to control this influence, making it important to further develop an ecosystem based resource management to secure a sustainable harvesting of the marine biological production. It is also important to stop illegal, unreported and unregulated fisheries (IUU-fisheries) in the Barents Sea. The plan also focuses on unintended negative effects of fisheries such as damages to coral reefs and other bottom fauna. Increased mapping of the sea bed is important to avoid this.

## Coordinated and systematic monitoring

The plan opens up for an expanded and coordinated monitoring of the environment. A new monitoring system based on indicators, reference values and thresholds for action will give us updated knowledge about changes in the state of the environment. On the basis of registered changes, researchers and authorities can make cross-sectoral assessments and implement the necessary measures to improve the environment. Reports on the state of the environment in the areas will be made, the first one in 2010.

# Strengthening the knowledge base

The management plan builds on a comprehensive set of knowledge, but it also reveals that there are considerable needs for further knowledge. The knowledge base is therefore to be strengthened through mapping, research and monitoring. A monitoring group is to be established to coordinate the monitoring of the ocean areas. A forum for environmental risks associated with acute pollution will also be established. The programmes MAREANO and SEAPOP will monitor sea bed conditions and the effects of human activities on the sea bed, and the dispersion of sea birds.