
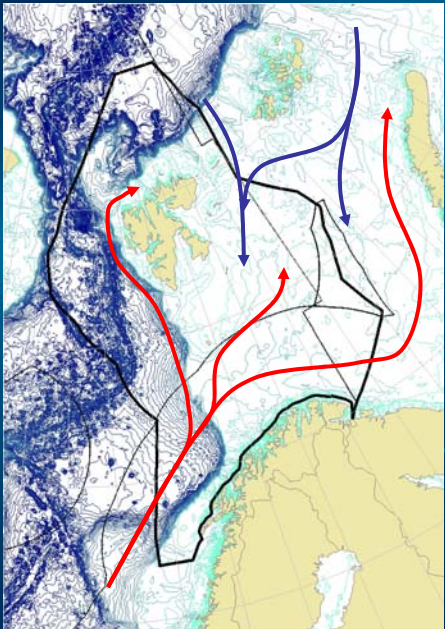



The Norwegian ecosystem-based management plan for the Barents Sea and sea areas off the Lofoten Islands


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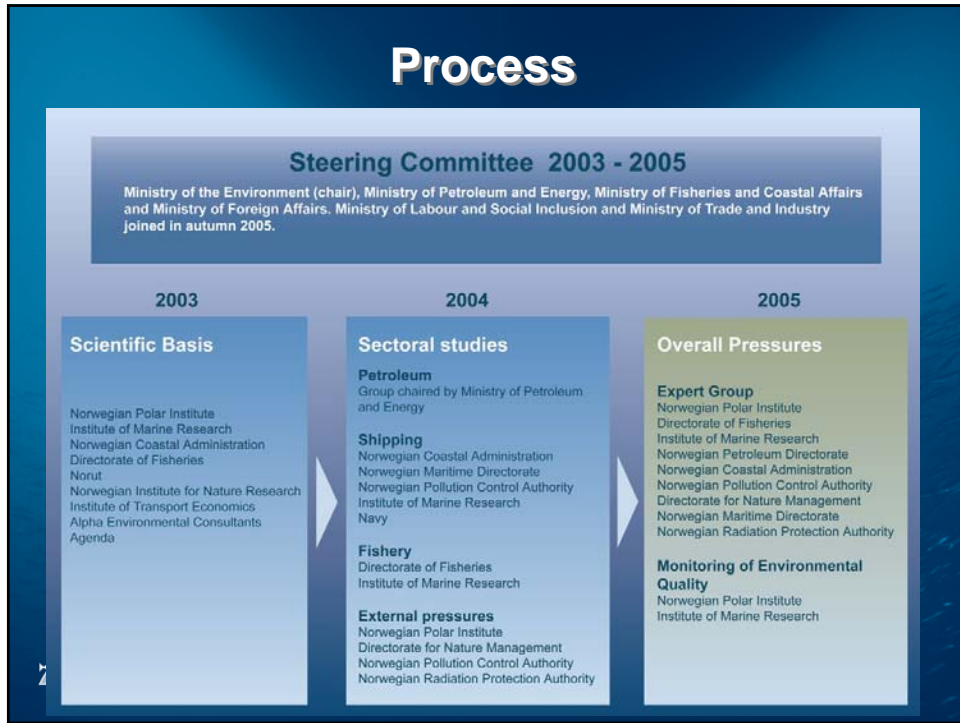
The Barents Sea



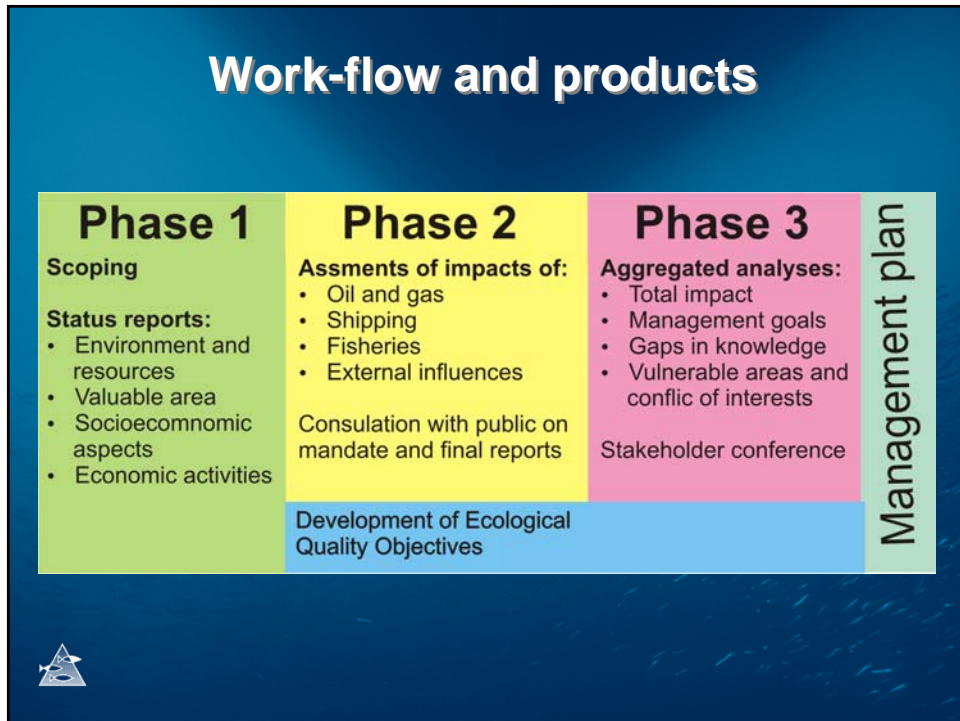
- Continental shelf sea
- Average depth 230m
- Area covered by management plan is 1.4mill km²



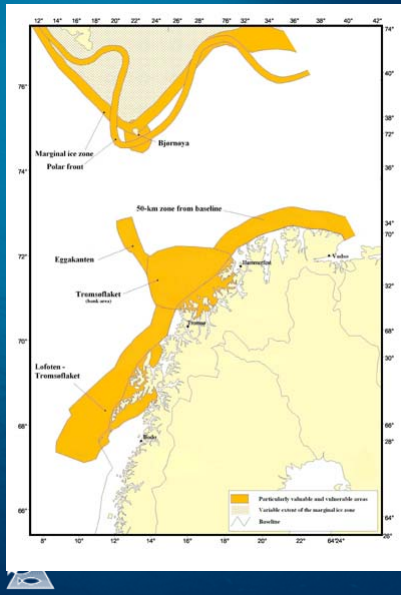
Process



Work-flow and products



Valuable and sensitive areas



- Lofoten Islands
 - Spawning grounds for cod, haddock and other species
 - Seabird colonies and high densities of marine mammals
 - Tentative UNESCO world heritage site
- Tromsøflaket bank area
 - Retention area for fish-eggs and -larvae
- Polar front
 - High primary and secondary production giving ample prey for larger species (i.e. fish, seabirds, whales)
- Marginal ice zone
 - Rich community of algae and other organisms, high primary and secondary production
- Finnmark, 50 km zone from the baseline
 - Many important seabird colonies
- Eggakanten
 - Edge of the continental shelf

Main impacts up to 2020



- **Petroleum industry:** its expansion will be the main change in human activity in this period. Possible impacts from oil spills and risks related to rising transport volumes.



- **Fisheries:** management is currently based on the precautionary approach. IUU fishing and insufficient control may have serious impacts on resources, environment, trade and local communities



- **Long-range transport of pollutants:** the situation in 2020 is likely to be unchanged from 2006. Inputs of "old" hazardous substances are expected to decrease, but they are already dispersed and degradation is slow. Inputs of "new" hazardous substances are expected to increase.
- **Introduction of alien species:** this is a serious threat, which will increase as tanker traffic increases. May result in substantial changes in ecosystems.
- **The greatest long-term challenge is climate change.**

Goals

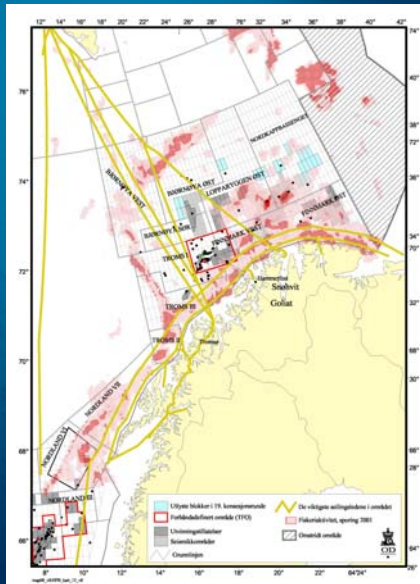
- Safeguard marine ecosystems to ensure long-term value creation
- Ensure that activities in the area do not threaten the natural resource base or opportunities for value creation in the future
- Goals have been set for:
 - Pollution
 - Biological diversity
 - Value creation through economic activity
 - Safe seafood
 - Acute oil pollution/environmental risk

Goals (cont.)

- Prevent or limit pollution
 - Build up knowledge
 - Follow up and develop international initiatives
 - Ensure zero discharges of pollutants and produced water from petroleum activities ("*Zero-discharge goal*")
- Ensure that seafood is safe
- Reduce the risk off and take steps to prevent oil spills
 - Ensure a satisfactory level of oil spill preparedness (tug capacity etc)
 - Enhance maritime safety
 - *Mandatory routing and traffic separation schemes*
- Maintain biodiversity at all levels
 - Take steps to protect particularly valuable and vulnerable areas
 - Manage commercial resources (e.g. fish) according to the precautionary principle
 - Avoid introduction of alien species
 - Maintain and safeguard nature types and habitats
 - Survey benthic habitats and introduce measures to minimize impacts on valuable and critical habitats

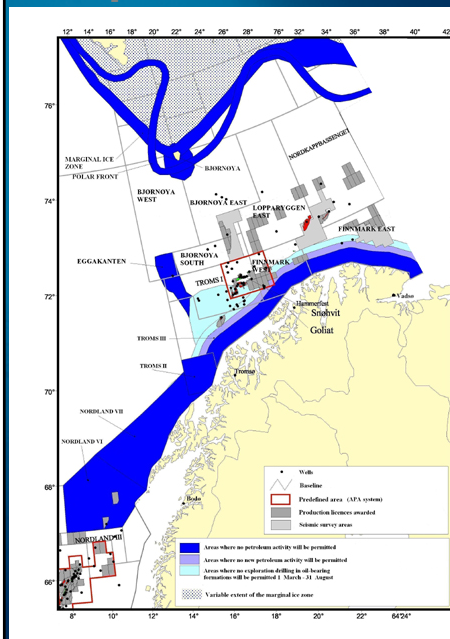


Scientific basis and knowledge gaps



- There is a sound scientific basis for the management plan, but gaps in our knowledge have been identified and the following priority tasks identified:
 - Mapping of the bottom habitat
 - Studies of ecological interactions between species and components of the ecosystem (energy flow)
 - Studies of effects of pollutants
- Measures to be introduced:
 - A better coordinated environmental monitoring system, to monitor the state of the ecosystem and environmental trends (indicators, reference values, action thresholds)
 - Expansion of research activity and surveys
 - Steps to fill gaps in our knowledge: activities under the Research Council of Norway

Implementation, cooperation, revision



- Implementation
 - Cooperation between ministries and subordinate institutions
 - Annual reporting
 - Revision in 2010
 - Forum on Environmental Risk Management
- Dynamic plan, new knowledge will be included at each revisions
 - Basis for previous decisions will be reassessed
- International cooperation
 - Regional level: cooperation on management of the whole ecosystem

Additional information

- In English:
 - Press release
 - Summary chapter
 - Presentation by the Minister of the Environment
 - can be downloaded from:
<http://www.dep.no/md/english/topics/IntegratedManagementBarentsSea/bn.html>
- In Norwegian:
 - The white paper and all background documents can be downloaded from:
<http://www.dep.no/md/norsk/tema/svalbard/barents/>

