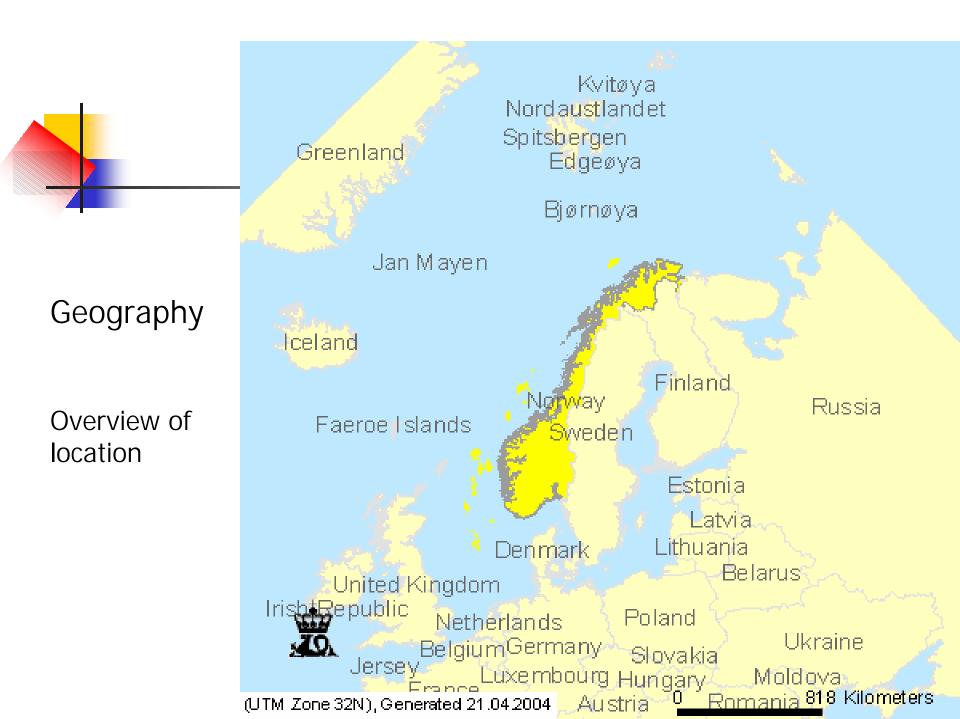
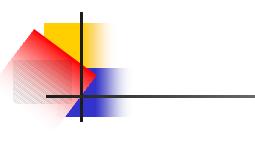


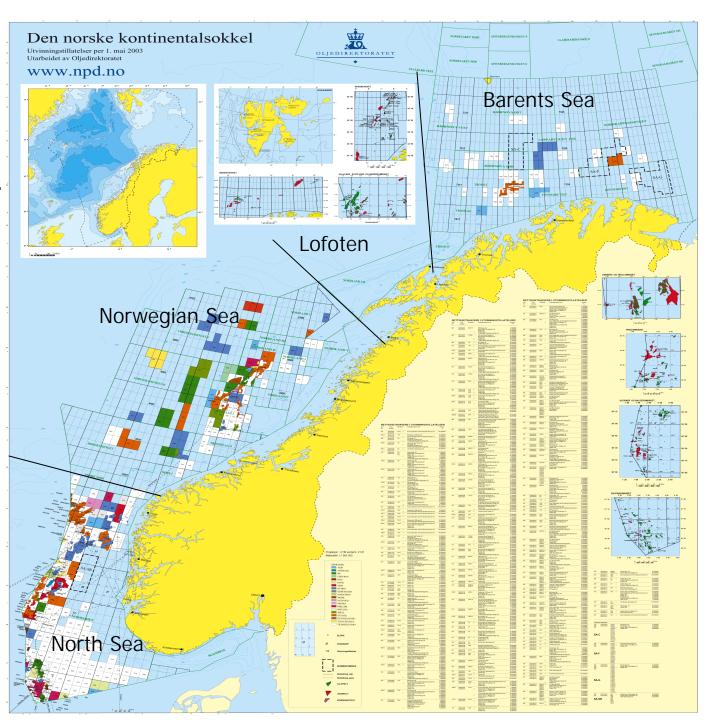
Strategic and Regional Environmental Impact Assessment for Norwegian Petroleum Development Projects Offshore

> Sigurd Juel Kinn, Statoil IAIA 04 Vancouver, Canada





The Norwegian Continental Shelf



- Norwegian EIA-system for offshore projects –a short introduction
- Concept of Regional Environmental Impact Assessment (REIA)
 - REIA Norwegian Sea
- Assessment of future Petroleum Activity in Lofoten and the Barents Sea
 - Total Management Plan

General overview of the Norwegian offshore EIA-system (1)

- EIA requirements for offshore projects in Limited EIA for actual area required prior to opening of new areas for exploration activity
 - Conducted by Ministry of Petroleum and Energy (MPE)
 - Only exploration activities included

- EIA is required for new developments according to Petroleum Act
 - EIA is a part of Plan for Development and Operation (PDO)
 - Ministry of Petroleum and Energy is responsible authority

General overview of the Norwegian offshore EIA-system (2)

- Revision of the Petroleum Act 1997 introduced two levels of EIA
 - Regional EIA (REIA)
 - MPE can require REIA according to Petroleum Act
 - Field-specific EIA (FEIA)
- Basic EIA-principle REIA and FEIA shall together meet the EIA-requirements
 - Less comprehensive FEIA if REIA exists
 - FEIA focusing on technical solutions and mitigating measures
- FEIA can be avoided for smaller developments
 - Development must be described in REIA and included in the assessments
 - Application incl documentation must be sent to MPE

Background for the REIA/FEIA-concept

Main drivers

- Authorities: Regional approach instead of "bit-forbit-assessments"
- Increasing numbers of satellite developments many EIA-processes for small projects
- Main objectives
 - Improved assessments
 - Increased efficiency simplification



REIA-regions

North Sea

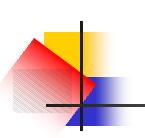
- REIA started 1998- approved 1999
- New version planned
- Norwegian Sea
 - REIA started 1996/97 approved 1999
 - New version approved 2004
- Barents Sea
 - Very political sensitive region
 - Only one development (Snow-white gas/LNG) no need for REIA yet
 - SEA and Total Management Plan by 4 ministries

REIA - Organization

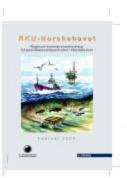
Cooperation between the operators

- Organized through the Norwegian Oil Industry Association
- Statoil has managed the work on behalf of the other companies
- Financing
 - 700-900.000 US dollars for each REIA
 - Financed by the operating licences within the region





Content of REIA General overview



- All existing, planned and foreseen offshore activity related to petroleum industry
- Total emissions and discharges 2000-2040
 - Based on yearly official reports NPD
- Environmental resources and their sensitivity
- Global and regional impacts
- Status of environmental technology mitigating measures
- Gaps in knowledge



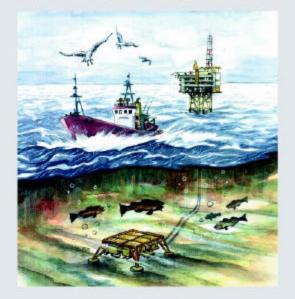
REIA Norwegian Sea

 Main report in Norwegian language only

 Content list and Summery in English available on CD

RKU-Norskehavet

Regional konsekvensutredning for petroleumsvirksomheten i Norskehavet



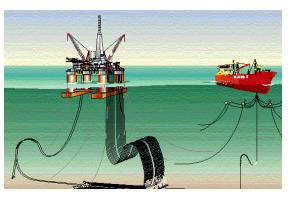
Februar 2003



O STATOIL

REIA Norwegian Sea Activity included (1)

- Includes all existing and foreseen activity within the region
- 5 existing field developments (platforms, FPSO)





- All planned new developments
 - New "stand-alone" developments (3)
 - All planned satellite-developments which will be connected to processing facilities (20)



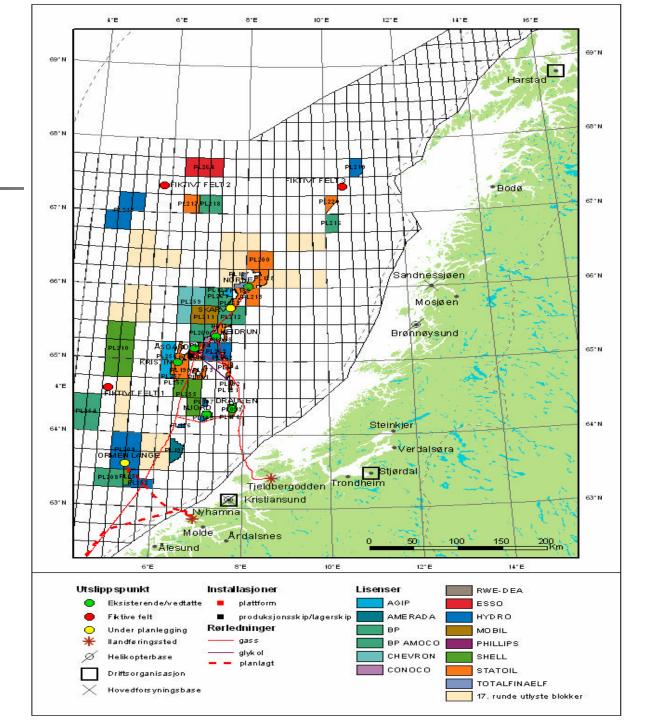




- Imaginary fields (3)
 - Located in "promising" areas
- Exploration drilling
- Shuttle tankers
- Supporting activities
 - standby&supply vessels
 - helicopter traffic

The Norwegian Sea

Prospective region with large scale developments

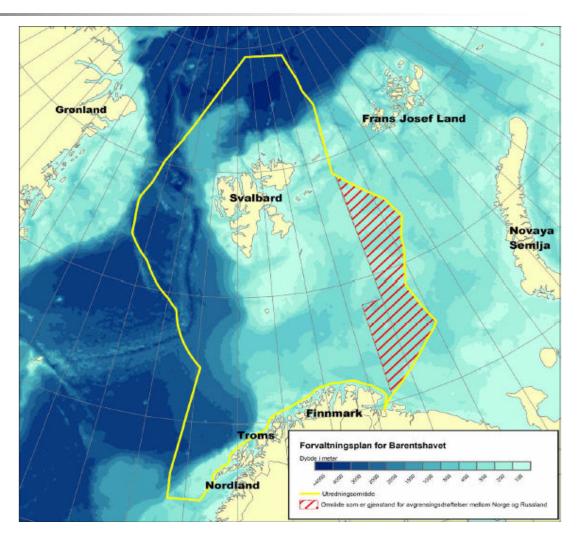




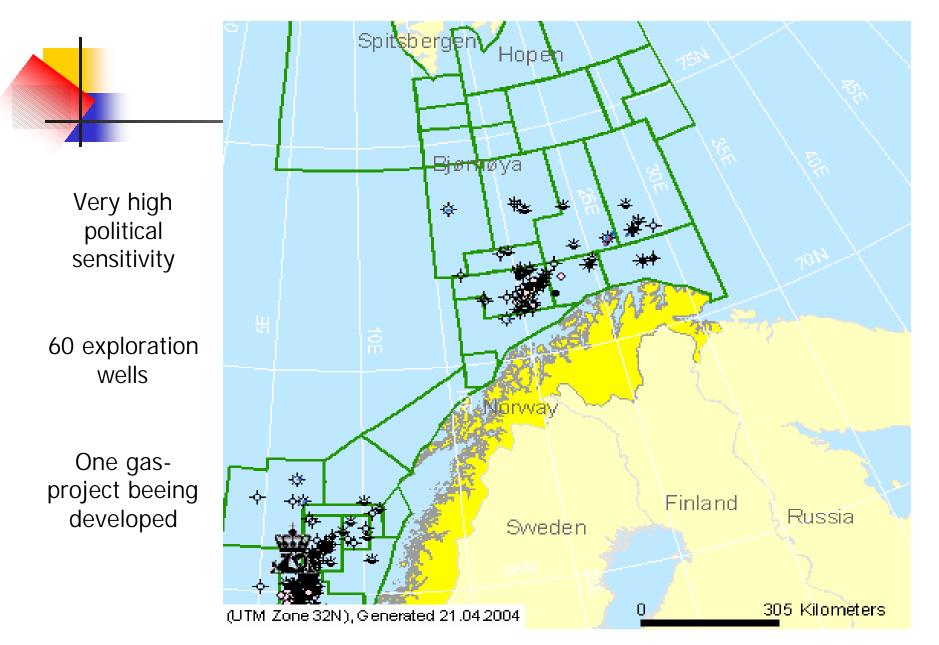
Assessment of oil & gas activity in the Lofoten -Barents Sea area (ULB)

ULB Assessment Region

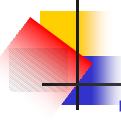
Only parts of the region is opened for Petroleum Activity



Barents Sea







Assessment of oil & gas activity in the Lofoten -Barents Sea area (ULB)

- The Sem-declaration (existing governmental coalition):
 - "to undertake an impact assessment of all-year-around petroleum activities in the northern ocean areas from Lofoten northwards"
 - The main challenge is to explore the possibilities for such activities without harming other industries or the environment
 - Lofoten-Barents Sea will until ULB is approved, not be opened for further petroleum activity
 - no new areas opened
 - no new licences in opened areas
 - no drilling operations in licenses
 - no PDO approvals in licenses
 - development of Snow-white project approved



Assessment of activity in the Lofoten - Barents Sea area (ULB)

ULB is

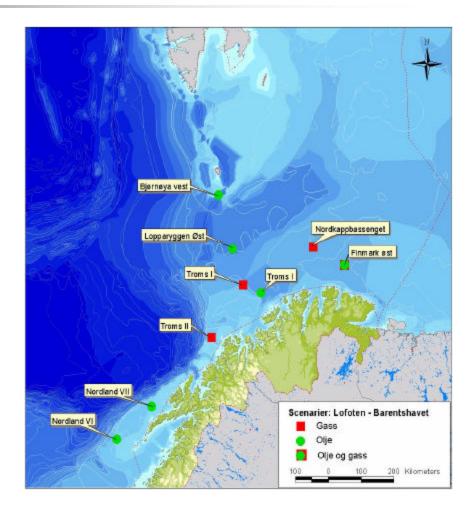
- an independent document assessing future petroleum activity versus other interests
- Political document to consider constraints on the Petroleum Industry
- input to the Total Management Plan (TMP) for the Barents Sea
- managed by the Ministry of Petroleum and Energy

Process

- Approved by the Government in December 2003
- Activity allowed in limited areas
- No further activity until Total Management Plan

ULB – scenarios for development of petroleum industry

- Be representative for the entire geographical area
- Include areas considered at high potential for conflicts with fisheries and the environment
- Where possible cover discoveries or areas with high probability for finding hydrocarbons
- No significant conflicts with fisheries and the environment
- Zero discharge to sea (produced water, drill cuttings and mud) at normal operation

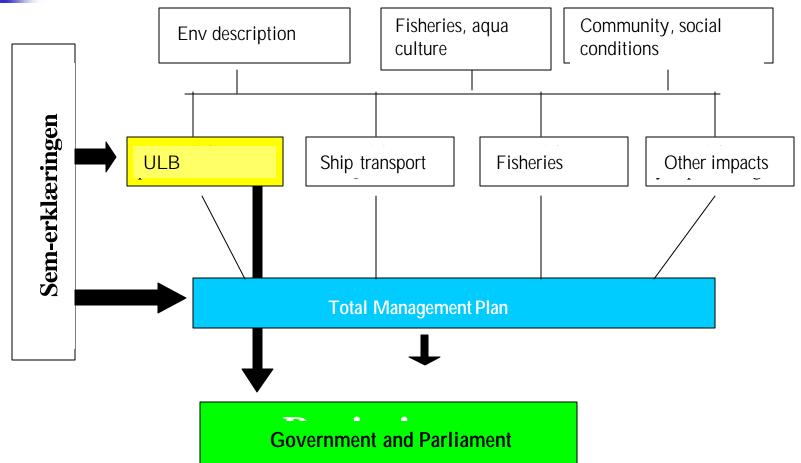


Total Management Plan (TMP) for Lofoten & Barents Sea

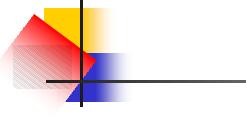
- TMP: Tool to ensure a holistic and ecosystem based management of the region
 - Described in the Sem-declaration
 - Strategic and Multi-sector Assessment and Plan
 - No description of the tool yet
- Process managed by the Ministry of Environment
 - Other ministries are participating
 - Ministry of Fisheries
 - Ministry of Petroleum and Energy
 - Ministry of Foreign Affairs
- Schedule
 - Work initiated early 2004
 - Planned approval 2006 (White Paper in Parliament)

Total Management Plan

Four separate assessments into one total plan



CD available with relevant documents





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Attachments:

Assessment Lofoten/Barents Sea – Summary Report

 A Summary of the Regional Environmental Impact Assessment Norwegian Sea

■ EIA-guidelines for offshore projects in Norway