Norwegian waters
Shipping gateway to the Arctic

Johan Marius Ly, director, emergency response
ShipArc2015, Malmø, August 26. – 27. 2015
Gateway to the Arctic Ocean
August 2014:
- Oil tankers
- Chemical and Product tankers
- Bulk
- Dry cargo
- Container vessels
- Ro/Ro
- Freezers
- Passengers
- Not fishing and oil industry

Ref:
- Havbase Arktis,
  www.havbase.no
August 2014:
- Fishing
- Offshore supply
- Offshore services
- Other activities (e.g. research)

Ref:
- Havbase Arktis, www.havbase.no
Norwegian Coastal Administration

• Authority under The Ministry of Transport and Communications
• Main tasks:
  – coastal management and infrastructure,
  – maritime traffic safety and monitoring,
  – preparedness and response against acute pollution
Main tasks - Emergency Response

• Co-ordinating authority for the national oil spill response preparedness
• National contact point regarding acute pollution at sea and on land.
• Direct major governmental oil spill response operations
• Manage governmental oil spill recovery equipment
• Give practical assistance in oil spill response operations
• Development of response and training of personnel
• International and national agreements
RISK REDUCING FACTORS
Preventive measures

- Surveillance
  - AIS Sat, LRIT
  - Aircraft
  - Vardø VTS
- TSS – Traffic Separation Scheme
- Mandatory pilot services (Svalbard)
- Emergency towing vessels
- Places of refuge
- Heavy fuel oil ban

- Vi tar ansvar for sjøvegen
Places of refuge – Svalbard
Heavy fuel oil ban in protected areas

- Heavy fuel ban in the national parks and protected areas around Svalbard.
- Protected areas:
  - 21 nature reserves (including 15 bird sanctuaries)
  - 7 national parks
  - 1 Geotope conservation area

- Vi tar ansvar for sjøvegen
TSS – before and after
Ship reporting – Barents SRS

- Barents mandatory ship reporting system
- Vessels in transit off the Norwegian coast
- Cooperation between Russia and Norway
- Ships carrying pollutants and hazardous substances
- Approved by IMO – in force from July 1st 2013
PREPAREDNESS MEASURES
Risk based environmental assessment

- Probability for acute oil pollution from shipping
- Environmental impact assessment
- Emergency response analysis – level of preparedness

– Vi tar ansvar for sjøvegen
Emergency Response Analysis
Arctic challenges that must be covered

• Lack of resources
• Limited infrastructure
• Seasons and climate
• Fog
• Distances
• Ice
• Darkness in parts of the year
Probability

- Low probability for incidents that may result in oil spills (one incident every 6th year)
- The highest probability around Svalbard
- The probability for an incident in the Jan Mayen area is one per 225 years.
- The average expected spill within the area analyzed is estimated to 3 tons.
- In the case of an incident with spills, it is most likely to be spills of distilled products (e.g. MDO).
Scenarios for response assessment

• Two scenarios included heavy fuel oil
• Two scenarios with large cruise vessels
• One with a large bulk vessel (coal)
• The size of the spills are between ca 200 cubic metres and 2000 cubic metres
Response analysis – recommendations

- Rapid deployment of booms around leaking vessels
- Local oil spill response vessels
- Equipment on Coastguard and Governors' vessel
- Improve communications – common operating picture
- Improve efficiency of mechanical recovery
- Use of dispersants e.g. on marine diesel and destillates
- Assess use of in situ burning
- Beach cleaning – waste management, logistics, HSE etc.
- Improved night capacity - IR/UV, radar, detection of oil
- Research on behaviour of spilled lighter destillates
AGREEMENTS AND INITIATIVES WITHIN THE ARCTIC COUNCIL

Picture: Austfonna ice cap on Nordaustlandet at Svalbard
SAR Agreement

• Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic
• Cooperation between the 8 countries of the Arctic council
• Signed in May 2011
• Ratified in January 2012
• Exercises
Regional Oil Spill agreements in the Arctic

- Vi tar ansvar for sjøvegen

Map showing agreements between:
- Canada-USA
- US-Russia
- Canada-Greenland
- Norway-Russia
- Finland-Russia
- Finland-Estonia
- Copenhagen Agreement: Norway, Sweden, Finland, Iceland, Denmark (inc. Greenland and Faroe Islands)

HELCOM (Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.)
Oil Spill Response (OSR) Agreement

- **Nuuk 2011**
  - Task Force, reporting to the SAOs, to develop an instrument on Arctic marine oil pollution preparedness and response.

- **Kiruna 2013**
  - Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, signed by the ministers as a legally binding agreement.

- **Objective:**
  - To strengthen cooperation, coordination and mutual assistance among the Parties on oil pollution preparedness and response in the Arctic in order to protect the marine environment from pollution by oil.
OSR Agreement

• Means by which cooperation and mutual aid is facilitated to prepare for and respond to an oil pollution incident.

• Highlights:
  – Provides for contact points
  – Promotes joint exercises and training
  – Promotes exchange of information
  – Addition to existing bilateral and multilateral agreements

• Appendices, including operational guidelines (OG)
  – EPPR responsible to maintain OG
Operational Guidelines - Highlights

Provides processes and information requirements for:

• 24/7 operational points of contact & Notification
• Requesting assistance & designating Liaison Officers
• Movement of resources across borders
• Responses beyond national jurisdiction (Conditional)
• Command and Control coordination
• Situational Awareness
• Reviews, exercise and training
Prevention of marine pollution (EPPR)

- Task in 2011 Nuuk ministerial declaration
- Two reports
  - Technical report prepared by DNV
  - Summary report with recommendations
- The EPPR working group has identified recommended prevention initiatives within the following fields that would contribute to safer operations and increase knowledge of Arctic specific risks and possible mitigation measures:
  - Hazardous ice detection, forecasting and monitoring
  - Standards for Arctic oil and gas activities
  - Circumpolar marine environment risk assessment.
  - Facilitate oil spill prevention research and regulatory cooperation
  - Ensure appropriate infrastructure is in place for emerging Arctic shipping lanes
2010 - Arctic Ocean circumnavigation

- Summer 2010
- Two men
- One trimaran
- 10,000 NM
Thank you for your attention!

Picture: Rossøya and Vesle Tavleøya at Svalbard. Rossøya (right) at 80,8283 N is Norway’s northernmost point.