Barents 2020 – an international industry cooperation project for safety standards in the Barents sea - Risk management lessons for the Arctic?

Vulnerable Arctic Conference, 1st February 2012.
Hosted by MEP Satu Hassi

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01.02.2012

MANAGING RISK

Arctic Challenges

Low temperatures
•Working Environment
•Cold Flow
•Selection of materials

Ice
•Sea ice and ice loads
•Icebergs and Ice management
•Icing

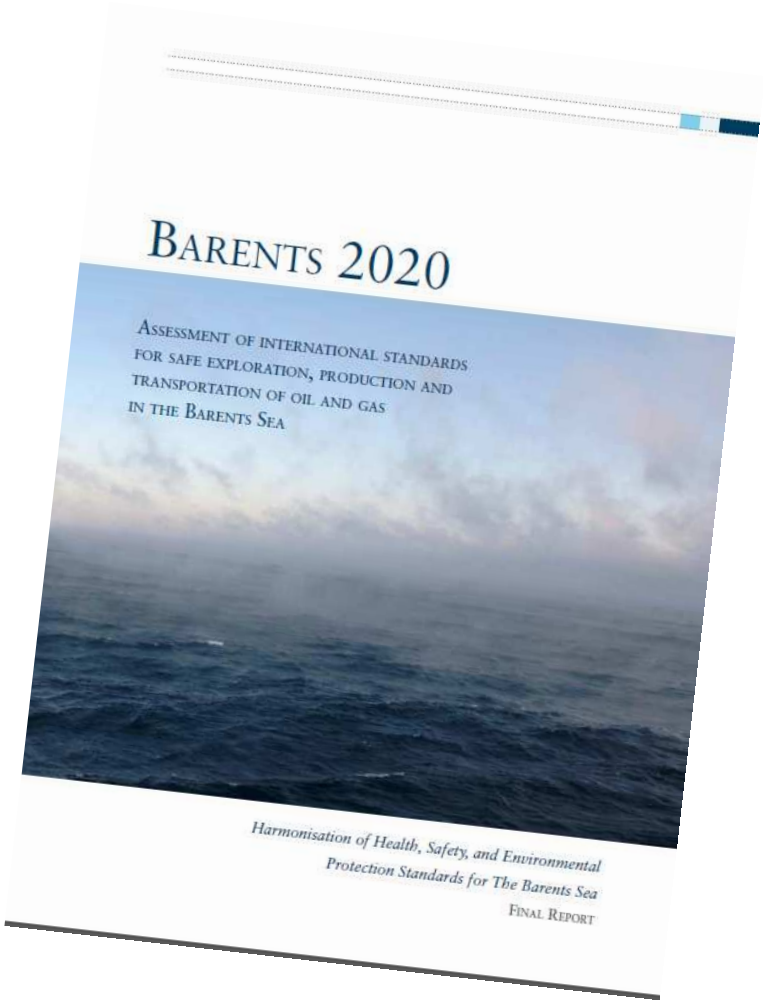
Darkness
•Working environment
•Rescue

Remoteness
•Emergency preparedness
•Transportation of personnel and equipment

•**Vulnerable Environment**

History 2007-2012

- Norway has North Sea **offshore** experience, while Russia has **Arctic** operational experience.
- The **Barents Sea** represents new opportunities and new challenges for both countries.
- **Safe oil and gas operations** are a common interest of both countries.
- Updated and harmonized **industrial safety standards** facilitates safety, cooperation, and cross-border activities.
- Barents 2020 was established as a **joint-industry project** for this objective.
- In 2007-2009 This was a **Russian-Norwegian** project, since 2009 it has become an **international** industry cooperation project.



Objective

OFFSHORE

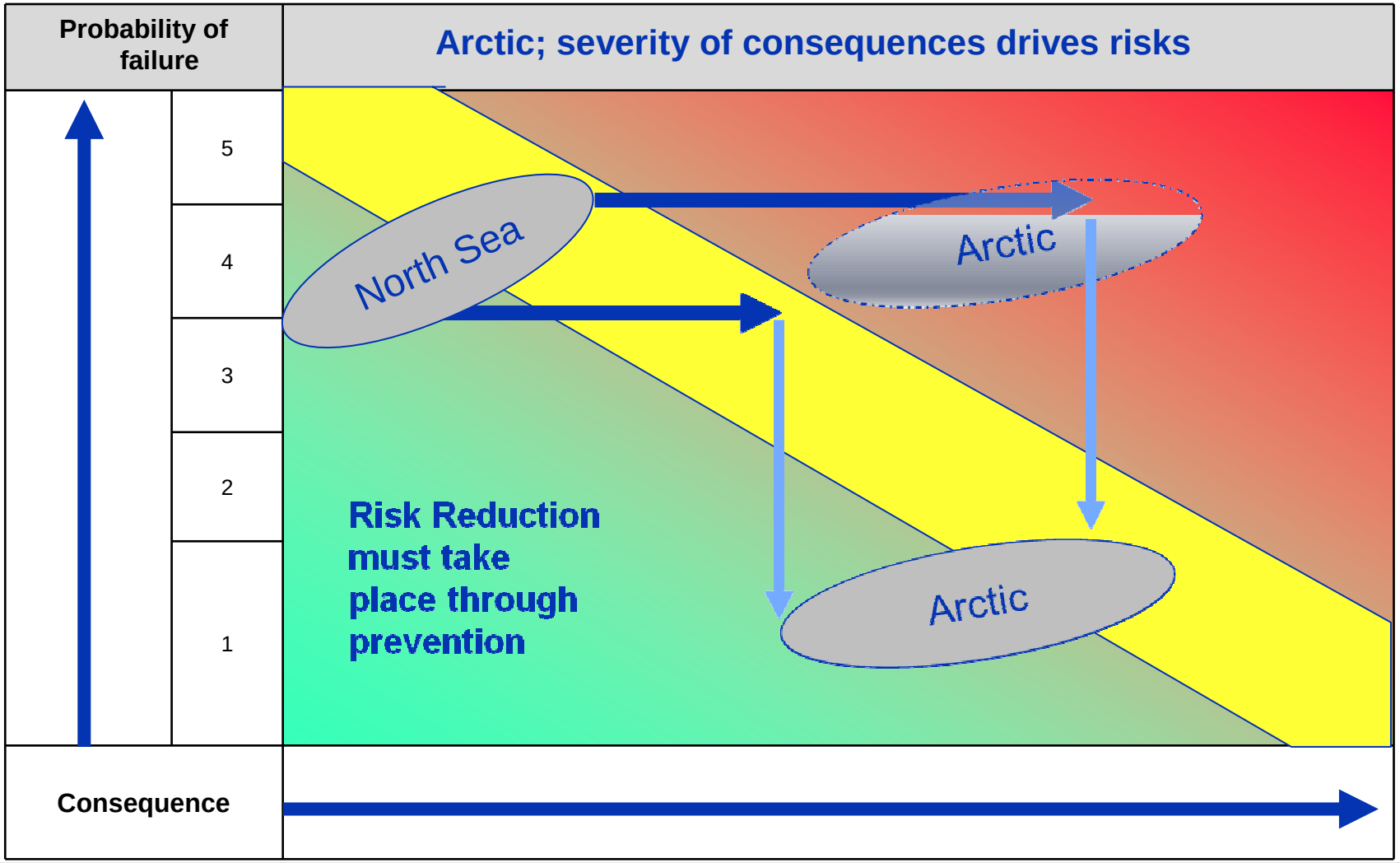
ONSHORE

BARENTS 2020

CONVENTIONAL

ARCTIC

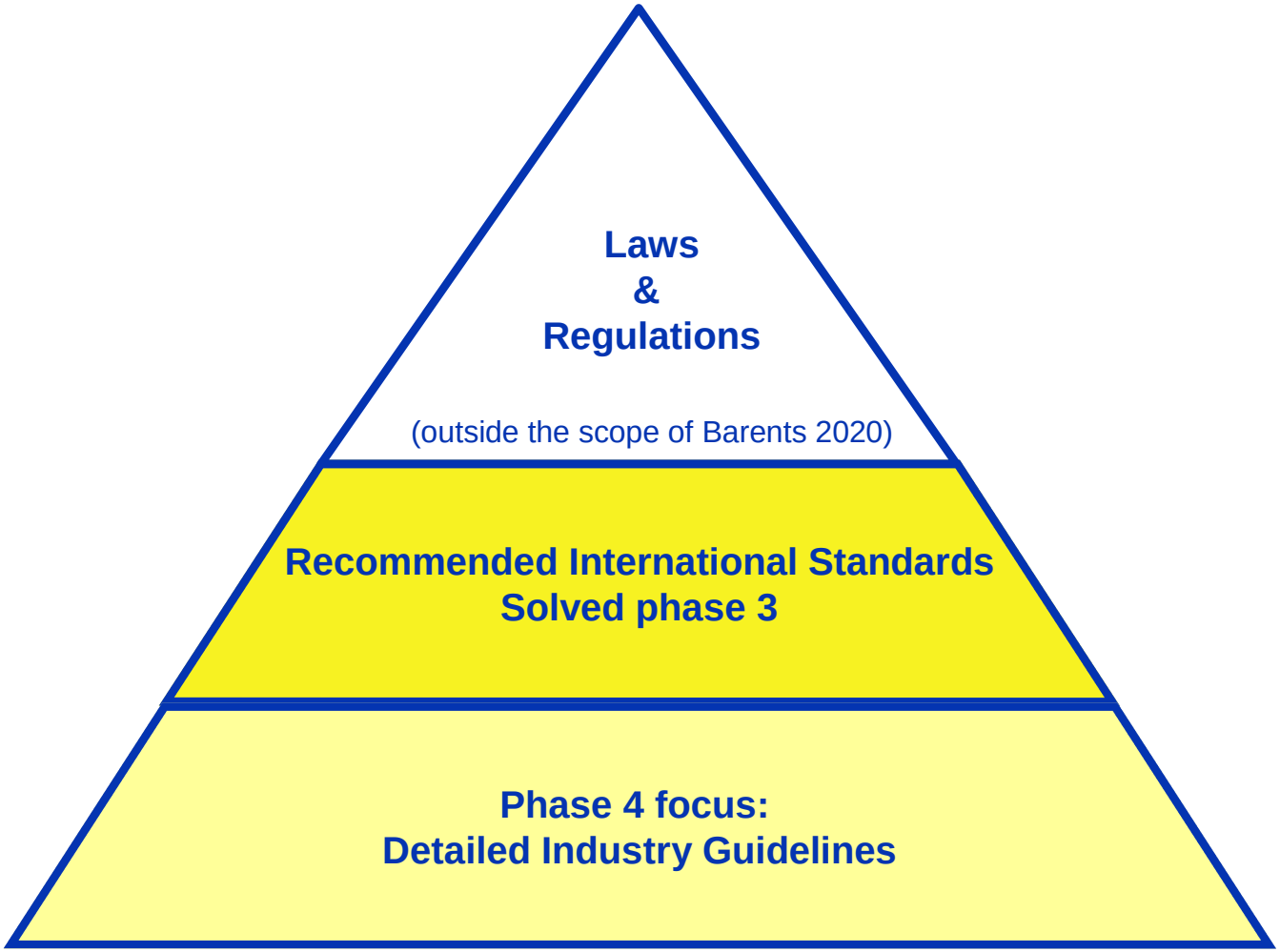
Philosophy



Partners

Supported by

Project Scope: Agree common standards for the Barents Sea



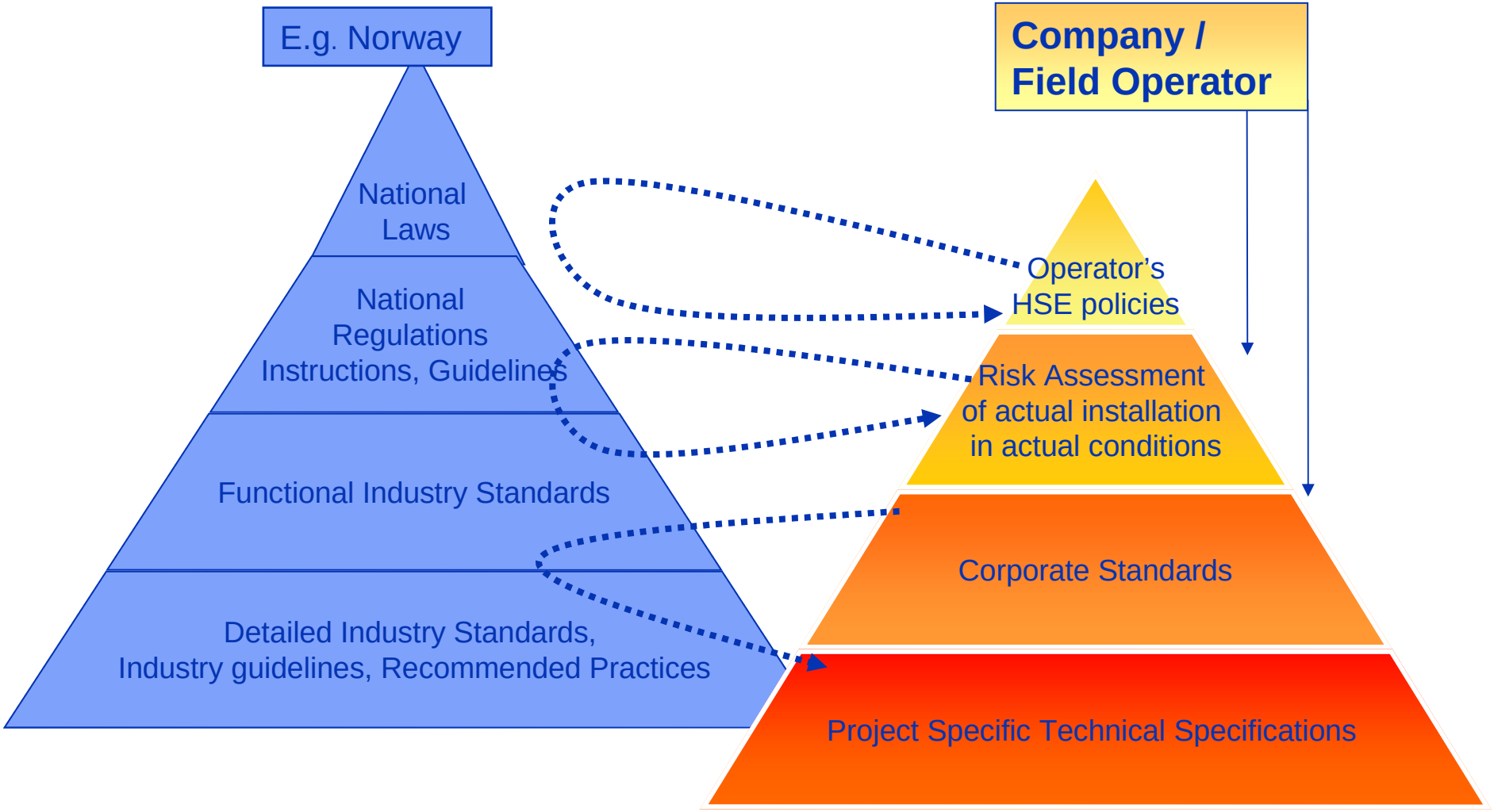
Risk Management - Main areas of concern

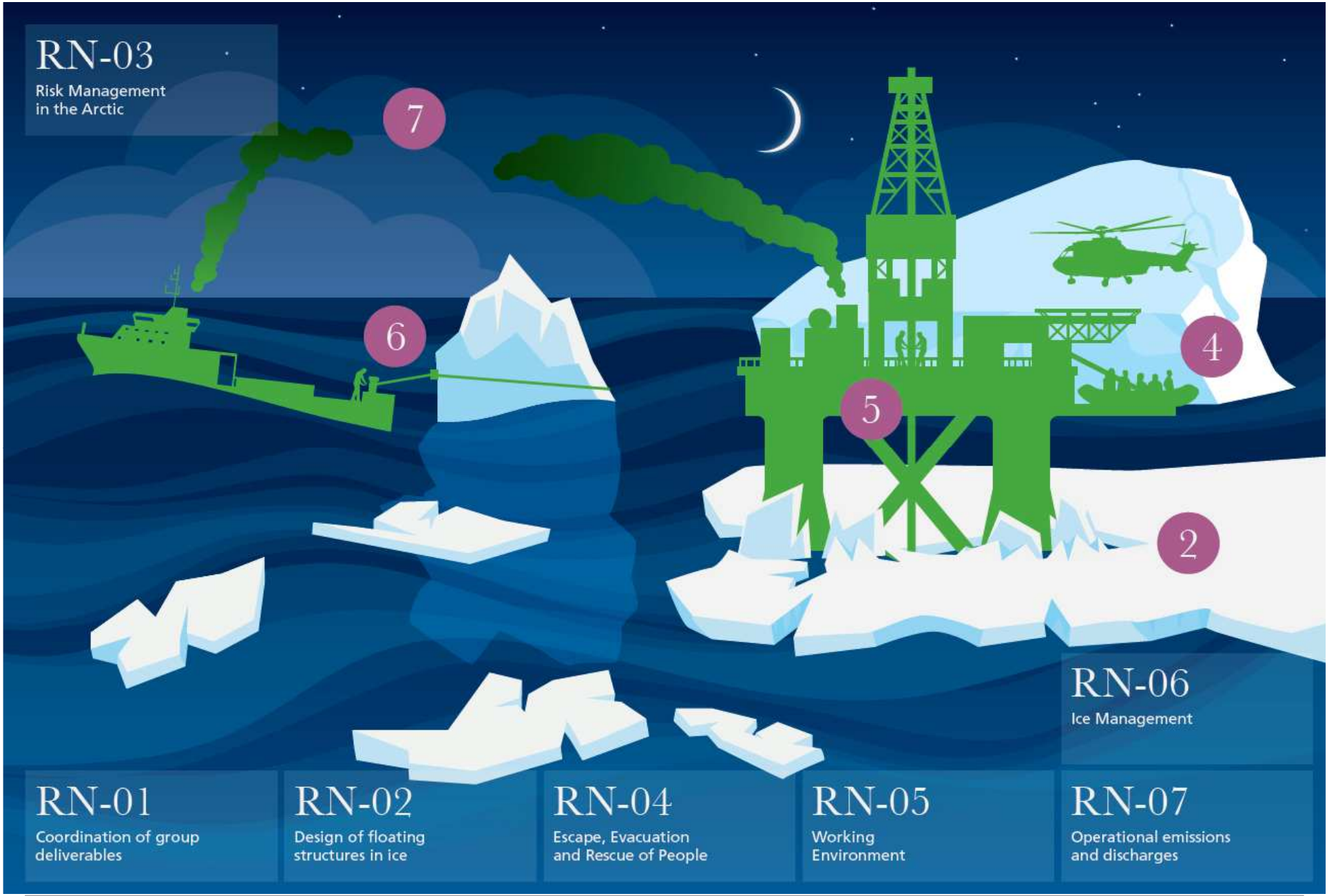
- **Explosion and fire risk management:** Cold and harsh climate require protection of personnel and process equipment by enclosing the process areas, this may, however, increase the fire and explosion risk.
- **Ignition source control:** With reduced ventilation compared to natural ventilation even a relatively small release of hydrocarbons can build up an ignitable gas cloud.


Sevan Hummingbird, North Sea

Sevan Goliat, Barents Sea

National Laws (what) vs Company Standards (how)

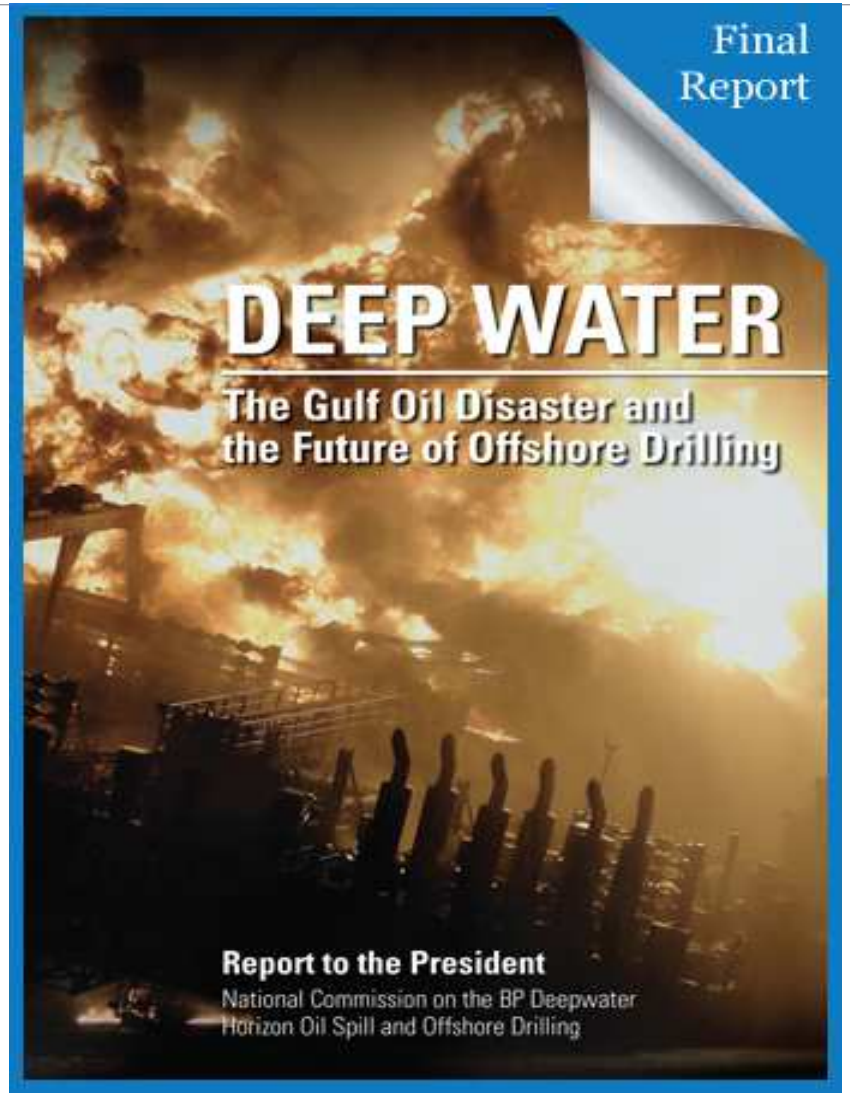




40 Organizations involved as specialists in Barents 2020

Based in Russia	Based in Norway	International
Gazprom	Statoil	Shtokman Development AG
VNIIGAZ	DNV	Transocean
Krylov Shipbuilding Research	University of North Norway	Shell (through OGP)
Giprospetzgaz	Petroleum Safety Authority (Ptil)	Total
Lomonosov Moscow State University	MossMaritime	Schlumberger
DOAO CBKN Gazprom	Akvaplan-Niva	Cairn Energy
Rosneft	ENI Norway	BP (through OGP)
FSO ”State Marine Rescue service of Russia”	Ship Maneuvring Simulator Centre	OGP
ANO ”Industrial Risk Agency”		Aker Arctic
Sakhalinnipimorneft (Rosneft)		Stena
CNIIMF		Neste Oil
Gazprom dobycha Shelf		OCIMF
ZAO ”Industrial Safety Research Centre”		
40 GNII Ministry of Defence RF		
FSO FSRI, Emercom (MinChs) of Russia		
Russian Maritime Register of Shipping		
Arctic and Antarctic Research Institute (AANII/AARI)		
GNINGI, State Research Navigation-hydrographic institute		

Deepwater Horizon – Lessons for the Barents Sea

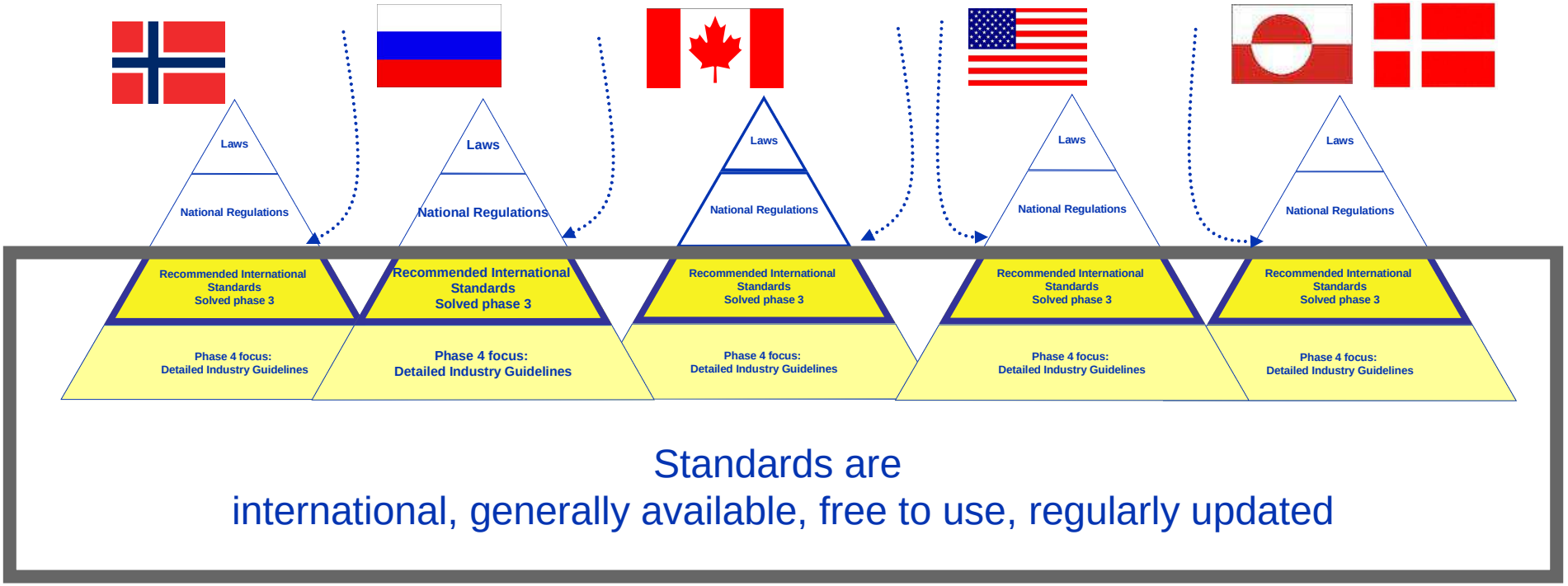


January 2011 report recommends that

- **Risk Assessment** should be the basis for Operator's **Safety Management System**
- the regulator (Offshore Safety Authority) should base his control on, the risk assessment and the safety management system ("safety case"), prepared by the operator, specifically for each offshore installation
- there should be one **coordinating regulatory body** – the Offshore Safety Authority, to ensure a holistic view of safety, and to coordinate the involvement of other agencies
- best industry practice, i.e. recognised **international petroleum industry standards (e.g. ISO)** should be used
- existing offshore regulatory systems in the North Sea (UK and Norway) represent good international regulatory practice

Knowledge Sharing in Circumpolar workshops 2012-2013

1. Share experience and results from international standards' cooperation in Barents 2020.
2. Review of national / local regulatory process in light of Arctic challenges.
3. Discuss safety regulatory approaches in light of recent events and developments (e.g. Barents 2020, Macondo, Kolskaya).



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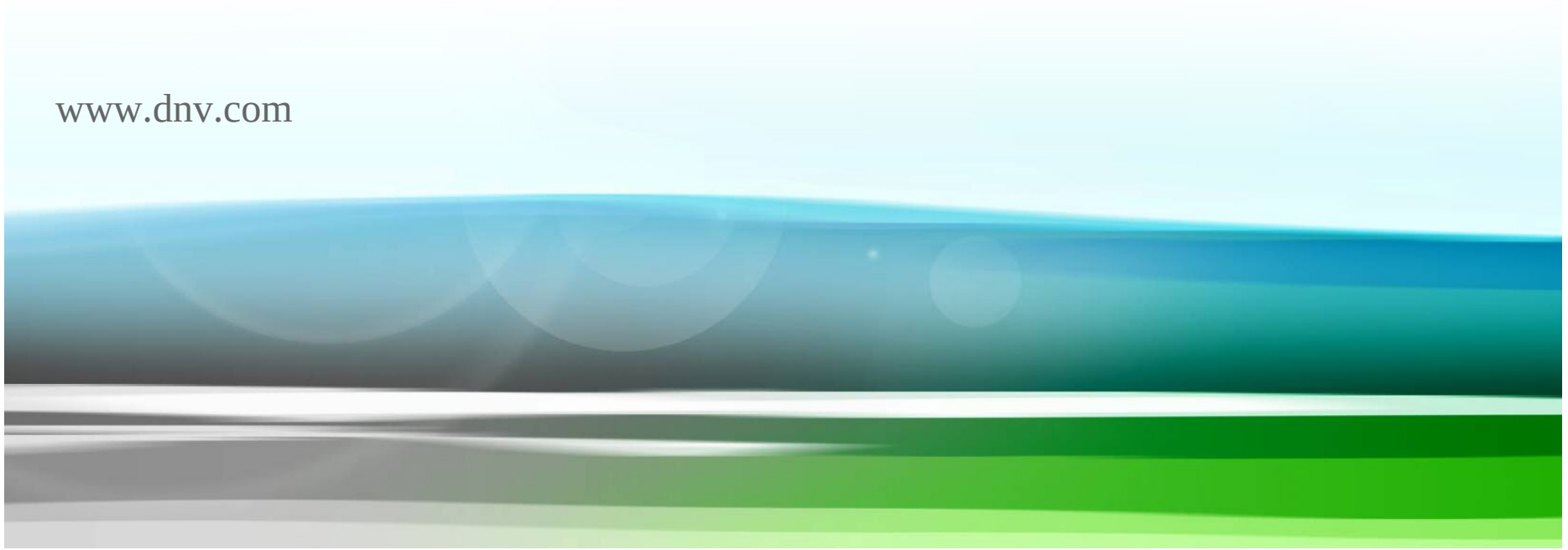

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