

Oil spill contingency in new areas. Political basis for development and improvements

Ladies and gentlemen,

I am delighted to be here at this SINTEF conference on oil spill response for the future.

SINTEF is the largest independent research organization in Scandinavia, and its expertise in the field of oil spill response is well known internationally.

Following the Deepwater Horizon incident in the Gulf of Mexico last April, SINTEF was contracted by the American authorities to estimate oil drift and to provide advice on the use of dispersants.

Our national oil spill preparedness and response also benefit from SINTEF's expertise. For example, the Norwegian Coastal Administration uses SINTEF analyses of oil weathering and oil drift to maximize the efficiency of response operations.

As you may know, the Ministry of Fisheries and Coastal Affairs is responsible for governmental oil spill preparedness and response in Norway. As the Ministry's state secretary, I have been invited to share some thoughts on oil spill contingency in new areas, and the political basis for development and improvement.

Outline

First, I will take a brief look at the basic legal framework for the Norwegian preparedness and response system and the players involved.

Second, I will present Norway's integrated management plans, which provide the overall framework for both existing and new activities in Norwegian waters. The management plans thus indirectly influence preparedness and response.

Third, I will focus on the importance of knowledge. I will also show how the Norwegian government has acted on new knowledge to improve the preparedness and response system in the face of new challenges.

The Norwegian preparedness and response system

A basic feature of the Norwegian system is its division into private, municipal and governmental areas of preparedness and response, each with specific responsibilities. Private companies are required to maintain the capacity to deal with spills from their own operations. This includes the offshore petroleum industry. The Norwegian Climate and Pollution Agency (KLIF) supervises the industry and ensures that contingency planning complies with all applicable legislation.

Municipal response systems are mainly directed towards dealing with local and small-scale spills. Norway's municipalities are organized into 33 regional response organizations, which are required to assist in any government-led response operations.

Governmental preparedness and response are operated by the Norwegian Coastal Administration. It is primarily designed to deal with spills from ship accidents. In the event of a major incident, and in situations where the private or municipal response proves insufficient, the Coastal Administration may take over operational responsibility.

This overview shows that the political basis of oil spill preparedness and response has several sides.

- First, we have direct influence. This entails political control over governmental oil spill preparedness through the budgetary process.
- Second, we have regulatory influence over private and municipal preparedness and response
- Third, there is also indirect influence, for example through integrated management plans aimed at establishing an overall framework for both existing and new activities in Norway's sea areas.

Let me emphasise that only part of the preparedness and response system is directly politically controlled. Private and municipal players also have important roles and responsibilities. This is equally true in regard to the development of new technologies and methods. I will come back to this later.

Integrated management plans

Allow me to dwell for a moment on the matter of integrated management plans. As many of you know, the government has recently adopted an updated management plan for the Barents Sea and sea areas off Lofoten. A similar plan for the North Sea and Skagerrak is in the pipeline, and a plan for the Norwegian Sea was adopted in 2009.

The integrated management plans adopt a holistic view of the ecosystem and human activities. They facilitate the co-existence of different interests - in particular fisheries, maritime transport and the offshore petroleum industry. The aim is to establish ecosystem-based management of activities in the relevant sea

areas. The combined pressure of human activities must not be allowed to threaten the ecosystem.

Why are these plans relevant to preparedness and response? Because they establish a general framework for the development of maritime transport, the petroleum industry and so on. They also help identify future needs in preparedness and response, and provide guidelines for governmental, municipal and private preparedness and response systems.

The updated management plan for the Barents Sea and sea areas off Lofoten clearly states that the government will maintain oil and gas exploration activities, and give the oil industry access to areas of potential interest within an environmentally sound framework. We will generate more knowledge of the north-eastern part of the Norwegian Sea, carry out an environmental impact assessment for the previously disputed area in the Barents Sea, and pave the way for petroleum production in the areas that have already been opened up.

At the same time, we recognize that dealing with the risks related to accidents and oil spills will be among the main challenges in the coming years. The management plan underlines the need for sound contingency systems and effective measures to prevent accidents. More shipping and petroleum activity will increase the probability of accidents and environmental risk if not met by mitigating measures. We will, in short, need to further strengthen preparedness and response.

There are several knowledge gaps in this field, and the government will contribute to filling them. The management plan identifies a need for further research into the efficiency of the available response methods and their

environmental impact. As petroleum production and shipping move further north, expertise in response operations in Arctic and ice-filled waters are particularly important. Moreover, the preparedness and response needs associated with shore-cleaning operations should also be mapped. Finally, we need to refine our knowledge of the ecosystems and of the species that are threatened by oil spills.

Research and development within oil spill response and management will also play an important role in strengthening our preparedness and response. My humble prediction is that, as we move into new and more challenging areas of activity, the market for technology and knowledge will grow. Consider this as an appeal to be bold, develop new ideas and find innovative solutions!

Limits of political influence and the importance of innovation

Effective solutions to the problem of dealing with spills cannot be brought about by political decisions alone. Without private initiative and industry involvement, we will not be able to overcome future challenges in preparedness and response.

Industries are responsible for dealing with spills resulting from their own operations. The industries' needs and efforts are therefore important driving forces behind the development of new technology and equipment. This is how it should be. The government will not be the primary source of funding. But we will support innovation, development and testing of equipment. We will and also be a customer of the best available technology.

I also believe there is untapped potential in drawing on knowledge and technology from other industries. As an example: within aquaculture and wind

power, research and development are currently concentrated on developing offshore technology. Such technology must be able to cope with forces similar to those that oil spill response equipment is subject to.

In recent decades, the petroleum industry has shown that quantum leaps in technology and equipment are indeed possible. Today's subsea production units are a good case in point – oil fields can now be exploited without massive oil rigs at the surface.

I know that many find today's oil spill clean-up techniques oddly old-fashioned. Shuffles and bark are in widespread use. Nevertheless, great improvements in response technologies have taken place. The booms we have today can cope with stronger currents and bigger waves than the equipment of yesterday. We also now have highly sophisticated detection tools to visualize spills. This has improved our ability to deal with spills and considerably reduce their environmental impact.

I am convinced that we will see further technological breakthroughs in the coming years. And it is my hope that Norwegian players will be in the technological forefront. The successful use of Norwegian booms in the cleanup operation after the Deepwater Horizon incident in the Gulf of Mexico is promising in this respect.

Again: I urge you to continue to be bold and seek innovative solutions. My wish list includes equipment capable of handling oil in ice-filled waters, improved dispersants application technology, and better techniques for beach cleaning operations. We need systems and equipment that are flexible, easy to use, safe and effective under a broad range of conditions.

Yet new technology alone cannot solve all the challenges we are facing. In fact, evaluations of response operations in Norwegian waters in recent years point to factors other than equipment and technology as areas of potential improvement. A robust response organization, coordination of the involved players, and expertise have been identified as keys to success. To put it simply: new technology is of little use if not employed efficiently, and substantial manual efforts will still be required. Therefore the Norwegian Coastal Administration also focuses on training, competence sharing and command systems.

Knowledge-based development of response: recent achievements

Our oil spill preparedness and response systems must be based on up-to-date risk assessments. Analyses of maritime traffic development, petroleum activity and the related risk of accidents are key factors in our policy. So is knowledge of vulnerable environmental resources. Without updated knowledge and the willingness to act on it, we will not be able to meet future challenges.

Over the last ten years, the Norwegian government has indeed acted on new knowledge to improve our preventive systems and our oil spill preparedness and response. Faced with increasing activity in several areas, we have introduced new measures that have, in turn, reduced the risk of environmental damage.

Allow me to give you some examples:

Prevention of maritime accidents in northern Norway

In 2004, the government presented a White Paper on safety at sea and preparedness and response. The White Paper was based on analyses of developments in maritime transport and the associated environmental risk.

These analyses showed that Russian oil tanker traffic along the Norwegian coast was on the rise. The risk of tanker accidents resulting in large oil spills would increase if new preventive measures were not introduced.

The government did not wait for an accident to happen. Rather, we seized the initiative and introduced several new measures:

A traffic separation scheme off the coast of northern Norway was established in 2007, following approval by the International Maritime Organization (the IMO). As a result of this measure, risk traffic has been moved further away from the coast. This gives us more time to respond to incidents and to activate emergency towage and oil spill response procedures.

Based on the very positive experience we have had with this measure, we are now in the process of establishing a similar traffic separation scheme with recommended routes off the western and southern coasts of Norway.

In 2007, the government also established a vessel traffic service in Vardø in northern Norway. This service monitors maritime traffic throughout the entire Norwegian Exclusive Economic Zone and in the waters around Svalbard. It focuses on tanker traffic and other risk traffic, and monitors the use of the traffic separation schemes. If anomalies are detected, the traffic service provides guidance to ships and may organize assistance if needed.

The tugboat service in northern Norway has also been strengthened. The service is relatively costly to the government, but emergency towage is an effective preventive measure to avoid environmental damage when ships are adrift.

Taken together, the traffic separation scheme, traffic monitoring and surveillance, and the tugboat service have substantially reduced the risk of maritime accidents in northern Norway.

Regulation allowing fishing boats to take part in oil spill preparedness and response

Another example of our ability to act on new needs is the recent introduction of a regulation allowing fishing vessels and other vessels to take part in oil spill preparedness and response.

The petroleum industry needed access to additional boats in order to build up robust oil spill preparedness and response at oil and gas fields closer to the coast. Local fishing boats were the most obvious choice, but regulations hindered such use of boats not specifically designed for the purpose. Based on input from the industry and fishermen's organizations, the Norwegian authorities recently passed a regulation allowing fishing vessels and other vessels to take part in oil spill preparedness and response. The safety of the crews involved is safeguarded through technical requirements and certification.

Investments in oil spill control and recovery equipment

My third and last example is our investments in oil spill control and recovery equipment. In 2005, the Norwegian Coastal Administration presented an assessment of governmental oil spill recovery equipment. The assessment identified a gap between the capacity of the existing equipment and the needs to be met. An investment plan designed to close the gap was also presented.

The assessment and the investment plan have formed the basis for the government's efforts to improve oil spill preparedness and response in recent years. In 2007, we re-established the response equipment depot at Fedje, on the western coast of Norway. Between 2008 and 2010, we allocated substantial new funding for response equipment. The equipment in the government depots has been replaced and upgraded, and Norway's new Coastguard vessels have been equipped with booms, skimmers and pumping systems.

The government's priorities for the coming years

To sum up: in recent years, we have put into place effective preventive measures and we have strengthened our oil spill response capacity. Analyses of future developments and risk assessments have guided our efforts.

I am proud of what our government has achieved in this field. This does not mean that we consider our work in this field done. Our preparedness and response systems, and the oil spill technology we employ, can always be improved. Evaluations of oil spill response operations in recent years have identified weaknesses that we are in the process of addressing. We must continue to learn from each and every incident, in the knowledge that no two incidents are alike.

In the coming years, the Norwegian Coastal Administration's updated environmental risk and contingency analysis will be guiding our efforts. Based on maritime traffic forecasts and analyses of environmental risk, the government's preparedness and response systems will be assessed. The analysis is still in the pipeline, but I expect that its recommendations will have a strong bearing on our priorities in the years ahead.

As maritime transport and petroleum production move into more challenging areas, the associated environmental risk is likely to increase. Faced with such developments, new preventive measures must be considered. The government may also have to consider new regulations and requirements.

Whatever the future brings, there will be a strong need for knowledge and innovations in oil spill technology. Without new and more efficient solutions to

meet the challenge of preventing and dealing with spills, we will not be able to keep environmental risk at an acceptable level. Moreover, there are limits to the political influence on technological innovation.

I would therefore like to conclude by repeating my appeal to those of you involved in research and development: Be inspired by the technological advances in other industries and be bold in your search for better solutions. We need your contributions to meet future challenges!

Thank you for your attention.