

# Norway

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## 1. Introduction

### 1.1 Industry structure and legal framework

Petroleum activities on the Norwegian continental shelf (NCS) started in the late 1960s, with the discovery of the giant Ekofisk field in the southern North Sea as the region's first major milestone. During the 1970s several substantial discoveries were made in similar areas of the North Sea.

The NCS soon attracted international interest. Because of their technological experience and financial capabilities, the first major oil and gas fields were developed by major international oil companies such as Philips Petroleum Company, Elf Aquitaine and Mobil. During the 1970s Norwegian authorities focused on building competence, and the state-owned oil company Statoil was established in 1972. Norwegian licensing policy ensured that Statoil was awarded significant participating interests in all major fields. Although Statoil is the dominant player, the NCS has remained attractive to international oil companies. All super-majors and many independent companies are currently active on the NCS.

The level of state participation in the Norwegian oil and gas industry is high. The Norwegian state is the largest player on the NCS, by way of its shareholdings in Statoil, and through the State's Direct Financial Interest (SDFI), whereby the state participates directly in various production licences.<sup>1</sup>

The ultimate regulatory authority with respect to petroleum activities on the NCS is exercised by the Norwegian Parliament. The overall responsibility for ensuring that petroleum activities are carried out in accordance with the regulatory framework rests with the Ministry of Petroleum and Energy (MPE). On the regulatory level below the MPE are two entities, the Norwegian Petroleum Directorate (NPD) and the Petroleum Safety Authority (PSA).<sup>2</sup> Policy and legislation concerning petroleum taxation is handled by the Ministry of Finance.

The Norwegian offshore licensing system comprises various licences, approvals, agreements and other mechanisms. The production licence is the key document in the licensing system and gives the licensee an exclusive right to explore for, develop and produce petroleum in the blocks covered by the licence. The legal basis for the

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<sup>1</sup> The SDFI is managed by the state-owned company, Petoro AS.

<sup>2</sup> The main functions of the NPD relate to resource management, while the responsibilities of the PSA relate to issues regarding health, safety and environment.

government regulation of the petroleum sector is found in the Petroleum Activities Act<sup>3</sup> (PAA), which provides the legal framework for the licensing system. Detailed provisions are set out in regulations which are passed pursuant to the PAA.

The production licence can be awarded to one or several oil companies, one of them being appointed as operator. One of the conditions of the award of a production licence is that the licensees enter into a joint operating agreement (JOA) in a standard form prepared by the MPE. The JOA governs the relationship between the licensees, forming the basis for day-to-day management of the activities, allocation of costs, decision-making processes, etc.

## 1.2 Decommissioning background

All hydrocarbon resources under Norwegian jurisdiction are located offshore. Water depths on the NCS vary, from shallow waters in the southern North Sea (eg, the Ekofisk field is 70 to 75 metres deep), through deeper waters in the northern North Sea (eg, the Troll field at 300 metres) to ultra-deep waters in the Norwegian Sea (eg, the Ormen Lange field at 800 to 1,110 metres).

The NCS stretches from the southern North Sea to the arctic waters of the Barents Sea. Weather conditions may vary significantly in these different areas, but the NCS is generally considered as a harsh weather environment. Weather conditions contribute to making decommissioning in the NCS both technically challenging and expensive.

The NCS sees a wide variety of offshore installations. Jack-up rigs and other steel structure installations are common in the shallower waters of the southern North Sea. The deeper waters of the northern North Sea are home to the large concrete installations used in the Statfjord and Troll fields. Semi-submersible production units and floating production, storage and offloading vessels (FPSOs) are also employed in deeper waters. In recent years subsea installations have become more common. These typically facilitate smaller and economically marginal fields, but they have also been used for significant fields such as Ormen Lange and Snøhvit. An extensive network of pipelines for transportation of oil and gas exists on the NCS, particularly in the North Sea.

In 1996 and 1997 the first field installations on the NCS were decommissioned.<sup>4</sup> Currently, 12 fields on the NCS, all localised in the North Sea, have been decommissioned.<sup>5</sup> Several other fields are now approaching the decommissioning phase. According to public information, there are currently four fields where the licensees are preparing decommissioning plans: the Volve, Tune and Huldra fields, which are planned to shut down in 2014, and Statfjord A, which is planned to shut down in 2016.

The level of awareness of decommissioning remains high with regulators and relevant government entities. Decommissioning is subject to detailed legislation, and is considered a significant liability among licensees, something which in particular

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3 Act of November 29 1996, No 72.

4 The North East Frigg and Odin satellite fields.

5 The fields where there has been cessation of petroleum activities are Albuskjell, Cod, Edda, Frigg, Frøy, Lille-Frigg, Mime, Nordøst Frigg, Odin, Tommeliten Gamma, Vest Ekofisk, Yme and Øst Frigg. Some of these fields are planned to be redeveloped with new facilities, such as the Yme and Frøy fields.

affects licence and asset transactions. The high level of attention has also made offshore decommissioning a growing business for entrepreneurs and contractors.

The Norwegian Parliament has issued a White Paper which comprehensively addresses the decommissioning of pipelines and cables<sup>6</sup> and which will form the basis for future decisions regarding the disposal of pipelines.

Decommissioning of the installations at the Frigg field was completed in 2012. The installations were partially removed in accordance with the decommissioning plan, leaving concrete substructures in place while the rest of the installations were brought to land for further disposal. The decision was subject to an OSPAR-derogation case, and the solution of partial abandonment met no objections from OSPAR contracting parties.

The case concerning decommissioning of the concrete oil storage tank at the Ekofisk field was subject to consultation with contracting parties according to OSPAR procedures. None of the parties had any comments regarding the solution of partial abandonment of this installation.

We are not aware of any exhaustive studies estimating the extent and cost of decommissioning all remaining offshore installations. However, to indicate the physical extent, there are about 550 offshore installations in and around the Norwegian part of the North Sea. According to a report issued by the Norwegian Climate and Pollution Agency (NCPA) the cost of removing all these installations is highly uncertain, but estimates have been made of 160 billion Norwegian kroner (approximately US\$28 billion).

There are currently four onshore facilities along the western coast of Norway which have been licensed by the NCPA to receive, recycle and dispose of discarded offshore installations. By 2020, the amount of steel from discarded offshore installations ready for recycling is expected to increase from around 50,000 to 80,000 tonnes to 200,000 tonnes annually.

While many proposals have been put forward in terms of converting disused installations into facilities for other purposes such as offshore wind power generation and rigs-to-reefs solutions, there are no known plans for such use.

## **2. The Norwegian legal framework on decommissioning**

### **2.1 Introduction**

The cessation of petroleum activities in Norway is subject to comprehensive regulations. The main objective of the provisions on decommissioning is to make sure companies perform a thorough assessment of the disposal of production facilities, and carry out decommissioning decisions accordingly. In the following sections we discuss Norway's international obligations and its internal law on decommissioning.

### **2.2 International obligations**

Under international law, Norway is obliged to implement certain minimum requirements regarding the decommissioning of offshore facilities. Norway has

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6 St meld nr 47 (1999 to 2000).

ratified a number of international conventions addressing the decommissioning of offshore installations, including:

- the fourth Geneva Convention of 1958 on the Continental Shelf (ratified by Norway in 1971);
- the UN Convention on the Law of the Sea 1982 (UNCLOS) (ratified by Norway in 1996);
- the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic 1992 (ratified by Norway in 1996); and
- the London Convention on Marine Pollution and the Dumping of Wastes and Other Matter (ratified by Norway in 1980).

Parties to the fourth Geneva Convention are obliged to remove offshore installations in their entirety. In the light of recent developments in international law regarding decommissioning, this convention is of less practical importance and needs to be read in conjunction with state practice and more recent conventions regarding decommissioning, which require total removal of the installation only to the extent necessary in order to secure safe passage.<sup>7</sup>

As a party to UNCLOS, Norway is obliged to ensure safety of navigation relating to abandoned installations. This convention is supplemented by guidelines issued by the International Maritime Organization (IMO). These guidelines are in practice only recommendations, but the contracting states must nevertheless take these recommendations into account when making a decision on disposal covered by UNCLOS Article 60(3).

The OSPAR Convention is a regional treaty concerning the protection of the marine environment in the northeast Atlantic. The parties to the convention are obliged to implement relevant decisions and recommendations under the convention. OSPAR decision 98/3 sets out requirements regarding decommissioning and removal of offshore installations. Although this decision is not legally binding on the parties of the treaty, Norway has regarded this decision as binding when considering decommissioning matters.

According to Norwegian constitutional law, international law obligations must be implemented by way of incorporation or transformation into national legislation. Certain international obligations are therefore discussed in detail under section 2.3 below.

## 2.3 Norwegian law on decommissioning

### (a) *Introduction*

The Norwegian law on decommissioning is based on two main elements; the PAA (together with associated regulations) and contractual obligations (particularly the JOA).

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<sup>7</sup> According to the preparatory works to the provisions in the PAA on cessation of the activities (NOU 1993, No 25, page 10), this interpretation is generally accepted in international law based on the change of circumstance in the industry and the installation used.

The PAA provides statutory requirements which apply to licensees in relation to cessation of petroleum activities, thereby implementing Norway's international obligations as discussed in section 2.2 above.

The award of a production licence implies a contingent obligation for the licensees to decommission any facilities later installed. In addition, under the terms of the JOA the licensees are responsible for joint costs (including decommissioning costs), ultimately on a joint and several basis. The JOA is discussed in section 3 below. The MPE can also require, at any time (but often before the first licence award) that the licensee provides security for the fulfilment of its obligations undertaken by it towards Norwegian authorities, as well as for possible liability in connection with the petroleum activities (see section 2.3(c) below).

**(b) *The decommissioning plan***

According to Chapter 5 of the PAA, licensees are required to submit to the MPE a plan for decommissioning and cessation of the petroleum activities. Based on this plan, the MPE then decides on the disposal of the facilities. Chapter 5 of the PAA applies to both production facilities and intra-field pipelines.

The decommissioning plan must be submitted to the MPE no earlier than five years but no later than two years prior to the expected termination of the petroleum activities or commencement of alternative use of the facilities.

The decommissioning plan must describe whether the field can be used for continued production, or whether the field must be shut down and production facilities decommissioned. In case of termination of activities, the decommissioning plan must state whether the installations will be subject to complete or partial removal. The decommissioning plan must contain all information and assessments deemed necessary for the MPE to make a decision regarding disposal. Detailed requirements regarding the content of the decommissioning plan are provided in the Petroleum Regulation,<sup>8</sup> which requires that the decommissioning plan consists of a section on disposal and an environmental impact assessment.

**(c) *Decision relating to disposal of the production facilities***

Following the submission of the plan by the licensee group, the MPE must reach a decision based on the information given in the plan. According to Section 5-3 of the PAA, the decision must give an account of the assessment made by the MPE and must set out a deadline for the implementation of the decision. Section 5-3 also regulates which is the responsible party for decommissioning, alternative financial responsibility where licence interests are transferred, and the consequences if a responsible party fails to implement the decision. See section 2.3(f) below.

In making the decision the MPE must consider, among other things, technical, environmental and economic aspects, as well as consequences for other users of the sea. The MPE, in its decision, sets out a deadline for carrying out the decommissioning. The MPE may choose any of the disposal alternatives described in the decommissioning plan.

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8 Regulation No 653 1997 to the Act Relating to Petroleum Activities.

In its evaluation of the alternatives for disposal, the MPE must pay due regard to Norway's obligations under international law, including the IMO guidelines, UNCLOS and OSPAR decision 98/3. According to Article 2 of the OSPAR decision, any dumping and conservation of abandoned installations is prohibited, but derogations are possible.<sup>9</sup>

While the OSPAR decision does not cover offshore pipelines, it is Norwegian policy that offshore pipelines shall also be subject to decommissioning in accordance with the PAA. Pipelines may be subject to dumping if they are properly secured and do not constitute a safety risk to fishing.

**(d) Responsibility for carrying out the decommissioning decision**

The licence group is the primary responsible entity for carrying out the MPE's decision. However, the PAA states explicitly that "the licensee and the owner" are obligated to make sure that the decision is carried out. This partly addresses the situation where the production licence has expired and the owners are formally no longer licensees, in which case the provision specifies that the obligation remains. The provision also comprises leased installations, thus giving a basis for the MPE to address both the licensees and the installation owner.

As mentioned in section 2.3(a), the MPE can, based on the PAA, require that a licensee provides security for the fulfilment of its obligations in favour of the Norwegian authorities, including potential liability in connection with petroleum activities. The purpose for security is broadly defined and not specific to any kind of activities or fields. The security can be called upon on the basis of any liability, including liability relating to decommissioning. The MPE may review any security provided at any time, and may if necessary request the provision of additional security. Although the MPE will in practice often request a parent company guarantee, it could require any kind of security (including letters of credit). A standard parent company guarantee has been drawn up by the MPE. The requirement of security fulfils Norway's obligations under the IMO Guidelines Article 3.11, which requires that the parties to UNCLOS make sure that the party or parties responsible for decommissioning have the financial strength to cover possible liabilities in the future.

In addition to security, licensees are also required to maintain a minimum level of insurance coverage. According to the Petroleum Regulation, the licensees shall at all times during petroleum activities maintain insurance to cover damage to installations, pollution damage and other liability towards third parties, removal of wrecks and clean-up after accidents, and workers' compensation. The insurance must provide reasonable coverage taking into account the risk exposure and the premium costs.

When the production licence expires or is surrendered, revoked or permanently terminated, the state may use its right to take over the licence or the permanent installation. This may be of interest to the state if the installation or part of the installation may be used further in petroleum activities.

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<sup>9</sup> Article 3 of the decision lists exemptions for heavy installations installed prior to February 9 1999, certain concrete installations and *force majeure* events.