



Guidelines on decommissioning plans for installations used in connection with the exploration, production, and transportation of oil and gas offshore

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Energistyrelsen

Carsten Niebuhrs Gade 43
1577 København V

T: +45 3392 6700

E: ens@ens.dk

www.ens.dk



1 Introduction

The purpose of these guidelines is to describe the content and application of the rules concerning decommissioning plans pursuant to Section 32a of the Danish Subsoil Act, the expectations regarding the content of such plans, and the framework governing their submission and approval. This guidance does not provide an exhaustive account of the legal basis for decommissioning activities.

The guidelines are aimed at the decommissioning of offshore facilities and installations, etc. (hereinafter referred to as “installations,” e.g. platforms, jackets, subsea installations, wells, pipelines and umbilicals) established in connection with the exploration, production, and transportation of oil and gas offshore.

The guidelines describe the rules in force as of 1 January 2026. Accordingly, any subsequent amendments to the Danish Subsoil Act and other relevant legislation may not be reflected herein. In the event of any inconsistency between these guidelines and the applicable legislation, the legislation in force shall prevail. The Danish Energy Agency will seek to update the guidelines regularly, including in connection with amendments to relevant legislation.

At the time of publication of this guidance, a bill concerning, inter alia, decommissioning, is under consideration by the Danish Parliament. The bill is expected to enter into force on 1 July 2026 [*postponed due to election for parliament 2026*]. Following its entry into force, the guidance will be updated in accordance with the adopted legislation.

2 Legal framework

2.1 Section 32a of the Danish Subsoil Act¹

Pursuant to Section 32a(1) of the Danish Subsoil Act, applications for approval pursuant to sections 10, 17, 23, or 28 of the Act must be accompanied by a decommissioning plan regarding all installations covered by the application, including any previously approved installations in connection with the licence to which the application relates. For installations approved prior to 19 July 2015 however, Section 32a(4) provided that decommissioning plans were to be submitted no later than 19 July 2018.

According to Section 32a(2), the decommissioning plan must be approved by the Minister for Climate, Energy and Utilities (authority delegated to the Danish Energy Agency)².

¹ Consolidated Act on the Use of the Danish Subsoil no. 1461 of 29. November 2023.

² Executive Order no. 840 of 25 June 2025 of the tasks and powers of the Danish Energy Agency.



Section 32a was introduced into the Danish Subsoil Act in 2015³ in connection with the implementation of the Offshore Safety Directive⁴ into Danish law. The purpose of the provision is, inter alia, to ensure that considerations regarding the removal of installations are taken into account at the planning stage of a field development project.⁵

Where a development includes previously approved installations, such installations must be included in the decommissioning plan accompanying the application for approval or authorisation of new installations. The intention is to ensure that a comprehensive and coordinated plan for the decommissioning of all installations forming part of the proposed development is always in place⁶.

In addition to describing which installations are to be decommissioned and how decommissioning is expected to be carried out, cf. Section 32a(1), a decommissioning plan must, pursuant to Section 32a(2), include an estimate of the abandonment expenditure and a description of how financial security will be established. A decommissioning plan thus enables the authorities to monitor whether the necessary funds for decommissioning are available and, where appropriate, to impose conditions in connection with the approval of the plan.

As a consequence of Section 32a of the Danish Subsoil Act, licence holders may be required to submit a decommissioning plan many years before decommissioning is expected to take place. In such cases, the plan will inevitably involve some uncertainty and be contingent on subsequent assessments, actual conditions, technological developments, and regulatory changes that will only become clear as the decommissioning period approaches. Accordingly, a distinction is made between:

- A *preliminary decommissioning plan*, submitted pursuant to Section 32a before a decision has been made to cease production. Decommissioning methods and other elements of the plan are to be described to the greatest extent possible, with particular focus on costs and financial security. The preliminary decommissioning plan must be approved by the Danish Energy Agency pursuant to Section 32a(2);

and

- A *final decommissioning plan* for a specific decommissioning project, submitted together with an application under Section 10(3) of the Danish Subsoil Act to cease production and decommission installations. The final

³ The Danish Subsoil Act 2015 (Lov nr. 535 af 29. april 2015 om ændring af lov om anvendelse af Danmarks undergrund).

⁴ Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC (the Offshore Safety Directive).

⁵ See *Folketingstidende 2014-15 (1. Samling), tillæg A, L 116 som fremsat, page 32.*

⁶ See *Folketingstidende 2014-15 (1. Samling), tillæg A, L 116 som fremsat, page 32.*



decommissioning plan must be approved pursuant to Section 10(3) and Section 32a(2).

This is further elaborated in Section 4 – Content of the Decommissioning Plan.

2.2 The license holder's obligation to decommission

Pursuant to Section 33 of the Danish Subsoil Act, licences granted under the Act shall lay down “detailed provisions on the action to be taken in respect of installations established by the licensee when the licence expires, is relinquished, lapses or is revoked, as well as the action to be taken in respect of installations that become obsolete prior to such time.”

It follows from the Sole concession and from licences for exploration and production of hydrocarbons that, upon an order from the Danish Energy Agency, the licence holder is obliged to remove any installations, structures, or facilities that the State does not wish to assume ownership of after cessation of use.

2.3 Denmark's international obligations regarding offshore decommissioning

Pursuant to Article 60(3), second sentence, and Article 80 of the United Nations Convention on the Law of the Sea⁷, and Article 5(5), second sentence, of the Convention on the Continental Shelf⁸, disused installations shall, as a general rule, be entirely removed.

Furthermore, under the IMO Resolution A.672⁹ and the OSPAR Convention¹⁰, including the OSPAR Decision 98/3¹¹, Denmark has committed to ensure that installations established in the North Sea for the production and transportation of oil and gas are removed after use. Consequently, as a general rule, all installations must be removed upon cessation of use. Pipelines are not covered by the OSPAR Decision 98/3 and moreover, for certain large installations, derogation from the obligation of removal may be sought pursuant to Article 3 of OSPAR Decision 98/3.

2.4 The Offshore Safety Act and the Danish Working Environment Authority

The safety of personnel is a decisive factor in both the planning and execution of activities. The Danish Energy Agency presupposes that the methods proposed in a decommissioning plan pursuant to Section 32a, have been assessed as acceptable from a safety perspective.

⁷ The United Nations Convention on the Law of the Sea (opened for signature 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3 (UNCLOS).

⁸ Convention on the Continental Shelf (opened for signature 29 April 1958, entered into force 10 June 1964) 499 UNTS 311.

⁹ International Maritime Organization, Resolution A.672(16) - *Guidelines and standards for the removal of offshore installations and structures on the continental shelf and in the exclusive economic zone* (adopted 19 October 1989) (IMO Resolution A.672(16)).

¹⁰ Convention for the Protection of the Marine Environment of the North-East Atlantic (opened for signature 22 September 1992, entered into force 25 March 1998) 2354 UNTS 67 (OSPAR Convention).

¹¹ OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations (adopted July 1998, Sintra) (OSPAR Decision 98/3).



Attention is drawn to the fact that the Danish Working Environment Authority (DWEA) is the competent authority for occupational health and safety on offshore installations, in connection with the exploration and production of oil and gas, regulated by the Danish Offshore Safety Act¹². The DWEA supervises the entire lifecycle of offshore oil and gas activities, including the decommissioning (removal) of fixed installations and associated infrastructure and pipelines, requiring authorisation pursuant to Section 31 of the Danish Offshore Safety Act. This process includes the operator carrying out a risk assessment (including the handling of hazardous substances and the plugging and abandonment of wells) to ensure that risks are reduced to as low as reasonably practicable (the ALARP principle).

3 Framework for decommissioning plans

The general framework for decommissioning plans, and the contexts in which they are required in connection with the development and modification of facilities approved pursuant to Sections 10, 17, 23 or 28 of the Danish Subsoil Act, including the cessation of production activities, are set out below:

3.1 General principles and rules

a) Any application for a permit or approval pursuant to Sections 10, 17, 23 or 28 of the Danish Subsoil Act shall be accompanied by a decommissioning plan covering all facilities comprised by the application, cf. Section 32a(1) of the Danish Subsoil Act.

b) In the event of further development or modifications to an exclusive licence requiring permit or approval pursuant to Sections 10, 17, 23 or 28 of the Danish Subsoil Act, an updated decommissioning plan is required. Such an updated plan shall encompass both new facilities and all previously approved facilities, including facilities already decommissioned, thereby ensuring a consolidated overview and coordinated plan for decommissioning is always available for all facilities pertaining to the relevant field(s) within the exclusive licence area, cf. Section 32a(1) of the Danish Subsoil Act.

c) In addition to Danish legislation and this guidance, the Danish Energy Agency takes recognised international standards, guidelines, and any updates thereto into account in its assessment of decommissioning plans, including inter alia:

- *Guidance Notes – Decommissioning of Offshore Oil and Gas Installations and Pipelines*, November 2018, Department for Business, Energy and Industrial Strategy, UK.¹³

¹² Consolidated Act no. 125 of 6. June 2018 The Offshore Safety Act.

¹³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/760560/Decom_Guidance_Notes_November_2018.pdf



- *Well Decommissioning Guidelines*, November 2022 – Issue 7, OEUK.¹⁴
- *NORSOK D-010 – Well Integrity Standard*, Norway.¹⁵

d) It follows from the sole concession and the licences for exploration and production of hydrocarbons that, upon instruction from the Danish Energy Agency, the licensee is obliged to remove facilities, structures, and installations which the State does not wish to assume ownership of after cessation of use. Accordingly, the State may require that all facilities, structures, and installations established in connection with production activities be removed upon cessation of use or upon expiry of the license.

e) Denmark has acceded to the OSPAR Convention, including OSPAR Decision 98/3, and has committed to ensure that all offshore installations established in connection with oil and gas production are removed. Derogations from the obligation to remove installations may only be granted for certain large installations pursuant to Article 3 of OSPAR Decision 98/3, subject to application and approval by the national authorities and following consultation with the other OSPAR Contracting Parties. Reference is also made to OSPAR Agreement 2024-04¹⁶, *Guidance on the Application of OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations*.

Pipelines shall, as a general rule, be removed; however, they are not covered by OSPAR Decision 98/3, which does not preclude in situ decommissioning (i.e. leaving in place), either in whole or in part. Reference is further made to Section 4.2, *Decommissioning Methods – Decommissioning of Pipelines, Umbilicals and Cables*.

f) Decommissioning should be carried out as soon as reasonably practicable following cessation of use or termination of production activities. Where a decommissioning plan proposes alternative timeframes for decommissioning, for example due to campaign-based decommissioning or potential full or partial reuse, the application shall provide a detailed explanation and justification of such strategy, with particular regard to environmental, safety, and economic considerations. The Danish Energy Agency will assess on a case-by-case basis whether alternative timeframes may be approved.

The licensee remains responsible for taking the necessary measures to secure and maintain the facilities until decommissioning has been completed.

g) The Danish Energy Agency acknowledges that facilities may constitute valuable infrastructure for, for example, future transport and storage of CO₂ or other alternative purposes beyond hydrocarbon production for the benefit of Danish society. Where specific projects for alternative use (reuse of facilities) have been identified, consideration must be given, inter alia, to responsibility for the reused facilities, including the allocation of the decommissioning obligation. The

¹⁴ <https://oeuk.org.uk/product/oeuk-well-decommissioning-guidelines-issue/>

¹⁵ <https://online.standard.no/norsok-d-010-2021ac2-2021>

¹⁶ <https://www.ospar.org/documents?v=57729>



decommissioning plan for the oil and gas licence shall specify which facilities are to be transferred to another use and therefore not be decommissioned immediately. Facilities transferred to another use under a new licence, for example a licence for CO₂ storage, shall be included in the decommissioning plan for that licence. A fundamental precondition for any potential reuse is the establishment of adequate legal, technical, and financial security to ensure that such facilities will be removed once they have fulfilled their purpose.

Dialogue with the Danish Energy Agency regarding alternative use of facilities should be initiated as early as possible.

h) Where individual platforms, wells, pipelines, or parts of processing facilities are taken out of operation and decommissioned, while the primary function of the remaining development continues, a decommissioning plan shall be submitted for the relevant partial decommissioning project. Such partial decommissioning shall be consistent with the overall decommissioning plan established for the entire development.

i) The licensee's obligations in connection with a licence, including the obligation to decommission and remove facilities, do not lapse upon expiry of the licence but remain in force until fulfilled. This entails, inter alia, that the licensee must possess the necessary technical capacity to carry out decommissioning in a safe and responsible manner, as well as sufficient financial capacity to perform the activities. In this context, the Danish Energy Agency notes that the Joint Operating Agreement (JOA) governing the participants in an exclusive licence provides that the parties mutually undertake to comply with the provisions of the JOA until such time as all obligations under the licence have been fulfilled, including completion of decommissioning. Accordingly, the Danish Energy Agency considers that, even after expiry of the licence, binding cooperation remains in place among the participants to ensure a sound execution of decommissioning.

3.2 Cessation of Production and Decommissioning

j) The licensee shall, in due time — typically two years prior to the cessation of production (CoP – Cessation of Production) or the expiry of the licence — submit an application to the Danish Energy Agency for approval pursuant to Section 10(3) of the Danish Subsoil Act to cease production activities and decommission installations. The application shall be accompanied by a final decommissioning plan providing a detailed description of the decommissioning project. The decommissioning plan shall set out the project in its entirety, including descriptions of the selected decommissioning methods and, where relevant, an assessment of alternative solutions.

Approval of the decommissioning project will, as a general rule, be granted in conjunction with the application for approval to cease production activities pursuant to Section 10(3) of the Danish Subsoil Act.



The final decommissioning plan must also be approved in accordance with Section 32a(2).

In cases where the cessation of production activities and the actual decommissioning of installations are temporally separated — for example, in connection with applications for campaign-based decommissioning — the Danish Energy Agency's decisions regarding cessation of production and the decommissioning project may likewise be issued at different times. If there is a wish to submit an application for cessation of production without an accompanying plan and environmental assessment of the decommissioning project, this must be clarified with the Danish Energy Agency prior to submission.

k) If individual platforms, wells, pipelines, or parts of processing facilities are taken out of operation and decommissioned, while the primary function of the remaining development/licence continues, an application pursuant to Section 10(3) and a decommissioning plan shall be submitted for the relevant partial decommissioning project.

In such cases, the existing decommissioning plan pursuant to Section 32a must be updated to cover all installations within the licence, including an overview of installations already decommissioned under the licence and how financial security is provided for the remaining installations, etc.

l) The final decommissioning project is always subject to an environmental impact assessment (EIA) in accordance with the EIA rules under the Danish Environmental Assessment Act.¹⁷ The project must also be assessed in accordance with the Nature Protection Directives,¹⁸ which, with regard to offshore hydrocarbon exploration and production, are implemented in the Danish Subsoil Act and the Danish Offshore Habitats Order.¹⁹ Furthermore, the project must be assessed in accordance with the Danish Marine Strategy Act.²⁰

Relevant alternatives to the preferred method and equipment shall be described and assessed in the EIA. This ensures, inter alia, that alternative methods may be applied without further administrative processing, as such alternatives will already have been environmentally assessed.

m) Only once the Section 10 application for cessation of activities and the application for decommissioning of specific installations, including the final decommissioning

¹⁷ The Danish Environmental Assessment Act 2023 (Lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)), jf. lovbekendtgørelse nr. 4 af 3. januar 2023).

¹⁸ Council Directive 92/43/EEC on *the conservation of natural habitats and of wild fauna and flora* (adopted 21 May 1992, entered into force 1 January 1994) (Habitats Directive); Council Directive 2009/147/EC on *the conservation of wild birds* (originally adopted as Council Directive 79/409/EEC on 2 April 1979, as amended) (Birds Directive).

¹⁹ The Danish Offshore Habitats Order 2023 (Bekendtgørelse nr. 786 af 14. juni 2023 om administration af internationale naturbeskyttelsesområder og beskyttelse af visse arter ved videnskabelige undersøgelser, forundersøgelser, efterforskning og indvinding af kulbrinter, lagring i undergrunden, rørledninger, m.v. offshore).

²⁰ The Danish Marine Strategy Act 2019 (Lov om havstrategi, jf. lovbekendtgørelse nr. 1161 af 25. november 2019 med senere ændringer).



plan and EIA report, have been submitted, can a decision be made as to whether the decommissioning project may be carried out as described in the application.

n) Well operations associated with the decommissioning of each individual well (P&A – Plug & Abandonment) must additionally be approved by the Danish Energy Agency pursuant to Section 28(3) of the Danish Subsoil Act.

o) Upon completion of the decommissioning activities, the licensee is expected to submit a report documenting, inter alia, that the decommissioning has been carried out in accordance with the approved decommissioning project and that any conditions have been fulfilled. The report shall document and verify that the seabed has been cleared of equipment and waste and shall account for any monitoring programmes that continue over time. The report must also include a consolidated financial statement of the costs of the decommissioning project. The report is expected to be submitted no later than one year after completion of the decommissioning activities.

p) A plan for any subsequent monitoring of in situ decommissioned installations must be approved by the Danish Energy Agency in connection with the approval of the decommissioning project. The Danish Energy Agency will typically impose conditions regarding monitoring of in situ decommissioned installations.

q) If abandoned installations or parts thereof pose a risk or inconvenience, the authorities may require the licensee to take the necessary measures to prevent such risk or inconvenience.

r) As a general rule, a decommissioning project will be considered completed once all decommissioning activities have been carried out in accordance with the decommissioning plan and all conditions imposed in connection with the approval of the cessation of production activities and the decommissioning of installations have been fulfilled, including any conditions relating to the monitoring of in situ decommissioned installations.

3.3 Processing of Applications by the Authorities

s) The indicative processing time for an application pursuant to Section 10(3) concerning cessation of production and decommissioning of installations is primarily determined by the environmental assessment process and any OSPAR consultation process, as well as by the complexity of the decommissioning project. The total processing time for decommissioning projects subject to a full EIA, including a minimum 30-day public consultation period (and potentially Espoo²¹ and OSPAR consultations), is estimated to be between 12 and 24 months. This estimate applies

²¹ Convention on Environmental Impact Assessment in a Transboundary Context (adopted 25 February 1991, entered into force 10 September 1997) UNTS 1989 I-34028 (Espoo Convention).



once a complete and fully documented application has been received. The duration depends, inter alia, on the size and complexity of the project, consultation responses received, and the applicant's own preparation of the application and supplementary materials. Accordingly, shorter or longer processing times may occur, depending on the specific circumstances of the case.

t) The indicative processing time for an application pursuant to Section 28 is 8 – 16 weeks after the application has been fully documented, but may be longer if, for example, additional environmental assessment is required.

4 Contents of the Decommissioning Plan

A decommissioning plan shall account for all installations covered by the licence and describe decommissioning methods based on the technologies available and the legislation in force at the time the plan is prepared. The plan shall include an assessment of the abandonment expenditure and describe how financial security is established to ensure that funds for implementation of the decommissioning plan are available.

As a consequence of Section 32a of the Danish Subsoil Act, licensees are often required to submit a decommissioning plan years before decommissioning is expected to take place. In such cases, the plan will be subject to a degree of uncertainty and be contingent on subsequent assessments, actual conditions, technological developments, and regulatory changes that will only become clear closer to the time of decommissioning. A distinction is therefore made between:

- *A preliminary decommissioning plan*, submitted pursuant to Section 32a of the Danish Subsoil Act before a decision has been made to cease production, in which decommissioning methods and other elements of the plan are described to the greatest extent possible, with a particular focus on costs and financial security. The preliminary decommissioning plan must be approved by the Danish Energy Agency in accordance with Section 32a(2) of the Danish Subsoil Act;

and

- *A final decommissioning plan* for a specific decommissioning project, submitted together with an application pursuant to Section 10(3) of the Danish Subsoil Act to cease production and decommission installations. The final decommissioning plan for a specific project must be approved pursuant to Section 10(3) and Section 32a(2) of the Danish Subsoil Act.

In a final decommissioning plan accompanying an application for a specific project, the selected decommissioning methods and their concrete alternatives must be described in detail. It shall be explained how the methods have been selected, for



example on the basis of comparative assessments²² evaluating the methods against a range of parameters such as environmental impact, safety, cost, and technical complexity.

It is important that the EIA of the specific decommissioning project takes into account any uncertainties in the project, as subsequent changes or refinements may trigger a new EIA if they are not covered by the existing assessment and project description. For example, where an activity can be carried out using different types of equipment, the relevant alternatives should be included in the EIA that any necessary changes during project execution may be implemented without further administrative procedures, as the alternatives will already have been assessed and included in the decision.

Table 1 provides an example of the contents of a decommissioning plan. The example is indicative and outlines the topics, descriptions, and assessments expected to be included in a decommissioning plan. The structure/table of contents of the decommissioning plan typically remains unchanged over time — from the initial plan submitted pursuant to Section 32a, for example in connection with development, to the final plan describing the specific decommissioning project in connection with CoP.

²² Comparative assessment: A detailed process by which the operator objectively and transparently evaluates the advantages and disadvantages of different decommissioning methods against key criteria such as safety, technical complexity—including the potential for the development of new methods—environmental considerations, societal interests, and economic factors. OSPAR Decision 98/3, Annex II, sets out a framework for “comparative assessment.”



Chapter	Section	Preliminary Decommissioning Plan	Final Decommissioning Plan (Decommissioning Project)
1 Executive Summary	- Introduction, background, and basis for decommissioning	x	x
	- Overview of installations being decommissioned	x	x
	- Summary of the proposed decommissioning plan	x	x
	- Field location/layout and adjacent facilities	x	x
	- Impact of decommissioning on other installations	x	x
	- Any specific conditions in the licence and/or partnership	x	x
2 Installations to be decommissioned	- Surface facilities (topsides)	x	x
	- Load-bearing structures (jackets/foundations/anchoring systems)	x	x
	- Pipelines, cables, subsea assemblies/manifolds, etc.	x	x
	- Wells, including status (active, suspended, abandoned, etc.)	x	x
	- Drill cuttings and other materials on the seabed	x	x
	- Other subsea installations, concrete structures, etc.	x	x
	- Inventory of installations, pipelines, etc.	x	x
3 Removal and disposal methods	- Topsides	x	x
	- Load-bearing structures (jackets/foundations/anchoring systems)	x	x
	- Pipelines, cables, subsea assemblies/manifolds, etc.	x	x
	- Wells (P&A)	x	x
	- Drill cuttings and other materials on the seabed	x	x
	- Other subsea installations, concrete structures, etc.	x	x
	- Any assessments of alternatives / comparative assessments	x	x
	- Waste management, including reference to appendix with material inventory	x	x
4 Environmental Assessments	- Overall description of environmental assessments and processes	x	x
	- Environmental impact assessment (if applicable, screening only) in accordance with the Environmental Assessment Act	-	x*
	- Assessment pursuant to the Habitats Directive and the Birds Directive	-	x*
	- Assessment pursuant to the Marine Strategy Act (or the Water Framework Directive)	-	x*
5 Financial information	- Estimates of abandonment expenditure (ABEX)** including any annual operational costs following cessation of operations	x	x
	- Value of remaining production, including underlying assumptions	x	x
	- Calculation of trigger point for provision of abandonment security	x	-
	- Security form and status of abandonment security	x	x
6 Planning, Project Management and Verification	- Project management and verification	-	x
	- Project organisation	-	x
	- Decommissioning schedule, including expected CoP (Cessation of Production)	x	x
	- Seabed clearance and verification	-	x
	- Post-decommissioning monitoring programme	-	x
Appendices	- It is recommended that financial information and information on abandonment security be organised in an appendix to the decommissioning plan	x	x
	- Material inventory	-	x
	- Various technical appendices	x	x
	- Other	x	x

* Typically, reference is made to a separate report

** Abandonment expenditure should be divided as given in Table 2

Table 1: Example of the content of a decommissioning plan.

Another relevant example of the content of a decommissioning plan is available in the UK guidance: *Guidance notes - Decommissioning of Offshore Oil and Gas Installations and Pipelines; November 2018; Department of Business, Energy and Industrial Strategy; Annex C - The contents of a Decommissioning Programme.*

Referring to the Chapters in Table 1, the decommissioning plan is expected to describe the following:



4.1 Installations to be decommissioned

The decommissioning plan should include an overview of all installations (wells, platforms, pipelines, etc.) established within the licence area in connection with exploration and production activities.

Inventories of installations to be decommissioned shall include both new and existing installations. An overview of any installations previously decommissioned shall also be included in the overall decommissioning plan.

In addition to the type of installation, the inventory should specify relevant information such as material type and any surface treatments, weight, dimensions, and position, as well as the date of installation and current operational status up to the time of decommissioning.

The decommissioning plan should include overview maps showing the positions of all installations.

4.2 Removal and disposal methods

A general description shall be provided of the options for decommissioning, removal, and disposal that have been considered for all installations to be decommissioned, as well as any alternative options. The recommended/selected decommissioning method for each case must also be clearly described and justified.

It shall be clearly stated which (parts of) installations will be removed, which (parts of) installations will be repurposed or remain in operation, and which (parts of) installations, if any, will be decommissioned in situ (left in place).

The possibility of derogation from the requirement to remove installations, cf. OSPAR Decision 98/3, Article 3, shall be assessed on the basis of a comparative assessment of the selected and alternative decommissioning methods, as described in OSPAR Decision 98/3, Annex 2, and requires consultation through OSPAR with the other OSPAR Contracting Parties in accordance with Article 4 and Annex 3 of that Decision. Reference is also made to OSPAR Agreement 2024-04²³, "Guidance on the application of OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations.

²³ <https://www.ospar.org/documents?v=57729>



Regarding Well Abandonment

Plug & Abandonment of wells should follow recognised norms and standards or updates thereof, such as:

- *Well Decommissioning Guidelines; November 2022 – Issue 7; OEUK²⁴*
- *NORSOK D-010:2021, Well Integrity Standard²⁵*

Reference is also made in this context to the Danish Working Environment Authority's guidance "65.2.2 on Health and Safety Aspects Regarding Offshore Well Operations,"²⁶ Chapters 6.3 and 6.4.

Cutting depths for installations below the seabed

The Danish Energy Agency requires that foundations, piles, or wells be removed to and/or cut at a level below the seabed to prevent them from posing a risk or inconvenience. Final decommissioning plans shall specify the depth to which installations are removed, taking into account site-specific seabed conditions (such as currents, risk of erosion and exposure, etc.) as well as other uses of the sea area (fishing, further development, etc.).

Decommissioning of pipelines, flowlines, and cables

As a general rule, pipelines, flowlines, and cables must be removed. Whether the Danish Energy Agency may permit in situ decommissioning of a pipeline, flowline, or cable (in whole or in part) will always depend on a case-by-case assessment.

It is the responsibility of the licensee to determine the preferred decommissioning method for pipelines, flowlines, and cables. The decommissioning plan shall justify the selected method, and cost estimates should reflect the recommended approach.

It should be noted that the Danish Energy Agency can only determine whether the proposed decommissioning may be carried out as applied for once an application for approval of a final decommissioning plan, including a description of the project and the associated EIA report, has been submitted.

In a final decommissioning plan accompanying an application for a specific decommissioning project, the selected methods for pipelines, flowlines, and cables, as well as their concrete alternatives, must therefore be described in detail. It shall be explained how the methods have been selected, for example on the basis of comparative assessments.

²⁴ <https://oeuk.org.uk/product/oeuk-well-decommissioning-guidelines-issue/>

²⁵ <https://online.standard.no/norsok-d-010-2021ac2-2021>

²⁶ <https://offshore.at.dk/en/regulations/wea-guidelines/well-operations/>



Waste management and material inventory

The decommissioning plan should describe the waste management strategy to be followed throughout the decommissioning project and include a material inventory describing the types and quantities of waste associated with the project.

4.3 Environmental Assessments

Activities associated with the decommissioning of installations in the North Sea may constitute a project subject to the EIA rules if the activity falls within one of the project categories listed in Annexes 1 or 2 of the Danish Environmental Assessment Act.

As a general rule, the decommissioning of platforms and/or pipelines will be subject to mandatory EIA requirements, as such projects fall within Annex 1, item 14 and/or Annex 1, item 16(a) of the Danish Environmental Assessment Act. For projects listed in Annex 1, the preparation of an EIA is mandatory. The licensee must prepare an EIA report covering the entire decommissioning project, which must be subject to public consultation (and, where relevant, Espoo consultation) before the Danish Energy Agency can grant approval under the Danish Subsoil Act. An EIA report must include the information specified in Annex 7 of the Danish Environmental Assessment Act.

For larger and more extensive decommissioning projects, additional procedural steps in the environmental assessment process may be required.

Furthermore, the EIA report must include a screening assessment of the project's potential impact on Natura 2000 sites and Annex IV species in accordance with the Habitats Directive, an assessment pursuant to the Birds Directive, and an assessment of the project in relation to the 11 descriptors set out in the Marine Strategy Act. It should be noted that if the activities take place within 1.8 km (1 nautical mile) of the coastal baseline, they fall within the scope of the Water Framework Directive²⁷ rather than the Marine Strategy framework.

If the project concerns only the abandonment of one or more wells, and no simultaneous (or planned) decommissioning of other installations — such as associated platforms and/or pipelines — is involved, the project must be subject to a screening to determine whether it is likely to have significant effects on the environment. The licensee must prepare a screening report describing the environmental impacts associated with the well abandonment activities.

On the basis of the screening report, the Danish Energy Agency will make a decision pursuant to Section 21 of the Danish Environmental Assessment Act as to whether the proposed project is subject to a requirement for an EIA. If the Danish Energy

²⁷ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (The Water Framework Directive), implemented in the Danish Water Planning Act 2017 (lov om vandplanlægning, jf. lovbekendtgørelse nr. 126 af 26. januar 2017)



Agency determines that an EIA is required, the applicant must prepare an EIA report. If, on the other hand, the Agency determines that no such requirement applies, it will subsequently grant approval under the Danish Subsoil Act.

A decision as to whether the decommissioning may be carried out as described in the decommissioning plan can only be made once an application pursuant to Section 10 for cessation of production (CoP) and decommissioning of installations has been submitted, including a final decommissioning plan describing the project in detail and accompanied by the relevant screening report and/or EIA report.

4.4 Abandonment cost and provision of security

The decommissioning plan is expected to include information on financial matters and financial security, as outlined below.

Information on financial matters and financial security for abandonment expenditure shall also be submitted to the Danish Energy Agency in accordance with Section 26(1) of the Danish Subsoil Act and the Danish Energy Agency's accounting regulations for the reporting of financial information.²⁸ To ensure that such information remains up to date, it must be updated and submitted to the Danish Energy Agency on an annual basis.

The Danish Energy Agency has developed a digital tool for the annual reporting of financial matters and financial security related to decommissioning, covering items 4.4.1 to 4.4.6.

4.4.1 Abandonment expenditure (ABEX)

To enable the assessment of decommissioning costs on a reasonable and consistent basis and to facilitate benchmarking of costs across licences, it is requested that costs be presented in categories corresponding to the cost model applied in Norway²⁹ and the United Kingdom,³⁰ as summarised in Table 2. As a general rule, decommissioning plans should specify costs distributed across these categories. Final decommissioning plans are furthermore expected to present costs on an annual basis over the entire decommissioning period.

The licensee is expected to account for the assumptions underlying the assessments and calculations used in estimating decommissioning costs.

²⁸ <https://ens.dk/media/5747/download>

²⁹ Offshore Norge:
<https://www.offshorenorge.no/contentassets/9c8d99d009a04989be2ef32f9fcc0985/wbs-handbook-r1.pdf>

³⁰ UK North Sea Transition Authority:
https://www.nstauthority.co.uk/media/8469/decommissioning-section-guide-2022_v4ac.pdf



1 Project Management
2 Post-CoP Running Costs/OPEX
3 Facilities/Pipelines Permanent Isolation & Cleaning
4 Well Decommissioning
5 Topsides Preparation
6 Topsides Removal
7 Substructure Removal
8 Subsea Infrastructure
9 Topsides and Substructure Onshore Disposal and Recycling
10 Site Remediation
11 Post-Decommissioning Monitoring

Tabel 2: Categories for abandonment expenditure.

The licensee must, in the decommissioning plan and on an annual basis, provide updated estimates of decommissioning costs for installations covered by the licence.

This is required to support the Danish Energy Agency's financial supervision of licences granted under the Danish Subsoil Act, including, inter alia, enabling comparison between decommissioning costs and the financial capacity of the licensees.

4.4.2 Value of Remaining Production within the License

The licensee shall, on an annual basis, report the expected value of the remaining production. The licensee must account for the assumptions underlying the calculations, including, for example, the source used for oil price assumptions and other assumptions relevant to the calculation of the value of remaining production. This may, for example, be documented in a spreadsheet.

4.4.3 The Trigger Mechanism

The licensee shall, in the decommissioning plan, describe the trigger mechanism that determines how the timing for the commencement of financial security for decommissioning costs within the partnership (the trigger point) is calculated, including the assumptions and premises forming part of the mechanism.

4.4.4 Calculation of the Trigger Point

Based on the estimated decommissioning costs, the value of remaining production, and the trigger mechanism, the licensee shall perform an annual calculation of the timing for the commencement of financial security within the partnership (the trigger point). This may, for example, be documented in a spreadsheet.

4.4.5 Provision of Security of abandonment costs

The decommissioning plan should include a description of how participants in a licence may provide financial security. Where the trigger point has been reached, the



licensee shall, on an annual basis, report to the Danish Energy Agency the type of financial security provided by each participant in the partnership and specify the amount of security provided by each participant. Furthermore, the total accumulated financial security within the licence shall be reported together with an account of the decommissioning costs for which security has not yet been provided by the participants.

4.4.6 Calculation Examples

To ensure transparency regarding the licensee's assessments, calculations, and assumptions, it is recommended that these be documented in an active spreadsheet, enabling easy evaluation of the impact of changes in calculation assumptions, for example changes in estimated decommissioning costs, oil prices, etc.

4.4.7 Relationship to Former Participants in the License

The licensee is expected to make updated information on decommissioning costs and the estimated trigger point available to former participants in the licence who retain secondary liability, immediately after such information becomes available. The information should be provided at a level of detail sufficient to enable former participants to assess their potential liability within the licence and to evaluate when such liability may arise.

4.5 Planning, project management and verification

An account shall be provided of how the required technical capacity for the execution of the decommissioning project will be established and organized, including a specification of the need for, and organization of, third-party verification of various components of the project. A project schedule shall also be presented, indicating the start and end times for the individual activities.

Furthermore, an account shall be provided of how it will be ensured and verified that the seabed has been cleared of equipment and debris, as well as of any subsequent monitoring program for potential remaining installations decommissioned in situ.

The need for and scope of monitoring will be based on a risk-based, case-specific assessment, taking into account, among other factors, the decommissioning plan, actual conditions, and the associated EIA. Where necessary, conditions regarding such monitoring will be stipulated.

4.6 Appendices

The decommissioning plan may include an annex setting out the financial information (see Section 4.4), including, inter alia, a calculation of the value of remaining production and the timing of the provision of financial security (trigger point). This could, for example, take the form of a dynamic spreadsheet specifying input data, assumptions, and calculations.



The need for additional annexes, such as technical appendices in the form of burial assessments of pipelines, shall be assessed by the licensee.

To the extent necessary, the Danish Energy Agency will request any additional data and assessments deemed required to ensure that the matter is sufficiently substantiated.

5 Use of Decommissioning Data by the Danish Energy Agency

It is generally in the interest of both society and the licensees to minimise decommissioning costs in Denmark, and it is therefore important to monitor cost developments. The Danish Energy Agency accordingly uses data to carry out an annual assessment of the total decommissioning costs in Denmark.

As the competent authority, the Danish Energy Agency is responsible for ensuring compliance with the provisions of the Danish Subsoil Act, including those relating to decommissioning plans, cf. Section 32a. Information and data, both technical and financial, submitted in connection with decommissioning plans are thus used to assess whether the plans comply with statutory requirements and to ensure that no compromises are made with respect to environmental considerations and international obligations in relation to decommissioning.

The Danish Energy Agency compares decommissioning plans across projects and, on that basis, continuously evaluates, inter alia, decommissioning methods as well as estimated (expected) and realised (actual) costs. The Agency assesses decommissioning costs from the plans within the specified cost categories across projects, thereby enabling comparison and benchmarking of costs. This supports the Agency in making the necessary assessment of whether cost estimates, and, consequently, the associated financial security, are reasonably determined. The information thus also forms part of the Danish Energy Agency's financial supervision of the companies.

Deviations from benchmarks, both positive and negative, may serve as a constructive basis for assessment, as decommissioning costs exceeding the benchmark may indicate an inefficient or inappropriate decommissioning method that could potentially place the licensee at a disadvantage.

Similarly, the described technical solutions are compared across projects, providing insight into and guidance on current best practices.