Protection of the Arctic Marine Environment

REDEG Pre-Meeting Agenda 7.2

Status of Offshore Oil and Gas Activities and Regulatory Frameworks in the Arctic

It is of interest to PAME to better understand the status of oil and gas activities and regulatory frameworks in the Arctic. The last assessment of offshore oil and gas activities and regulatory frameworks was contained in the Arctic Monitoring and Assessment Program (AMAP) Working Group of the Arctic Council's 2010 Assessment, *Oil and Gas Activities in the Arctic – Effects and Potential Effects* (2010 OGA).

In an effort to understand the status of current or planned offshore oil and gas activities as well as changes to relevant legislation, regulations, and policies over the last several years, information was sought from Arctic States. States were requested to provide a short description of activities currently underway or being planned. In addition, States were requested to describe any amendments to existing legislation or regulations or the establishment of new legislation or regulations, as well as policies, practices, and organizational structures, instituted after the 2010 OGA.

In summation, almost all Arctic nations with oil and gas programs underwent changes in the aftermath of the Deepwater Horizon disaster. The United States had the biggest changes including a reorganization and complete rebuilding of the offshore oil and gas regulatory agencies and rules and Greenland whose oil and gas department moved from being a part of the Mineral License and Safety Authority (MLSA) to become a part of the Ministry of Industry, Energy and Research (MIER). The United States, Norway and Canada also had some major changes to their safety regulation regimes.

Most offshore activity is being conducted on the Arctic shelves of Norway, the Russian Federation, and the United States. Norway, the Russian Federation, and the United States have production from Arctic oil and gas fields and active exploration programs. Canada has suspended their offshore Arctic program for five years, which is up in 2021. Greenland/Faroe Islands/Kingdom of Denmark have nascent programs as does Iceland.

Survey of the Status of Offshore Oil and Gas Activities and Regulatory Frameworks in the Arctic

In 2010 the Arctic Monitoring and Assessment Programme (AMAP) produced the AMAP Assessment, *Oil and Gas Activities in the Arctic — Effects and Potential Effects*, which includes a compendium of oil and gas laws, regulations, practices and policies of the Arctic States. PAME requested States to update information on activities and status of legislation, regulations and policies for offshore oil and gas activities.

The following are the questions asked of the Arctic States:

Please describe current and planned offshore oil and gas activities in the Arctic including:

- leasing/licensing
- exploration and development

Please describe in further detail exploration or development activities on offshore leased or licensed lands including:

- seismic
- coring
- drilling
- platform installation
- production
- pipelines

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

- Engagement with Indigenous Peoples and local communities
- Leasing or licensing offshore areas
- Environmental Impact Assessments or Statements
- Environmental protection and/or mitigation for exploration and development activities
- Environmental monitoring
- Compliance monitoring
- Human health and safety
- Use and discharge of chemicals, including dispersants
- Emissions
- Waste management
- Drilling safety
- Prevention, preparedness and response, including response practices
- New technology and research
- Decommissioning

How have management activities changed since the 2010 OGA?

Iceland

Please describe current and planned offshore oil and gas activities in the Arctic including:

- leasing/licensing
  In 2007, the Ministry of Industry presented a plan on the possible granting of exclusive licenses for prospecting, exploration and production in the northern part of the so-called Dreki area and in parallel published a Strategic Environmental Assessment of the plan in agreement with Act No. 105/2006 which implemented EU Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment. The first Licensing round for hydrocarbon exploration and production licenses, announced in January 2009, was unsuccessful. A second announcement in 2011 led to three applications that were agreed upon, leading to two exclusive exploration and production licences issued in Janu3-4ary 2013 and one in January 2014. According to the licenses, a decision point on whether an exploration well would be drilled was in the beginning of years 2020 and 2022, respectively. All of the licensees relinquished their licences leading to the present day situation where there are no licences active in the Dreki area.
- exploration and development
  No hydrocarbon exploration activities have been executed in Icelandic waters.

Please describe in further detail exploration or development activities on offshore leased or licensed lands including:

- seismic – seismic studies were carried out in the Dreki area in connection with the abovementioned licences.
- coring N/A
- drilling N/A
- platform installation N/A
- production N/A
- pipelines N/A

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

- Engagement with Indigenous Peoples and local communities - none
- Leasing or licensing offshore areas - Regulation No. 884/2011 describes in a more detailed manner than Act No. 13/2004 the process of application of licenses for prospecting, exploration and production, granting of licenses, their content and provisions, as well as requirements on information and data delivery from the holders of licenses to the National Energy Authority.
- Environmental Impact Assessments or Statements N/A
- Environmental protection and/or mitigation for exploration and development activities Act No. 7/1998 on Hygiene and Pollution Control contains provisions of industry emission regulation and pollution control. The act applies to territorial land and sea and exclusive economic zone, as well as the Icelandic airspace and on ships flying the Icelandic flag. The Act specifies the role of the Environment Agency of Iceland as competent authority issuing emission permits, pollution control and inspections. In a

2008 amendment to the act, it was stressed that it applies to exploration and production of hydrocarbons.

- Environmental monitoring N/A
- Compliance monitoring N/A
- Human health and safety
  According to the Construction Act No. 160/2010, the Iceland Construction Authority issues permits for the construction of offshore installations, and is responsible for fire safety at installations designed for exploration and production of hydrocarbons.
- Use and discharge of chemicals, including dispersants N/A
- Emissions N/A
- Waste management N/A
- Drilling safety N/A
- Prevention, preparedness and response, including response practices N/A
- New technology and research N/A
- Decommissioning N/A

How have management activities changed since the 2010 OGA?
No change in management activities

PAME State / Member: Iceland

Name of Responder / Expert and Affiliation: Sigurros Fridriksdottir, Environment Agency

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Greenland/Kingdom of Denmark

Please describe current and planned offshore oil and gas activities in the Arctic including:
Leasing/licensing

- *Plans for offshore oil and gas licensing rounds will be set out in the new oil and gas strategy.*

Exploration and development

- *N/A*

Please describe in further detail exploration or development activities on offshore leased or licensed lands including:
Seismic:

- N/A

Coring

- N/A

Drilling

- N/A

Platform installation

- N/A

Production

- N/A

Pipelines

- N/A

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:
Engagement with Indigenous Peoples and local communities

- *Since the introduction of the Mineral Resources Law 1st of January 2010 a number of subsequently amendments related to engagement and local communities have been adopted to the Act.*
  An amendment to the Act was approved in 2012 related to a more explicit requirement for preparation of an Impact Benefit Agreements (IBA). An IBA is an agreement between the company, the government and the local community (municipality) related to jobs, skills upgrading, tenders, local enterprises etc. The purpose of the IBA is to reduce negative impacts and promote positive effects. Another amendment to the Act was introduced in 2014 related to public consultation and local involvement. This included early involvement through a pre-consultation process, specific and detailed references in the Act related to consultation requirements etc. Further to this, a fund was established where local residents and relevant organizations can apply for funds if they wish to investigate aspects of a project in more detail. In this way, a third party could come up with new information to the benefit of the project.

Leasing or licensing offshore areas

- *N/A*

Environmental Impact Assessments or Statements:

- *All offshore hydrocarbon activities are subject to approval by the Mineral Resources Authority (MRA), formerly known as Bureau of Minerals and Petroleum (BMP), before commencement. More comprehensive activities, such as exploration drillings etc., are subject to approval by the Government of Greenland. The licensees shall submit an application for approval of an activity to the MRA and the application shall be accompanied by an EIA. The conditions for the EIA were revised in January 2011 and are described in "BMP Guidelines – for preparing an Environmental Impact Assessment (EIA) report for activities related to hydrocarbon exploration and exploitation off shore Greenland*" cf. https://govmin.gl/images/stories/petroleum/BMP_EIA_Guidelines_Jan_2011.pdf.

  Furthermore, in April 2011 the MRA developed "*Environmental Impact Assessment (EIA) report related to stratigraphic drilling offshore Greenland*". *These EIA guidelines directed to stratigraphic drilling are considered an Annex to the main MRA EIA guidelines. All offshore stratigraphic drilling activities are subject to approval by the MRA, Government of Greenland, before commencement. The companies shall submit an application for approval of the activity to the MRA and the application shall be accompanied by an EIA cf.*
  https://govmin.gl/images/stories/petroleum/BMP_EIA_Guidelines_stratigraphic_drilling.pdf
  and
  https://govmin.gl/images/stories/petroleum/Guidelines_stratigraphic%20drilling_April_2011.pdf

Environmental protection and/or mitigation for exploration and development activities

- *Greenland Oil Spill Response was established in 2012 and is owned by the Government of Greenland. Greenland Oil Spill Response operates within oil spill contingency, oil spill response and other related business primarily within the Mineral Resources area in Greenland cf. Parliament Act no. 4 of 4 June 2012 on Greenland Oil Spill Response A/S*
  - *http://lovgivning.gl/lov?rid=%7b52179309-C130-4FE0-A7C9-70E0185DE7B4%7d (legislation in Danish).*

Environmental monitoring

- *Companies have to, when making seismic research, prepare an environmental impact assessment of seismic activities in ice free Greenland waters. The focus is the marine mammals and fish in Greenland waters because of the environmental concern related to seismic surveys see.* https://www2.dmu.dk/Pub/FR785.pdf

- *To increase the knowledge of seabird and marine mammal distribution and abundance in Greenland the Mineral Resources Authority (MRA) has made it mandatory for seismic vessels operating in Greenland to collect seabird and marine mammal data see. https://govmin.gl/images/stories/petroleum/approval_offshore/SR152_Manual_for_seabird_and_marine_mammel_2015_rettet.pdf*

Compliance monitoring:

- *MRA shall overlook and ensure that sufficient well data and information are collected in interesting potential hydrocarbon reservoir layers by the license holder in order to make future evaluation and interpretation of potential estimates of reserves and producing capabilities. See https://www.govmin.gl/images/stories/petroleum/110502_Drilling_Guidelines.pdf*

Human health and safety:

- The MRA approves and supervises all drilling and related operations in Greenland especially with respect to safety and environmental issues in compliance with the Greenland Mineral Resources Act and the Danish Marine Environment Act. For further information https://govmin.gl/images/stories/petroleum/110502_Drilling_Guidelines.pdf Section 6: Safety precautions and Drills.

Use and discharge of chemicals, including dispersants

A strategy for a drilling mud and chemical use and discharge strategy in connection with oil exploration activities in Greenland have been developed. The strategy, will provide basis for development of guidelines for regulating drilling mud selection, use, discharge and removal / disposal. See more in appendix A.

Emissions N/A

Waste management

See appendix A.

Drilling safety

- *Greenland Bureau of Minerals and Petroleum Drilling Guidelines – May 2011 Offshore drilling guidelines for operating companies In Greenland. The guidelines follow best international practice.*

Prevention, preparedness and response, including response practices

- *The contingency plan for Greenland was latest updated in 2017. The contingency plan outlines the procedures in case of an **emergency** like an oil spill and is regularly updated by the emergency commission.*

New technology and research

- N/A

Decommissioning

- *There have never been oil production in Greenland, and thereby no decommissioning.*

How have management activities changed since the 2010 OGA?

Since 2010, the oil and gas department has moved from being a part of the Mineral License and safety Authority (MLSA) to become a part of the Ministry of Industry, Energy and Research (MIER).

Relevant publication regarding oil and gas since 2010 in English:

- Guidelines to Best Environmental Practices, Environmental Impact Assessments and Environmental Mitigation Assessments
  - file:///C:/Users/metl/AppData/Local/cBrain/F2/.tmp/44525806/Guidelines_UK_2_Dec.pdf

- Guidelines for submission of scope of project for off shore hydrocarbon exploration activities
  - file:///C:/Users/metl/AppData/Local/cBrain/F2/.tmp/44525806/Scope_UK_28%20Jan.pdf

- Guidelines to environmental impact assessment of seismic activities in Greenland waters.
  - https://www2.dmu.dk/Pub/FR785.pdf

- Environmental Impact Assessment (EIA) report for activities related to hydrocarbon exploration and exploitation off shore Greenland
  - https://govmin.gl/images/stories/petroleum/BMP_EIA_Guidelines_Jan_2011.pdf

- Greenland Bureau of Minerals and Petroleum Drilling Guidelines
  - https://govmin.gl/images/stories/petroleum/110502_Drilling_Guidelines.pdf

- BMP Guidelines – for preparing an Environmental Impact Assessment (EIA) report related to stratigraphic drilling offshore Greenland
  - https://govmin.gl/images/stories/petroleum/BMP_EIA_Guidelines_stratigraphic_drilling.pdf

- BMP Stratigraphic Drilling Guidelines, April 2011
  - https://govmin.gl/images/stories/petroleum/Guidelines_stratigraphic%20drilling_April_2011.pdf

Relevant publication regarding oil and gas since 2010 in Danish:

- Retningslinjer for ansøgning, udførelse og afrapportering af offshore kulbrinteefterforskningsaktiviteter (eksklusive boringer) i Grønland
  - https://naalakkersuisut.gl/~/media/Nanoq/Files/Publications/Raastof/DK/Retningslinjer%20for%20ansgning%20udfrelse%20og%20afrapportering%20af%20offshore%20kulbrinteefterforskningsaktiviteter%20eksklusive%20boringer%20i%20Grnland%20maj%202011.pdf

- Inatsisartutlov nr. 4 af 4. juni 2012 om Greenland Oil Spill Response A/S OMHANDLER OMRETTELSEN AF GREENLAND OIL SPILL RESPONSE
  - http://lovgivning.gl/lov?rid={52179309-C130-4FE0-A7C9-70E0185DE7B4}

- HØRING: Råstofstyrelsens retningslinjer for ansøgning, udførsel og afrapportering af offshore kulbrinteefterforskningsaktiviteter (eksklusive boringer) i Grønland
  - https://naalakkersuisut.gl/da/H%c3%b8ringer/Arkiv-over-h%c3%b8ringer/2015/MLSA-offshore-guidelines-ex-drilling-2015
-

PAME State / Member: Kingdom of Denmark

Name of Responder / Expert and Affiliation: Andreas Haugaard Christensen

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Canada

1. Please describe current and planned offshore oil and gas activities in the Arctic including:

In December 2016, Canada designated all Arctic Canadian waters as indefinitely off limits to new offshore oil and gas licensing, and that this moratorium would be reviewed every five years based on marine and climate change science.

The moratorium is indefinite, but subject to review every five years.

In October 2018, Canada (subsequently) announced a suspension of any ongoing activities to existing licenses for the duration of the moratorium.

- **leasing/licensing** - no leasing or licensing given 5-year moratorium

- **exploration and development** – no exploration or development activities given 5-year moratorium

In 2019, Bill C-88 gave the federal cabinet the power to prohibit certain oil and gas activities in Arctic offshore areas, and the authority to freeze the terms of license holders in those areas during the moratorium. Following Bill-88, an Order in Council was promulgated to preserve existing rights, remit the balance of any financial deposit related to licences to affected licence holders and suspend any oil and gas activities for the duration of the moratorium.

Two strategic environmental assessments were initiated in 2016: one for the Baffin Bay and Davis Strait (Eastern Arctic) and the other for Beaufort Sea region (Western Arctic) that are expected to be completed in the 2019-2021 timeframe. These assessments will help to inform the 5-year review:

- gather existing research and traditional knowledge of the Arctic environment and conduct new research where gaps in knowledge exist;
- help assess potential impacts of future oil and gas activity; and
- inform whether, and how, oil and gas activity should proceed in these regions.

2. Please describe in further detail exploration or development activities on offshore leased or licensed lands including:

- seismic --
    - Eastern Arctic – One small petroleum–related seismic survey in 2007; no Geological Survey of Canada research seismic survey since 2007.
    - Western Arctic – Inuvialuit Settlement Region – several seismic projects between 2007 – 2013.
    - Future of seismic industry activity in Arctic likely dependent on the outcome of the 5-year review.

- coring – no activity given the economic uncertainty linked to the moratorium and following the Order In Council.

  drilling – no activity given moratorium the economic uncertainty linked to the moratorium and following the Order In Council.

- platform installation – no activity given moratorium the economic uncertainty linked to the moratorium and following the Order In Council.

- production – no activity given moratorium the economic uncertainty linked to the moratorium and following the Order In Council.

- pipelines – no activity given moratorium the economic uncertainty linked to the moratorium and following the Order In Council.

3. Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

- Petroleum resource management in the Arctic offshore and on Crown lands in the Nunavut Territory is exercised under two foundational pieces of legislation:
  - The ***Canada Petroleum Resources Act HYPERLINK "http://laws-lois.justice.gc.ca/eng/acts/C-8.5/"*** ***(CPRA)*** and its regulations govern the granting and administration of Crown exploration and production rights and set the royalty regime.
  - The ***Canada Oil and Gas Operations Act*** ***(COGOA)*** governs the regulation of oil and gas exploration and production activities in the Canadian Arctic offshore petroleum operations and associated benefits.

- **Rights issuance, royalty and benefits matters** are managed by Crown-Indigenous Relations and Northern Affairs Canada while the Canada Energy Regulator (formerly the National Energy Board) takes the lead role in approval of **operations**.

- **Canada Energy Regulator (CER)** (formerly the **National Energy Board (NEB)**) is the federal regulator of Canadian pipelines and power lines that cross provincial, territorial and international borders. The NEB became the CER to separate the regulator's adjudicative function, which demands a high-degree of independence, from its daily operations, where a high-degree of accountability is required.

- This is done in three key ways:
  1. The new federal regulator has a Board of Directors to provide oversight, strategic direction and advice on operations.
  2. The position of Chief Executive Officer, which is responsible for day-to-day operations, is separate from the Chair of the Board. As well, the CEO does not serve on the Board, thereby further separating the roles of the board and the executive.

3. The new regulator includes a group of independent commissioners that are responsible for timely, inclusive and transparent project reviews and decision-making.

- Also of note, the CER has measures in place to enhance the diversity and expertise of the regulator's Board of Directors and commissioners. It includes:
    - An emphasis for expert panels to included expertise in Indigenous knowledge, as well as municipal, engineering, and environmental issues.
    - A requirement that at least one member of the Board of Directors and one Commissioner be Indigenous.

- Canada is in the process of updating the regulations under ***Canada Oil and Gas HYPERLINK "http://laws-lois.justice.gc.ca/eng/acts/O-7/"Operations Act*** (COGOA) in order to modernize and amalgamate five existing regulations (Drilling and Production; Geophysical Operations; Certificate of Fitness; Operations; Installations) into one set of operational requirements, known as the 'Framework Regulations'. The Framework Regulations will:
    - Update safety and environmental protection requirements to ensure Canada's regulations remain world-class
    - Reduce multi-regulation redundancy
    - Shift to a hybrid regulatory approach with a balance of prescriptive and performance-based requirements
    - Support consistency across jurisdictions
    - Ensure an effective and efficient regulatory regime

- Engagement with Indigenous Peoples and local communities

  As part of the oil and gas exploration cycle, consultation is required with the local communities close to the area of interest prior to launching a call for nominations.

- Leasing or licensing offshore areas - no activity given moratorium

- Environmental Impact Assessments or Statements - see response above related to strategic environmental assessments in Q1, para # 3

- Environmental protection and/or mitigation for exploration and development activities – no activity given moratorium

- Environmental monitoring - no activity given moratorium

- Compliance monitoring - no activity given moratorium

- Human health and safety - no activity given moratorium

- Use and discharge of chemicals, including dispersants - no activity given moratorium

- Emissions - no activity given moratorium

- Waste management - no activity given moratorium

- Drilling safety - no activity given moratorium

- Prevention, preparedness and response, including response practices- no activity given moratorium

- New technology and research –

  Under the Environmental Studies Research Fund (ESRF) which was established under the *Canada Petroleum Resources Act (CPRA)*, the two research priorities for the North for 2015-2018 were:
    - Spill preparedness and response, fate and effects, and
    - Regional effects assessment and management

- Decommissioning - no activity given moratorium

4. How have management activities changed since the 2010 OGA?

On December 20, 2016, Prime Minister Justin Trudeau announced that Canadian Arctic waters are indefinitely off limits to new offshore oil and gas licencing, to be reviewed every five years through a science-based review. As existing oil and gas licences in the Arctic offshore were not impacted by the announcement, the Prime Minister also committed to a one-year consultation process with the current licence holders and with territorial and Northern Indigenous governments on their interests in the offshore.

Officials from Indigenous and Northern Affairs Canada, now Crown-Indigenous Relations and Northern Affairs Canada, and Natural Resources Canada coordinated the consultations throughout 2017.

In addition to the points of view of interested parties heard during the consultations, the Government of Canada considered the opinions and ideas gathered during engagement activities of both the *2016 Review of the Canada Petroleum Resources Act* and on the development of a new Shared Arctic Leadership Model before deciding on next steps on future Arctic oil and gas development on October 4, 2018.

The path forward

As a result of the information received through the consultations and engagement activities, the Government of Canada is committed to a future approach on Arctic offshore oil and gas which will be developed in collaboration with all parties concerned. As part of the next steps, announced on October 4, 2018, the government will:

- freeze the terms of the existing licences in the Arctic offshore to preserve existing rights, remit the balance of any financial deposit related to licences to affected licence holders and suspend any oil and gas activities for the duration of the moratorium work with

Northern partners to co-develop the scope and governance framework for a science-based, life-cycle impact assessment review every five years that takes into account marine and climate change science

- negotiate a Beaufort Sea oil and gas co-management and revenue-sharing agreement with the governments of the Northwest Territories and Yukon, and the Inuvialuit Regional Corporation

PAME State / Member: Canada

Name of Responder / Expert and Affiliation: Maureen Copley, Senior Advisor, Marine, Crown-Indigenous Relations and Northern Affairs Canada

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January 31, 2020

Return the completed Survey to the PAME Secretariat (pame@pame.is) and Dennis Thurston (dennis.thurston@boem.gov).

Norway

Please describe current and planned offshore oil and gas activities in the Arctic including:

- leasing/licensing
- exploration and development

In early 2020 87 petroleum fields were on-stream on the Norwegian shelf. Of those, two are in the southern Barents Sea, 19 in the Norwegian Sea, and the remaining 66 in the North Sea.

The two fields currently on-stream in the southern Barents Sea are called Snøhvit and Goliat. The gas-field Snøhvit came on stream in 2007. The gas is transported by pipeline to Melkøya in Hammerfest, Finnmark, where LNG is produced and shipped to marked. The oil-field Goliat came on stream in 2016. A third field, Johan Castberg, is under construction in the Barents Sea, and is scheduled to start production of oil in 2022. Another oil-field, Wisting, is in the planning phase.

There are now 19 fields in production in the Norwegian Sea. Draugen was the first field to start producing in 1993. The Maria field came on stream in 2017. The Aasta Hansteen and Trestakk fields started production in 2018 and 2019, respectively. The Dvalin, Bauge, Fenja and Ærfugl fields are under development. With the Aasta Hansteen field and the Polarled pipeline, a new gas region has been opened on the Norwegian continental shelf. The Norwegian gas transport system now extends to the north of the Arctic Circle. Gas from the Norwegian Sea is largely transported by pipeline to various onshore facilities in Norway and further to the UK and continental Europe. Oil is transported by tanker (buoy-loaded on the fields).

There are two kinds of licensing rounds on the Norwegian continental shelf, the numbered licensing rounds and the Awards in predefined Areas (APA). The numbered licensing rounds are normally held every other year and include frontier parts of the Norwegian continental shelf (NCS). The Awards in Predefined Areas (APA) are announced every year and comprise the mature parts of the shelf, with known geology and good infrastructure.

In the last licensing round, (APA 2019) 69 licenses were offered. 13 of those were in the southern Barents Sea, and 23 in the Norwegian Sea. 19 different companies were offered the role as operator. Exploration activities on the Norwegian continental shelf has been on a stable, high level, with an average of 50 exploration wells drilled per year. In 2019, 57 exploratory wells were drilled on the Norwegian shelf, resulting in 17 new discoveries. Current production of oil and gas on the Norwegian shelf amounts to 2-3 percent of world consumption.

Please describe in further detail exploration or development activities on offshore leased or licensed lands including: (Additional information may come after 15 August)

- seismic
- coring
- drilling
- platform installation

- production
- pipelines

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

- **Engagement with Indigenous Peoples and local communities**

Norwegian offshore activities in the Barents and Norwegian Seas are generally taking place quite far offshore. Related infrastructure on land, could, however, directly affect Indigenous people and local communities. An important tool in this regard is the system of Environmental Impact Assessment. Norway is not a European Union (EU) member, but as a member of the European Economic Area, it has incorporated the EIA Directive of the EU into its domestic legal system. The system consists of three separate processes, one for land-based projects, one for offshore projects, and one exclusive for projects on Svalbard. Onshore projects, which meet specified criteria, are governed by the Planning and Building Act. Offshore oil and gas projects are regulated by the Petroleum Act. The Planning and Building Act (PBA) includes a Regulation on EIA to the PBA. It applies to national, regional and local projects and encompasses both community and land use planning. It contains a list of projects, whose environmental impacts will always be significant enough to require an EIA. The impact assessment shall identify and describe the factors that may be affected and assess significant impact on the environment and society, including nature diversity, ecosystem services and Sámi nature and cultural foundation. The cumulative impact of a plan or initiative shall also be considered in light of the plans or initiatives that have already been implemented, adopted or approved in the influence area. Where reindeer interests are affected, the overall impact of the plans and initiatives within the relevant reindeer grazing district shall be considered. The impact assessment shall also contain a description of the methods used to identify the impact on the environment and society. The impact assessment shall describe the planned initiatives in order to avoid, limit, remedy, and if possible, compensate for the significant adverse effects on the environment and society both in the construction and operation phase. The description shall include planned monitoring schemes, as well as impacts across national boundaries. Other important participatory mechanism for the meaningful engagement of Indigenous Peoples are the consultation procedures based on article 110a of the Norwegian Constitution and two consultation agreements (Basic Consultation Agreement and Consultation Agreement on Conservation 2007).

- **Leasing or licensing offshore areas**

Some additional areas in the South-Eastern part of the Barents Sea were opened for drilling and production activities in 2013. New licences have been awarded in these areas, as well as in the northern part of the areas open to petroleum activities in the Southern Barents Sea (areas south of 74 30 N) . Public consultations have been carried out. For further details, see text above. There has been no changes in the legal framework related to licencing. (Supplementary text may follow after 15 August).

- **Environmental Impact Assessments or Statements**

There have been no changes in the legal framework.

- **Environmental protection and/or mitigation for exploration and development activities**

The Integrated Ocean Management Plan for plans for the Barents Sea–Lofoten area; the Norwegian Sea; and the North Sea and Skagerrak (white paper), states some requirements and limitations, mainly connected to areas identified as particularly valuable and vulnerable. Typical conditions are that the operators cannot drill during certain months of the year based on the vulnerability of marine species and sea birds. Those requirements and limitations have recently been updated, and are described in detail below.

There has also been a number of small changes in the legislation (HSE regulations for the offshore petroleum industry). This include stricter requirements for documentation, more comprehensive risk evaluations regarding possible impact of the discharges of produced water and calculation of the Environment Impact Factor (EIF) and more. In addition, the requirements regarding the use and discharge of chemicals have been more detailed and new areas of use for chemicals have been included, such as sandblasting.

The first Integrated Management Plan (2006) included zero discharge requirements in the Barents Sea, including the ban of discharges of drill cuttings, even if the cuttings were drilled with water based drilling fluids. The Management plan also stated that no more than 95 % of produced water could be discharged. In the updated Management plan in 2011 the general zero discharge goal for the Norwegian Continental Shelf was made valid also for the Barents Sea, and the specific requirements on drill cuttings and produced water were removed. For drill cuttings the rationale behind this was that offshore discharge in many cases is the best environmental option compared to transportation, treatment and depositing the cuttings onshore. Knowledge based on environmental monitoring and research suggest marginal effects on the sea floor in areas as long as there are no vulnerable bottom fauna (e.g. corals and sponges). For produced water the point of departure for new developments, regardless of location, is reinjection of produced water.

The operators shall carry out field specific risk evaluations of the discharge of produced water. This gives increased focus on the most harmful components in the water, and how to reduce them to lower the environmental risk. The average oil content on the Norwegian Continental Shelf is now about 13 mg/l.

The regulations also now include a section which gives conditions regarding drill stem testing and burning the well fluids. Fallout of hydrocarbons into the sea, black carbon (soot), and the effects on bird life is also included, especially related to the northern areas.

- **Updated framework for petroleum activities in specific geographical areas**

Norway's integrated ocean management plans for the Barents Sea–Lofoten area; the Norwegian Sea; and the North Sea and Skagerrak were updated and renewed through a white paper

(Meld.St.20 (2019-20) Report to the Storting) presented to the Norwegian Parliament on April 24th 2020. The white paper passed through parliament on June 18th with a broad majority support.

Each of the ocean management plans sets out a framework for petroleum activities in specific geographical areas. The management plans provide a good basis for sound resource management and a predictable regulatory framework for the oil and gas industry. In the light of new knowledge about vulnerable species and habitats and the environmental impacts of oil and gas activities, parts of the framework from the previous management plans have been revised, including for petroleum activities near the marginal ice zone. Some geographical areas, such as the polar front, are no longer specified in the framework for petroleum activities now that more information is available. Certain adjustments have been made to ensure continuity across the management plan areas. The framework for each of the management plan areas is shown in Figures 9.1, 9.2 and 9.3, of the white paper, and the information is also available through the marine spatial management tool on the BarentsWatch portal, https://kart.barentswatch.no/arealverktoy.

The framework for specific geographical areas will be used as a basis in the licensing rounds. Unless otherwise specified, the framework set out below will apply until any changes are made when the management plans are updated.

Framework for petroleum activities that applies to all the management plan areas

The Government will use the following framework as a basis for petroleum activities in *all* the management plan areas:

- In connection with numbered licensing rounds, and when licences are issued through the system of awards in predefined areas (APA), the authorities will continue to hold public consultations and take into account all available new knowledge about the effects of produced water and drill cuttings and other impacts on the environment and living marine resources;
- New production licences must include requirements for any necessary measures to ensure that the coral reefs and other vulnerable benthic fauna are not damaged by petroleum activities. Operators must be prepared to meet special requirements in order to avoid direct physical damage to the reefs from bottom gear and anchor chains, sediment deposition from drill cuttings and pollution from produced water;
- Continue efforts and follow-up to achieve the zero-discharge target for releases of hazardous substances to the sea from petroleum activities;
- Seek to reduce uncertainty as regards acoustic disturbance and other possible negative impacts of seismic surveys on marine life;
- Establish stricter requirements for activities in vulnerable areas to avoid damage (in line with the risk-based approach of the health, safety and environment legislation).

Framework for petroleum activities in the Barents Sea–Lofoten area

The Government will use the following framework as a basis for petroleum activities in the Barents Sea–Lofoten area:

- *Coastal waters, Tromsøflaket to Russian border*

  - No petroleum activities will be initiated within a zone stretching 35 km outwards from the baseline from the Troms II petroleum province along the coast to the Russian border.
  - In a zone stretching between 35 km and 100 km outwards from the baseline, no exploration drilling in oil-bearing formations will be permitted in the period 1 March–31 August. This will be reviewed when the delimitation of this particularly valuable and vulnerable area has been completed.
- *Tromsøflaket bank area*
  - In coastal waters of the Tromsøflaket, restrictions apply corresponding to those set out for the area 'coastal waters, Tromsøflaket to the Russian border', following from the framework for the Coastal zone along Troms and Finnmark counties to the Russian border.
  - No exploration drilling will be permitted in oil-bearing formations on the Tromsøflaket outside 65 km from the baseline in the period 1 March–31 August.
- *Eggakanten North//Eggakanten area (The continental slope/ area along the edge of the continental shelf)*
  - There is a general principle that new production licences must include requirements for surveys to identify any coral reefs or other valuable benthic communities that may be affected by petroleum activities and ensure that they are not damaged. This will be particularly strictly applied in the Eggakanten North area. Special conditions may be included in licences in vulnerable areas to avoid damage.
- *The marginal ice zone*
  - No new petroleum activities will be initiated in areas where sea ice is found on 15 % of the days in April, based on sea ice extent data for the 30-year period 1988–2017. This will apply until any changes are made when the management plans are updated, in 2024 at the earliest.
- *Bjørnøya*
  - No new petroleum activities will be initiated within a 65-km zone around Bjørnøya.
  - In a zone stretching from 65 km to 100 km outwards from the baseline around Bjørnøya, no exploration drilling will be permitted in oil-bearing formations in the period 1 April–31 August.
- *Nordland IV (unopened part), Nordland V (unopened part), Nordland VI (open part), Nordland VI (unopened part), Nordland VII and Troms II*
  - The waters off the Lofoten and Vesterålen Islands and Senja will not be opened for petroleum activities and no impact assessments under the Petroleum Act will be carried out in the period 2017–2021.
- *Other conditions*

- In areas less than 50 km from observed sea ice,[1] exploration drilling in oil-bearing formations will not be permitted in the period 15 December–15 June.

Framework for petroleum activities in the Norwegian Sea

The Government will use the following framework as a basis for petroleum activities in the Norwegian Sea:

a) The Møre banks

- No production licences will be awarded for the Møre banks. This does not apply to the parts of the Møre banks that are included in the system of awards in predefined areas (APA).

b) Halten bank, part open to petroleum activity

- No exploration drilling in oil-bearing formations in the spawning season (1 February–1 June);
- No seismic surveys during spawning migration/in the spawning season (1 January–1 May);
- Use of technology to deal with drill cuttings and drilling mud on herring spawning grounds.

c) Sklinna bank, part open to petroleum activity

- No exploration drilling in oil-bearing formations in the spawning season (1 February–1 June);
- No seismic surveys during spawning migration/in the spawning season (1 January–1 May);
- Use of technology to deal with drill cuttings and drilling mud on herring spawning grounds;
- Particularly effective oil spill preparedness and response system, including short response times.

d) Coastal waters, northern part

- No further opening of areas of coastal waters that are not currently open for petroleum activities.

e) Remman archipelago and coastal waters, southern part

- No exploration drilling in oil-bearing formations in the spawning season and breeding and moulting seasons (1 March–31 August);
- Particularly effective oil preparedness and response system, including short response times.

f) Entrance to the Vestfjorden, part open to petroleum activity

1As shown on the Norwegian Meteorological Institute's daily ice charts.

- No exploration drilling in oil-bearing formations in the spawning season (1 February–1 June);
- No exploration drilling in oil-bearing formations in the breeding and moulting seasons (1 March–31 August);
- No seismic surveys during spawning migration/in the spawning season (1 January–1 May);
- Particularly effective oil spill preparedness and response system, including short response times.

Delimitation of the area – blocks: 6609/1, 2, 3 and 6610/1, 2, 3, 6611/1, 2.

g) Iverryggen reef

- No new petroleum activities will be initiated in the Iverryggen reef area until an overall marine protection plan for all Norwegian sea areas has been presented to the Storting.

h) Froan archipelago/Sula reef

- No new petroleum activities will be initiated in the Froan archipelago/Sula reef area until an overall marine protection plan for all Norwegian sea areas has been presented to the Storting.

i) Eggakanten South//Eggakanten area (continental slope/ area along the edge of the continental shelf)

- There is a general principle that new production licences must include requirements for surveys to identify any coral reefs or other valuable benthic communities that may be affected by petroleum activities and ensure that they are not damaged. This will be particularly strictly applied in the Eggakanten South area. Special conditions may be included in licences to avoid damage.

j) Jan Mayen/West Ice

- No petroleum activities will be initiated around Jan Mayen.

k) Other areas that have been opened for petroleum activities in the Norwegian Sea

- No seismic surveys in the exploration phase are to be carried out landward of the 500-metre depth contour in the period 1 January–1 April. This restriction does not apply to site surveys.
- No exploration drilling in oil-bearing formations in the period 1 April–15 June in the blocks 6204/1,2,3,4,5,7,8 and 6304/12 within the 500-metre depth contour; quadrant 6305 within the 500-metre depth contour, quadrants 6306, 6307, 6407/2,3,5,6,8,9,11,12; 6408/4,7; 6508, 6509, 6510, 6608/3,5,6,7,8,9,10,11,12; 6609, 6610 and 6611.
- No exploration drilling in oil-bearing formations in the breeding and moulting seasons (1 April–31 August) in the blocks 6204/7,8,10,11; 6306/6,8,9; 6307/1,2,3,4,5,7.

- **Environmental monitoring**

Guidance and requirements for environmental monitoring has been further developed. Of relevance to the Barents Sea are more detailed requirements to visual mapping of the sea bottom in areas with sponges and corals. There have also been developments in methods and requirements for water column monitoring. So far this is not relevant in the Barents Sea due to marginal discharges of produced water.

- **Compliance monitoring**

No new legislation or procedures. Focus is on energy production, energy efficiency, emissions to air, contingency planning and emergency preparedness, and that the operators follow the requirements issued on annual reporting to the authorities.

- **Human health and safety**

(Information will follow after 15 August)

Use and discharge of chemicals, including dispersants

Changes in the legislation is covered above. Dispersants is covered in the Pollution Control Regulation. We also have issued guidance documents related to the use of dispersants in combatting oil discharges and in beach cleaning. There has not been any significant changes in our policy the last decade.

- **Emissions**

Changes in the legislation is covered above.

- **Waste management**

There are no significant changes in legal framework, procedures or management

- **Drilling safety**

(More information may follow after 15 August)

- **Prevention, preparedness and response, including response practices**

A continuous work has been undertaken to improve risk evaluation and achieve risk reduction. This has led to the operators' increased focus on this issue. More knowledge about sea birds have led to more focus and stricter requirements, especially in the north. (More information may follow after 15 August)

- **New technology and research**

New technology and research has not directly initiated changes in the legislation. However, there are interesting activities going on, for example regarding cuttings cleaning, emergency preparedness, equipment etc.

- **Decommissioning**

There are no significant changes in legislation or procedures.

- **How have management activities changed since the 2010 OGA?**

- In light of new knowledge about vulnerable species and habitats and the environmental impacts of oil and gas activities, parts of the framework for petroleum activities in specific geographical areas from previous management plans have been revised, including for petroleum activities near the marginal ice zone.
- New knowledge about vulnerable areas or species has led to stricter conditions and new requirements (for example cold water corals and sponges).
- Conditions and requirements have been transferred from permits and licences to regulations.
- Focus on accidents and acute discharges has increased.
- New recommendations from OSPAR have led to changes in the work with risk assessments for the discharges of produced water.
- The procedures for handling applications for plugging and abandonment of old wells have been amended.
- We have increased focus on the effects of climate change in the area of the Barents Sea, such as extensive changes in the ecosystems. In the recent integrated ocean management plan, the framework for petroleum activities in specific geographical areas from previous management plans have been revised in light of such changes.
- The industry's reporting to the authorities has been improved substantially after the industry developed a new data base in cooperation with the Norwegian Environment Authority.
- Subsea geological storage of CO2: New regulations on CO2 storage entered into force in 2014. The new regulations transpose EU-directive 2009/31 into Norwegian legislation.. The regulations apply for CO2 storage on the Norwegian Continental Shelf.

PAME State / Member: Norway

Name of Responder / Expert and Affiliation: Fredrik Juell Theisen, Specialist Director, Ministry of Climate and Environment

Contact information / email: Fredrik-Juell.Theisen@kld.dep.no

United States

United States Response for Survey of the Status of Offshore Oil and Gas Activities and Regulatory Frameworks in the Arctic

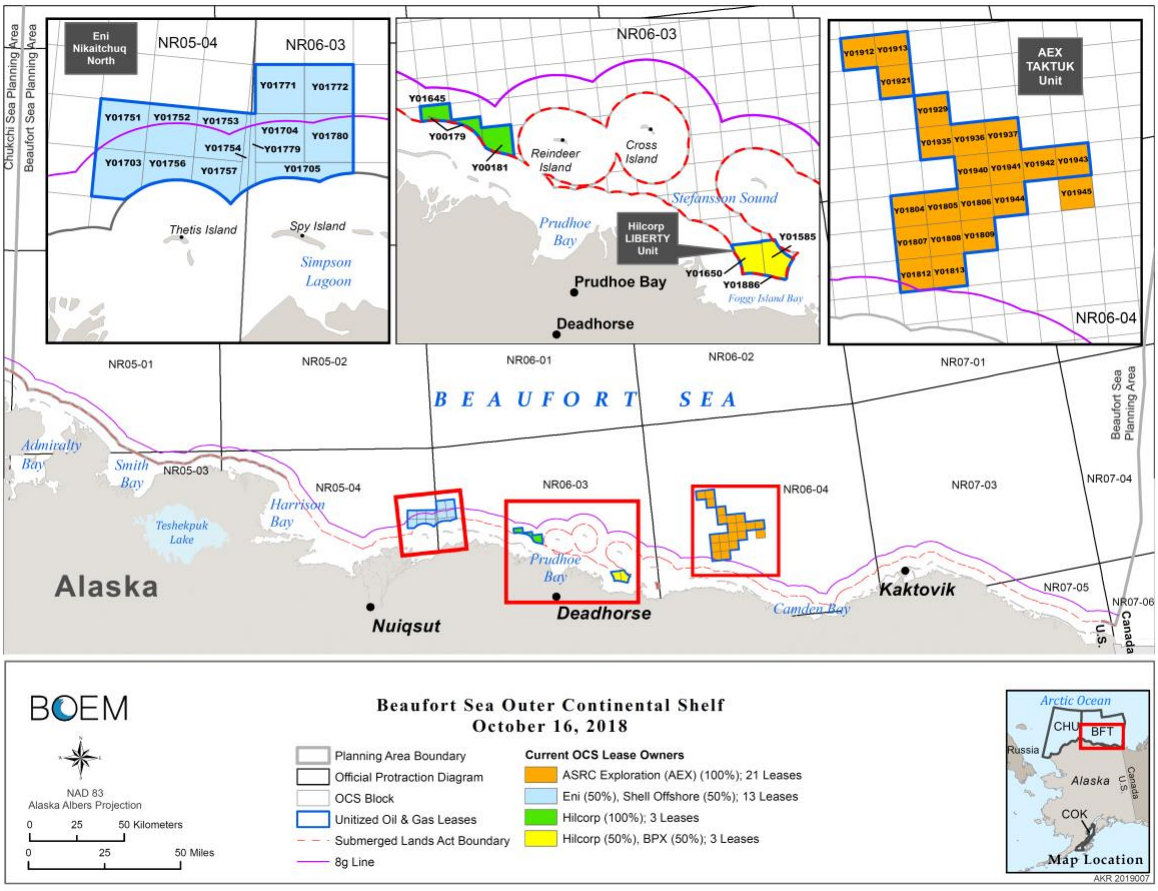
The United States received and compiled input from the Department of Interior's Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement (BSEE) and Bureau of Ocean Energy Management (BOEM) as well as NOAA Fisheries Protected Resources Division, Alaska Region. The compiled responses are described below:

SURVEY RESPONSES

1. PLEASE DESCRIBE CURRENT AND PLANNED OFFSHORE OIL AND GAS ACTIVITIES IN THE ARCTIC INCLUDING:

LEASING AND LICENSING

There are currently 40 active leases in the Beaufort Sea on the Alaska Arctic OCS[2]. There are two approved Development and Production Plans and one approved Exploration Plan. There are no permits pending for seismic surveys or geologic sampling. There are no lease sales currently scheduled for areas of the Arctic OCS. BOEM has collected research through its Environmental Studies Program totaling 22 Arctic research projects from 2018-2019. BOEM has completed 16 Environmental Assessments (EAs) and 8 Environmental Impact Statements (EISs) since 2010. Since 2010, there have been a number of Presidential Executive Orders, Department of Interior Secretarial Orders, rule changes or new rules, and Notices to Lessees (NTLs) regarding or affecting BOEM management of offshore activities in the Arctic.

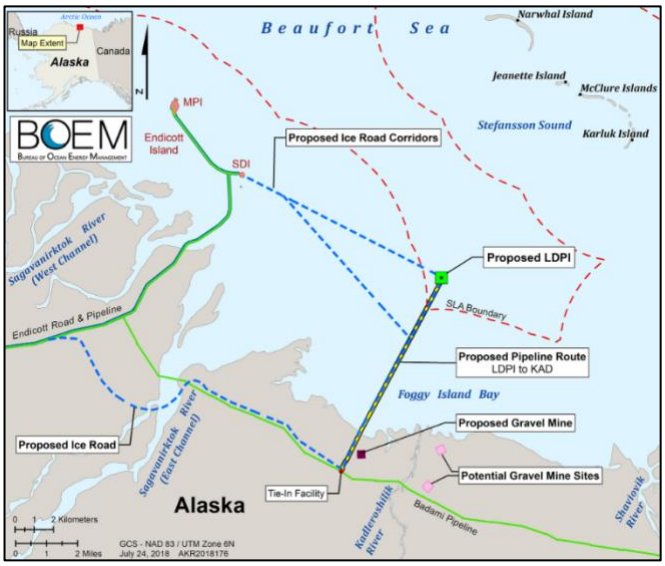


[2] The United States Government, Department of Interior administers the submerged lands, subsoil, and seabed, lying between the seaward extent of the States' jurisdiction and the seaward extent of Federal jurisdiction. Federal jurisdiction is defined under accepted principles of international law.

Active Arctic OCS Leases: There are 40 active lease blocks or partial lease blocks in the Arctic OCS – all in the Beaufort Sea.

EXPLORATION AND DEVELOPMENT

1. HILCORP ALASKA LLC-LIBERTY DEVELOPMENT AND PRODUCTION



THE LIBERTY PROJECT

Discovered in 1997, the Liberty Prospect is located 8.85 km offshore in about 6m of water, inside the Beaufort Sea's barrier islands. It is 32-km east of Prudhoe Bay and about 13-km east of the existing Endicott oil field operated by Hilcorp Alaska.

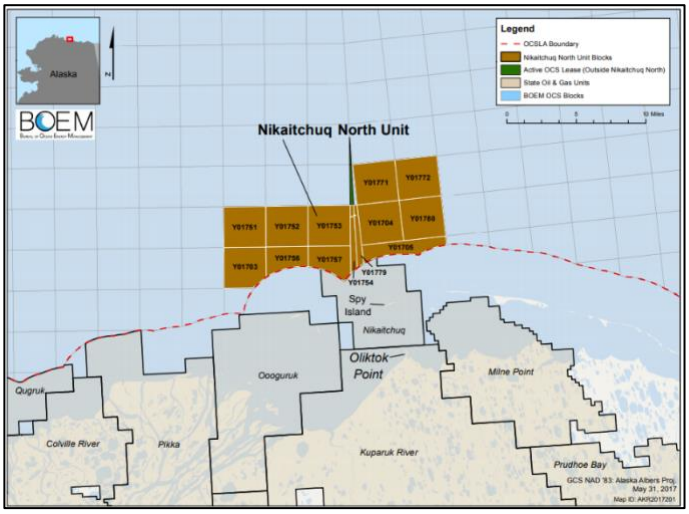
In November 2014, primary ownership and operatorship of Liberty was acquired by Hilcorp. Hilcorp estimates that the Liberty Unit contains approximately 150 million barrels of recoverable, high-quality crude oil. In October 2018, after a careful environmental and operational review, BOEM approved the Liberty Development and Production Plan. Hilcorp is in the process of acquiring approvals from other agencies, but tentatively plans to begin construction of the island that will support drilling and production in 2020. On August 27, 2019, BP announced that it has agreed to sell all Alaska operations and interests to Hilcorp for $5.6 billion. The sale includes BP's interest in the Liberty Prospect.

Timeline of Activities:

Oct 26, 2018: A **Notice of Availability** for the Liberty EIS Record of Decision (ROD) is published in the Federal Register.

Oct 25, 2018: A **Notice of Availability** for the Liberty EIS Record of Decision (ROD) is posted to the Federal Register's Reading Room.

Oct 24, 2018: BOEM issues conditional approval for Hilcorp's Liberty Project Development and Production Plan.



- Press Release
- Letter of Conditional Approval
- Record of Decision and Notice of Availability

2. ENI US OPERATING CO., INC. BEAUFORT SEA EP

ENI BEAUFORT SEA EXPLORATION PLAN

BOEM approved Eni's Beaufort Sea Exploration Plan in July 2017. From 2018-2019, Eni drilled one well into the federal submerged lands of the Beaufort Sea from Spy Island Drillsite, a pre-

existing facility located on an artificial gravel island in Alaska state waters. Eni may continue exploration of the federal acreage from Spy Island Drillsite.

- **Revised Beaufort Sea EP**
- **Approval Letter from BOEM to Eni US Operating Co. Inc.**
- **Determination of NEPA Adequacy**

3. Hilcorp Alaska, LLC Northstar Production

HILCORP NORTHSTAR
Northstar is a joint Federal/State of Alaska unit located in the Beaufort Sea about 12 miles northwest of Prudhoe Bay producing since 2001. BP Exploration Alaska, Inc. (BPXA) was the original lessee and operator of Northstar, but has subsequently sold its remaining interests to Hilcorp. Hilcorp Alaska has operated the field since 2014, which produces about 11,000 barrels of oil per day.

2. Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

Engagement with Indigenous Peoples and local communities

- The Department of Interior's Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement (BSEE) Annual DOI-wide reports by each bureau documenting government-to-government communication and activities with tribal entities and native corporations.
- The 2015 DOI Tribal Consultation Guidelines facilitate ongoing and regular consultations with tribal entities and native corporations by BSEE concerning rulemaking, applications and planned operations.

Leasing or licensing offshore areas

- There are currently no Geological and Geophysical (G&G) Permit applications.
- There are no lease sales currently planned for the U.S. Arctic OCS. Alaska's District Court decision in March 2019 overturned the portion of President Trump's executive order on offshore energy that modified the previous administration's withdrawal from leasing consideration of Alaska's Arctic waters. As such, the Secretary is evaluating all options to determine the best pathway to accomplish the Department's mission entrusted to it by the President.

ENVIRONMENTAL IMPACT ASSESSMENTS OR STATEMENTS

Executive Orders Pertinent to EIAs:

1. Executive Order 13807 – Establishing Discipline and Accountability in Environmental Review and Permitting Process for Infrastructure Projects (August 15, 2017)

- Developed a "performance accountability system" to track milestones and deadlines "major infrastructure projects," score agencies' ability to meet those deadlines, establish best practices for the permitting/review of infrastructure projects. Projects are tracked through a "dashboard" that is updated monthly.
- Implemented "One Federal Decision" for major infrastructure projects. Under "One Federal Decision," a project has a single lead agency that will coordinate all necessary federal approvals and issue a single record of decision to address all those approvals.
- Established that the completion of all permit decisions should occur within 90 days of the Record of Decision (ROD), and not more than 2 years after issuance of the notice of intent to prepare an Environmental Impact Statement (EIS).

2. Secretarial Order 3355 – Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807 (August 31, 2017)

- All EISs for which a DOI Bureau is a lead agency shall not exceed 300 pages.
- Bureaus shall complete an EIS within 1 year from when the notice of intent is issued.
- Environmental Assessments (EA's) shall be completed in less than 75 pages and 180 days. EAs commence once a Bureau receives a completed application from a project proponent, receives or obtains sufficient information to analyze the proposed action, publishes a Notice of Proposed Rulemaking in the Federal Register, or internally determines to pursue action planning.

BOEM EISs and EAs 2010-2019

BOEM has been conducting environmental analyses of the effects of the OCS oil and gas activities since the inception of the **National Environmental Policy Act** (NEPA) 42 U.S.C. 4321-4347, in 1970. These NEPA documents may be EAs or EISs, depending upon the nature of the action in question or the significance of potential impacts associated with the action. Below is a list of completed EAs and EISs for the U.S. Arctic from 2010 to the present.

- OCS EIS/EA BOEM 2018-050 Final Environmental Impact Statement for Hilcorp Liberty Project Development & Production Plan - **Volume 1** | **Volume 2**
- OCS EIS/EA BOEM 2016-010 Liberty Development Project, Development and Production Plan, In the Beaufort Sea, Alaska, Draft Environmental Impact Statement - **Volume 1** | **Volume 2**
- OCS EIS/EA BOEM 2017-047 Eni 2017 Beaufort Sea Exploration Plan - **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2015-020 Shell 2015 Revised Chukchi Sea Exploration Plan. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2014-1004 Proposed Rule for Oil and Gas Exploration Drilling Activities on the Arctic Outer Continental Shelf for 30 CFR Parts 250, 254, and 550. **Draft Environmental Assessment**

- OCS EIS/EA BOEM 2014-669 Chukchi Sea Oil & Gas Lease Sale 193 Final Second Supplemental Environmental Impact Statement. **Volume 1** | **Volume 2**
- OCS EIS/EA BOEM 2014-653 Chukchi Sea Oil & Gas Lease Sale 193 Draft Second Supplemental Environmental Impact Statement. **Volume 1** | **Volume 2**
- OCS EIS/EA BOEM 2014-605 SAExploration Inc. Colville River Delta 2014 3D Geophysical Seismic Survey, Beaufort Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2014-056 BP Exploration (Alaska) Inc. 2014 Liberty Ancillary Activities Shallow Geohazard Seismic Survey, Beaufort Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2014-054 BP Exploration (Alaska) Inc., North Prudhoe Bay 2014 OBS Geophysical Seismic Survey, Beaufort Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2014-007 SAExploration 2014 Geophysical Seismic Survey, Beaufort Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2013-01161 Shell 2013 Ancillary Activities Survey, Chukchi Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2013-01153 TGS 2013 Geophysical Seismic Survey, Chukchi Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEM 2012-081 ION Geophysical 2012 Seismic Survey, Beaufort Sea and Chukchi Sea, Alaska. **Environmental Assessment** | **Finding of No Significant Impact**
- UPDATE **Draft Programmatic EIS concerning Effects of Oil and Gas Activities in the Arctic Ocean**.
- OCS EIS/EA BOEM 2011-061 Shell Gulf of Mexico, Inc., 2012 Revised Chukchi Sea Exploration Plan (Burger Prospect). **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEMRE 2011-041 Chukchi Sea Planning Area, Oil and Gas Lease Sale 193. **Final Supplemental Environmental Impact Statement**
- OCS EIS/EA BOEMRE 2011-039 Shell Offshore, Inc., 2012 Revised Outer Continental Shelf Lease Exploration Plan, Camden Bay, Beaufort Sea, Alaska, Flaxman Island Blocks 6559, 6610 & 6658, Beaufort Sea Lease Sales 195 & 202. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEMRE 2011-036 Statoil USA E&P Inc., Chukchi Sea 2011 Ancillary Activities. **Environmental Assessment** | **Finding of No Significant Impact**
- OCS EIS/EA BOEMRE 2010-034 **Revised Draft Supplemental Environmental Impact Statement** - Chukchi Sea Planning Area, Oil and Gas Lease Sale 193
- OCS EIS/EA BOEMRE 2010-034 **Draft Supplemental Environmental Impact Statement** - Chukchi Sea Planning Area, Oil and Gas Lease Sale 193
- OCS EIS/EA BOEMRE 2010-027 **Environmental Assessment** - ION Geophysical, Inc., Beaufort and Chukchi Seas Seismic Surveys, and **Finding of No Significant Impact**

- OCS EIS/EA BOEMRE 2010-020 **Environmental Assessment** - Statoil USA E&P Inc., Chukchi Sea Seismic Survey, and **Finding of No Significant Impact**
- OCS EIS/EA MMS 2010-022 **Environmental Assessment** - Shell Exploration & Production, Ancillary Activities, Marine Surveys, Beaufort Sea, Alaska, and **Finding of No Significant Impact**

ENVIRONMENTAL PROTECTION AND/OR MITIGATION FOR EXPLORATION AND DEVELOPMENT ACTIVITIES

- In July 2016, BSEE published a final rule on exploratory drilling activities in the Arctic, specifically the Beaufort Sea and Chukchi Sea. These regulations were designed to help ensure the safe, effective, and responsible exploration of Arctic OCS oil and gas resources, while protecting the marine, coastal, and human environments, and Alaska Natives' cultural traditions and access to subsistence resources.
- BSEE is developing proposed revisions to the July 2016 Arctic Rule in accordance with Executive Order 13771 of January 2017 and Secretarial Order 3350 of March 2017. These proposed revisions will address technical developments since the 2016 Arctic rulemaking specifically aimed at environmental protection and safety.
- On November 2, 2017, NOAA Fisheries published a Tech Memo finalizing the agency's Arctic Marine Mammal Disaster Response Guidelines.
  https://repository.library.noaa.gov/view/noaa/16986
    - This document and associated Appendices (see "Supporting Files" tab at the website above) describe the decision-making processes and protocols that NOAA Fisheries would follow when responding to potentially impacted marine mammals under NOAA jurisdiction during a spill event. The Guidelines also provide an overview of communities in the Arctic and the Appendices provide contact information in addition to equipment lists and potential facilities that could be used for marine mammal response. While these documents are not regulatory, they provide a framework and expected standards of response (including preparedness).

ENVIRONMENTAL MONITORING

Environmental Studies 2018-2019
The Bureau's Environmental Studies Program conducts research that is used by BOEM analysts to prepare environmental documents and by bureau and Departmental decision-makers to base all decisions on the best available science. Decades of completed studies can be found on BOEM's website at Alaska Scientific and Technical Publications. A list of recent studies is below.

Environment and Oceanographic

- BOEM 2019-009 Marine Arctic Ecosystem Study (MARES): Moorings on the Beaufort Sea shelf, 2016-2017

- BOEM 2019-024 Chukchi Sea Acoustics, Oceanography, and Zooplankton Study: Hanna Shoal Extension (CHAOZ-X) and Arctic Whale Ecology Study (ARCWEST) Supplemental Report
- BOEM 2018-006 US Outer Continental Shelf Oil Spill Statistics
- BOEM 2018-007 Technical Manual for a Coupled Sea-Ice/Ocean Circulation Model (Version 5)
- BOEM 2018-008 Chukchi Sea Acoustics, Oceanography, and Zooplankton Study: Hanna Shoal Extension (CHAOZ-X)
- BOEM 2018-016 Development of an Autonomous Carbon Glider to Monitor Sea-Air CO2 Fluxes in the Chukchi Sea
- BOEM 2018-017 Synthesis of Arctic Research (SOAR): Physics to Marine Mammals in the Pacific Arctic
- BOEM 2018-018 Development of a Very High-Resolution Regional Circulation Model of Beaufort Sea Nearshore Areas
- BOEM 2018-020 Arctic Air Quality Impact Assessment Modeling Study: Final Project Report
- BOEM 2018-022 Arctic Whale Ecology Study (ARCWEST): Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of the BOWFEST)
- BOEM 2018-023 Distribution and Relative Abundance of Marine Mammals in the Eastern Chukchi and Western Beaufort Seas, 2017 Annual Report
- BOEM 2018-024 Marine Arctic Ecosystem Study—Biophysical and Chemical Observations From Glider and Benthic Surveys in 2016
- BOEM 2018-027 Northern Alaska Sea Ice Project Jukebox: Phase III
- BOEM 2018-037 ShoreZone Imaging and Mapping along the Alaska Peninsula
- BOEM 2018-059 Migration Trends for King and Common Eiders and Yellow-billed Loons past Point Barrow in a Rapidly Changing Environment

Oil Spill Research

- BOEM 2019-006 Oil Spill Preparedness, Prevention, and Response on the Alaska OCS
- BOEM 2018-048 Oil-Spill Occurrence Estimators: Fault Tree Analysis for One or More Potential Future Beaufort Sea OCS Lease Sales
- BOEM 2018-032 US Outer Continental Shelf Oil Spill Causal Factors Report (2018)
- BOEM 2018-036 Fate and Persistence of Oil Spill Response Chemicals in Arctic Seawater

Coastal Marine Institute

- BOEM 2019-005 Coastal Marine Institute (CMI) Annual Report 25: Calendar Year 2018
- BOEM 2018-021 CMI Graduate Student Projects: Characterizing Bacterial Communities in Beaufort Sea Sediments in a Changing Arctic; Chukchi-Beaufort Seas Storms and Their Influence on Surface Climate; Using Genotyping-by-Sequencing (GBS) Population Genetics Approaches to Determine the Population Structure of Tanner Crab (Chionoecetes bairdi) in Alaska

- BOEM 2018-058 CMI Graduate Student Projects: Volume 2: Functional Diversity of Epibenthic Communities on the Chukchi and Beaufort Sea Shelves; Using Trace Elements in Pacific Walrus Teeth to Track the Impacts of Petroleum Production in the Alaskan Arctic

PREVENTION, PREPAREDNESS AND RESPONSE, INCLUDING RESPONSE PRACTICES

- BSEE's annual inspections are being supplemented by a risk-based inspection program implemented in March of 2018. The risk-based approach employs a systematic framework to identify facilities and operations that exhibit a high-risk profile so that they can be inspected accordingly.

3. HOW HAVE MANAGEMENT ACTIVITIES CHANGED SINCE THE 2010 OGA?

In addition to the changes in policies described below, after the ***Deepwater Horizon*** oil spill in April 2010, the management functions regarding offshore oil and gas activities were divided among three new entities:

- Bureau of Ocean Energy Management (BOEM) is responsible for land and resource management, which includes environmental impact assessments, leasing, and permitting of seismic activities.
- Bureau of Safety and Environmental Enforcement (BSEE) is responsible for the oversight of safe and environmental sustainable exploration and development activities.
- Office of Natural Resource Revenue (ONNR) is responsible for verification, collection and distribution of natural resource and energy revenues.
- A number of practical changes have occurred since 2011 including the codification of the Safety and Environmental Management Systems, enactment of the Well Control Rule, development of Arctic specific regulations issuance of the Decommissioning Costs Reporting Rule, creation of a near-miss reporting system (SafeOCS), making safety alerts available to the general public via a text messaging service (BSEE!Safe) and launching joint inspections with the U.S. Coast Guard.

EXECUTIVE ORDERS AND MEMORANDA, SECRETARIAL ORDERS, REGULATIONS, AND NOTICE TO LESSEES SINCE 2010

PRESIDENTIAL EXECUTIVE ORDERS AND MEMORANDA

The White House
April 28, 2017
Executive Order 13795, **Presidential Executive Order Implementing an America-First Offshore Energy Strategy Implementing an America-First Offshore Energy Strategy**

The White House
March 28, 2017
Executive Order 13783, **Presidential Executive Order on Promoting Energy Independence and Economic Growth**

The White House
December 20, 2016

*Presidential Memorandum for the Secretary of the Interior, **DCPD-201600861*** **– Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf from Mineral Leasing**
Withdrawal of the entire U.S. Chukchi Sea and the vast majority of the U.S. Beaufort Sea; nearly 125 million acres in the Arctic to be protected from future oil and gas activity.

The White House
July 12, 2011
Executive Order 13580, **Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska**
Coordinate the efforts of Federal agencies responsible for overseeing the safe and responsible development of onshore and offshore energy resources and associated infrastructure in Alaska and to help reduce U.S. dependence on foreign oil.

The White House
May 22, 2010
Executive Order 13543, National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

DEPARTMENT OF THE INTERIOR SECRETARIAL ORDERS

May 1, 2017
Secretary of the Interior ORDER NO. 3351
Counselor to the Secretary for Energy Policy
Establishes a new position – Counselor to the Secretary for Energy Policy – to coordinate the Interior Department's energy portfolio that spans nine of the Department's ten bureaus.

May 1, 2017
Secretary of the Interior ORDER NO. 3350
America-First Offshore Energy Strategy
Directs the Bureau of Ocean Energy Management to develop a new five-year plan for oil and gas exploration in offshore waters and reconsider a number of regulations governing those activities.

March 29, 2017
Secretary of the Interior ORDER NO. 3349
America Energy Independence
Directs a reexamination of the mitigation and climate change policies and guidance across the Department of the Interior

January 27, 2015
MEMORANDUM FOR THE SECRETARY OF THE INTERIOR
SUBJECT: **Withdrawal of Certain Areas of the United States Outer Continental Shelf Offshore Alaska from Leasing Disposition**
Withdraws from leasing, deferral areas within the Chukchi Sea Planning Area and the Beaufort Sea Planning Area in the 5-year oil and gas leasing program for 2012-2017; and (2) the Hanna Shoal region of the Chukchi Sea Planning Area

May 19, 2010
Secretary of the Interior ORDER NO. 3299
Establishment of the Bureau of Ocean Energy Management, the Bureau of Safety and Environmental Enforcement, and Office of Natural Resource Revenue
The Office of Natural Resource Revenue was formed immediately and the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) was formed as an interim agency until the creation of the Bureau of Ocean Energy Management and the Bureau of Safety and Environmental Enforcement (BSEE).

BUREAU OF OCEAN ENERGY MANAGEMENT OCS OIL AND GAS FEDERAL REGULATIONS ISSUED SINCE 2010

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management 30 CFR Part 550
Air Quality Control, Reporting, and Compliance
Bureau of Ocean Energy Management
Proposed rule; not yet published.
DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management 30 CFR Parts 550 and 553
Final rule effective March 26, 2019.
Oil and Gas and Sulfur Operations in the Outer Continental Shelf-Civil Penalties Inflation Adjustments

SUMMARY: This iteration of an annual final rule implements the 2019 adjustment of the level of the maximum daily civil monetary penalties contained in the BOEM regulations for violations of OCSLA and the Oil Pollution Act of 1990 (OPA), in accordance with the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 and relevant Office of Management and Budget (OMB) guidance. The 2019 adjustment multiplier of 1.02522 accounts for one year of inflation spanning the period from October 2017 through October 2018.

DEPARTMENT OF THE INTERIOR
Bureau of Safety and Environmental Enforcement, 30 CFR Parts 250 and 254
Bureau of Ocean Energy Management 30 CFR Part 550
Final rule effective September 13, 2016
Oil and Gas and Sulfur Operations on the Outer Continental Shelf— **Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf**

SUMMARY: On February 24, 2015, BOEM and BSEE published a Notice of Proposed Rulemaking (NPRM) in the Federal Register entitled, "Oil and Gas and Sulfur Operations in the Outer Continental Shelf—Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf" (80 FR 9916). After considering comments on the NPRM, Tribal and other consultations, the environmental analysis, and DOI's direct experience from Shell's 2012 and 2015 Arctic operations, BOEM and BSEE concluded that finalizing additional exploratory drilling regulations will enhance existing regulations and is appropriate for establishing a more holistic Arctic OCS oil and gas regulatory framework.

This final rule adds to and revises existing regulations in 30 CFR parts 250, 254, and 550 for Arctic OCS oil and gas activities and focuses on exploratory drilling activities that use MODUs and related operations during the Arctic OCS open-water drilling season. The final rule does not preclude exploratory drilling on the Arctic OCS conducted in the future using other drilling technologies (e.g., use of a land rig on grounded or land-fast ice). Exploratory drilling operations using technologies other than MODUs are outside the scope of the final rule and would be evaluated under the existing OCS oil and gas regulatory program, as may be amended. The final regulations address a number of important issues and objectives, including ensuring that each operator:

Designs and conducts exploration programs in a manner that accounts for Arctic OCS conditions;

- Develops an integrated operations plan (IOP) that addresses all phases of its proposed Arctic OCS exploration program, and submits the IOP to BOEM at least 90 days in advance of filing its Exploration Plan (EP);
- Has access to, and the ability to promptly deploy, Source Control and Containment Equipment (SCCE) while drilling below, or working below, the surface casing;
- Has access to a separate relief rig located in a geographic position to be able to timely drill a relief well under the conditions expected at the site in the event of a loss of well control;
- Has the capability to predict, track, report, and respond to ice conditions and adverse weather events;
- Effectively manages and oversees contractors; and,
- Develops and implements an Oil Spill Response Plan (OSRP) that is designed and executed in a manner at accounts for the unique Arctic OCS operating environment, and has the necessary equipment, training, and personnel for oil spill response on the Arctic OCS.

DEPARTMENT OF THE INTERIOR
Bureau of Safety and Environmental Enforcement, 30 CFR Parts 250
Bureau of Ocean Energy Management 30 CFR Part 550
Notice of Proposed Rulemaking; not yet published (estimated in Fiscal Year 2020)
Oil and Gas and Sulfur Operations in the Outer Continental Shelf—**Revisions to the Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf**

SUMMARY: In accordance with Executive and Secretary of the Interior's Orders on regulatory review and promoting an America-first energy independence strategy, DOI, acting through BOEM and BSEE, is proposing to revise its existing regulations for exploratory drilling and related operations on the Arctic OCS, in order to reduce unnecessary burdens on stakeholders while ensuring energy exploration in the Arctic OCS is safe and environmentally responsible.

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management 30 CFR Part 556
Final rule correction May 31, 2016.
Leasing of Sulfur or Oil and Gas in the Outer Continental Shelf; Correction

SUMMARY: On March 30, 2016, BOEM published in the Federal Register a final rule that updates and streamlines the OCS oil and gas and sulfur leasing regulations, which will become effective on May 31, 2016 (81 FR 18111) ("Leasing Rule"). One of the regulations contained in the final rule was incorrectly stated. This document corrects that error.

Need for Correction:
BOEM has the authority, under certain conditions, to disqualify a party from acquiring a lease or an interest in a lease on the OCS. The title, as well as the verbiage, of § 556.403 in the final Leasing Rule, states that BOEM may disqualify entities from "holding", a lease or lease interest on the OCS. This could be interpreted to imply that BOEM would not allow a disqualified party to retain a preexisting OCS lease interest. That interpretation is incorrect. Disqualified entities may not acquire new leases or lease interests, but they may continue to hold existing leases or lease interests. BOEM is correcting the wording of § 556.403 to avoid the implication that the use of the word "hold" might authorize BOEM, under the conditions stated in § 556.403, to require forfeiture of leases already acquired.

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management 30 CFR Parts 550, 556, 559 and 560
Final rule effective May 31, 2016.
Leasing of Sulfur or Oil and Gas in the Outer Continental Shelf

SUMMARY: This final rule updates and streamlines the existing OCS leasing regulations and clarifies implementation of the Federal Oil and Gas Royalty Simplification and Fairness Act of 1996, which amended the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA). The final rule reorganizes leasing requirements to more effectively communicate the leasing process as it has evolved over the years. The final rule makes changes to regulations which relate to the oil, gas, and sulfur leasing requirements.

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management 30 CFR Parts 519, 550, 551, 553, 556, 560, 580, 581, 582, and 585
Direct final rule, September 22, 2015.
Updating Addresses and Contact Information in the Bureau of Ocean Energy Management's Regulations

SUMMARY: In this rule, BOEM amends its existing regulations by: updating address locations; removing an outdated website address and correcting a form number; changing the term "Associate Director" to "Deputy Director" in the regulations; and other housekeeping changes, such as removing reference to a URL hyperlink for a webpage that no longer exists.

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management
30 CFR Part 553
Final rule, January 12, 2015
Consumer Price Index Adjustments of the Oil Pollution Act of 1990 Limit of Liability for Offshore Facilities

SUMMARY: The Oil Pollution Act of 1990 (OPA) establishes a comprehensive regime for addressing the consequences of oil spills, ranging from spill response to compensation for damages to injured parties. Other than deepwater ports subject to the Deepwater Port Act of 1974, BOEM is authorized to adjust the limit of liability in OPA for offshore facilities, including pipelines. This rule amends BOEM's regulations to add to the regulations on Oil Spill Financial Responsibility (OSFR) for offshore facilities in order to increase the limit of liability for damages caused by the responsible party for an offshore facility from which oil is discharged, or which poses the substantial threat of an oil discharge, as described in OPA. This rule adjusts the limit of liability to reflect the significant increase in the Consumer Price Index (CPI) that has taken place since 1990. It also establishes a methodology for BOEM to use to periodically adjust the OPA offshore facility limit of liability for inflation. BOEM is hereby increasing the limit of liability for damages under OPA from $75 million to $133.65 million.

DEPARTMENT OF THE INTERIOR
Bureau of Ocean Energy Management
30 CFR Chapter V
Final rule effective October 1, 2011.
Reorganization of Title 30: Bureaus of Safety and Environmental Enforcement and Ocean Energy Management

SUMMARY: Based on the responsibilities established by Secretarial Order No. 3299, separating BOEMRE into BOEM and BSEE, this direct final rule reorganizes the regulations previously found in 30 CFR chapter II by:
Retitling chapter II as "Bureau of Safety and Environmental Enforcement";
Retaining the regulations that will be under the authority of BSEE in chapter II;
Adding a new chapter, "Chapter V—Bureau of Ocean Energy Management"; and
Moving the regulations that will be under the authority of BOEM to 30 CFR Chapter V.

In addition to redesignating the regulations to the appropriate bureau, this rule makes minor supporting edits for clarification, consistency, or to reiterate current and longstanding practices. However, the regulatory requirements themselves are not changed.

Finally, BOEM continues to strengthen its risk management capabilities to address changing conditions in industry by tracking the financial profiles of companies in distress and obtaining financial assurance on specific leases as necessary. Through these efforts, BOEM has determined that a new regulatory framework is necessary. BOEM is working to publish a proposed rulemaking in the near future. Through this rule-making effort, BOEM will enhance its comprehensive risk management and financial assurance regulatory framework, with the overall goal of ensuring the U.S. taxpayer does not have to pay for liabilities related to the noncompliance by lessees and grant holders with OCS obligations, including the decommissioning of OCS facilities.

BOEM NTLs APPLICABLE TO THE ARCTIC

Notices to Lessees (NTLs) are formal documents that provide clarification, description, or interpretation of a regulation or OCS standard; provide guidelines on the implementation of a special lease stipulation or regional requirement; provide a better understanding of the scope and meaning of a regulation by explaining interpretation of a requirement; or transmit administrative information such as current telephone listings and a change in personnel or office address. The listing below contains active NTLs that have been issued since 2010.

NTL Number	Effective Date	Title
BOEM 2018-N01	September 14, 2018	Outage of Fees for Services due to Fiscal Year-end Closeout
BOEM 2016-N03	November 1, 2016	2017 Outer Continental Shelf Emissions Inventory Gulf of Mexico and North Slope Borough of the State of Alaska
BOEM REN-N02	February 11, 2016	Applications for Renewable Energy Lease and Grants and Alternate Use Grants on the U.S. Outer Continental Shelf
BOEM 2015-N06	September 8, 2015	Procedures and Requirements for Right-of-Use and Easement Requests for Platforms, Artificial Islands, Installations and Other Devices Attached to the Seabed
BOEM 2015-N04	August 17, 2015	General Financial Assurance
BOEM 2015-N03	July 22, 2015	Limitations on Credit Card Collection Transactions and Policy for Splitting Transactions
BOEM 2015-N02	February 06, 2015	Elimination of Expiration Dates on Certain Notices to Lessees and Operators Pending Review and Reissuance
BOEM 2015-N01	January 14, 2015	Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios
BOEM 2015-N01 FAQ	January 14, 2015	Frequently Asked Questions Information Sheet for Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios
BOEM 2012-N01	August 6, 2012	Electronic Submittal of Company, Qualification, Financial Assurance, and Bonding Information and Documents

AUTHOR INFORMATION

PAME State / Member: **United States**
Name of Responder / Expert and Affiliation:
Dennis Thurston, Bureau of Ocean Energy Management, U.S. Department in Interior

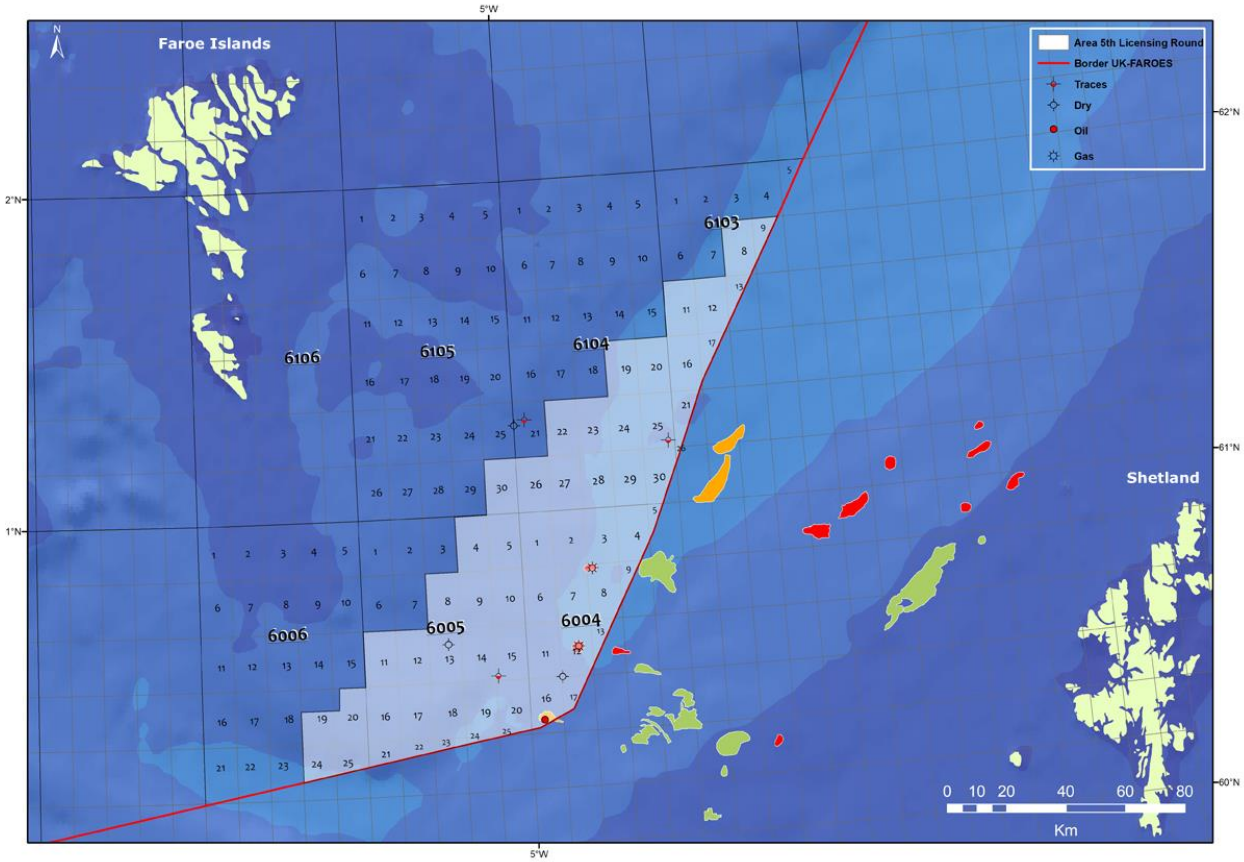
Mark Fleming, Bureau of Safety and Environmental Enforcement (BSEE), Office of Congressional and International Affairs (OCIA)
Sadie Wright, NOAA Fisheries Protected Resources Division, Alaska Region
Elizabeth McLanahan, NOAA, U.S. Department of Commerce
Contact information / email: **contact Elizabeth McLanahan, Elizabeth.McLanahan@noaa.gov**

Faroe Islands/Kingdom of Denmark (draft under review by Denmark and Faroe Islands)

Please describe current and planned offshore oil and gas activities in the Arctic including:

- leasing/licensing

The 5th License Round



The 5th Faroese Licensing Round opened on 11th July 2019 and was run in conjunction with the 32nd UK Licensing Round. ***Both rounds closed on 12th November 2019.***

In preparations for the 5th licensing round Jarðfeingi, together with the Ministry of Foreign Affairs and Trade, secured Parliamentary approval for adjustments in the terms and conditions of licenses and licensing procedures to align them more closely to those which obtain in the UK. Companies can now look at the area in the knowledge that the licensing regimes are similar on both sides of the border. This may be considered of particular relevance in relation to investment decisions in those areas where the geology is also similar on both sides with the possibility of prospects crossing the border.

OUT OF ROUND BIDS

The Faroese government offers the possibilities of Out of Round options in the Faroese area.

There are some large structures, of which the Fugloy Ridge, Ymir Ridge and the Wyville Thomson Ridge, are currently the most promising. In addition there is interesting potential at the edge of the volcanics at e.g. the Mid Faroe High and in the Judd Basin.

TERMS AND CONDITIONS

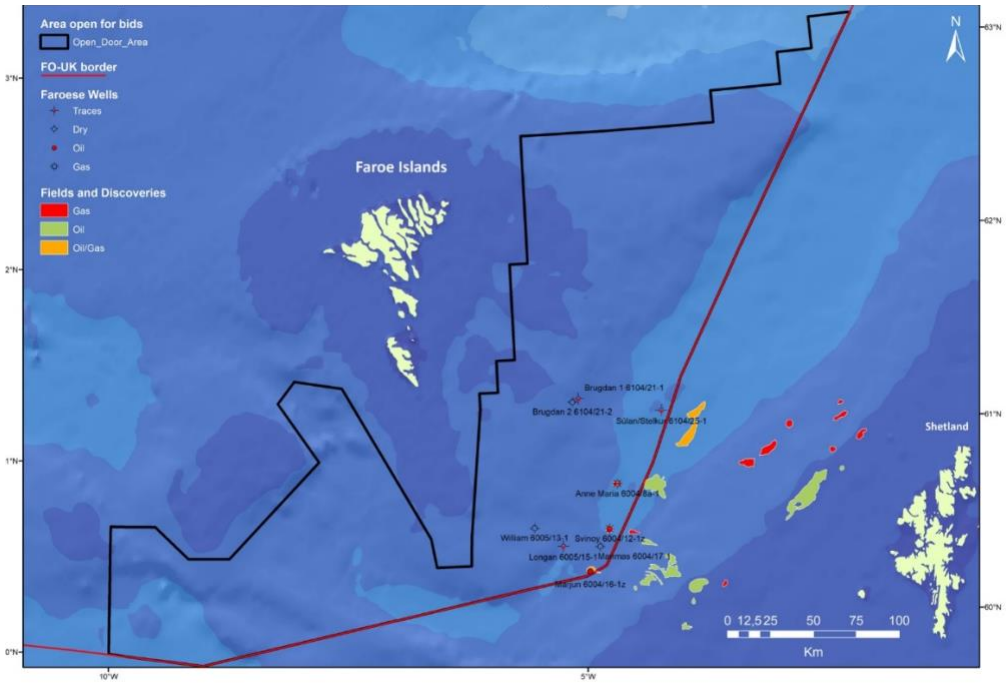
Terms and Conditions

The terms for licenses applied for and awarded under the open door regime, are subject to the same terms and conditions which were passed in parliament for the previous round. This means that the current terms and conditions, for licenses awarded under the open door regime, are the same as for the last licensing round.

Procedure

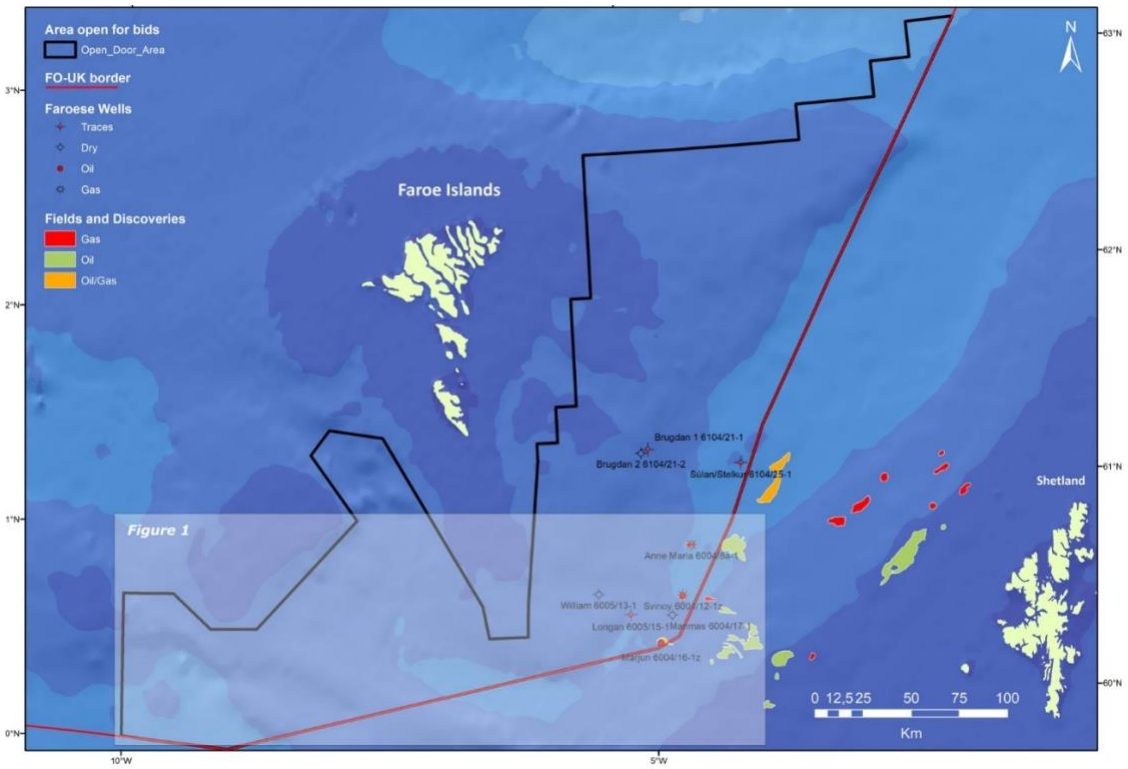
– Individual companies or license groups can submit an application to Jarðfeingi at any time.
– Jarðfeingi will then advertise that an area has been applied for.
– Three months later the application will be evaluated.
– If there are compeeting bids, then the best bid will be awarded the license, provided that the proposed workprogram is sound.
– If there are no compeeting bids, then the license will be awarded to the sole bidder, provided that the proposed workprogramme is sound.

AREA OPEN FOR BIDS

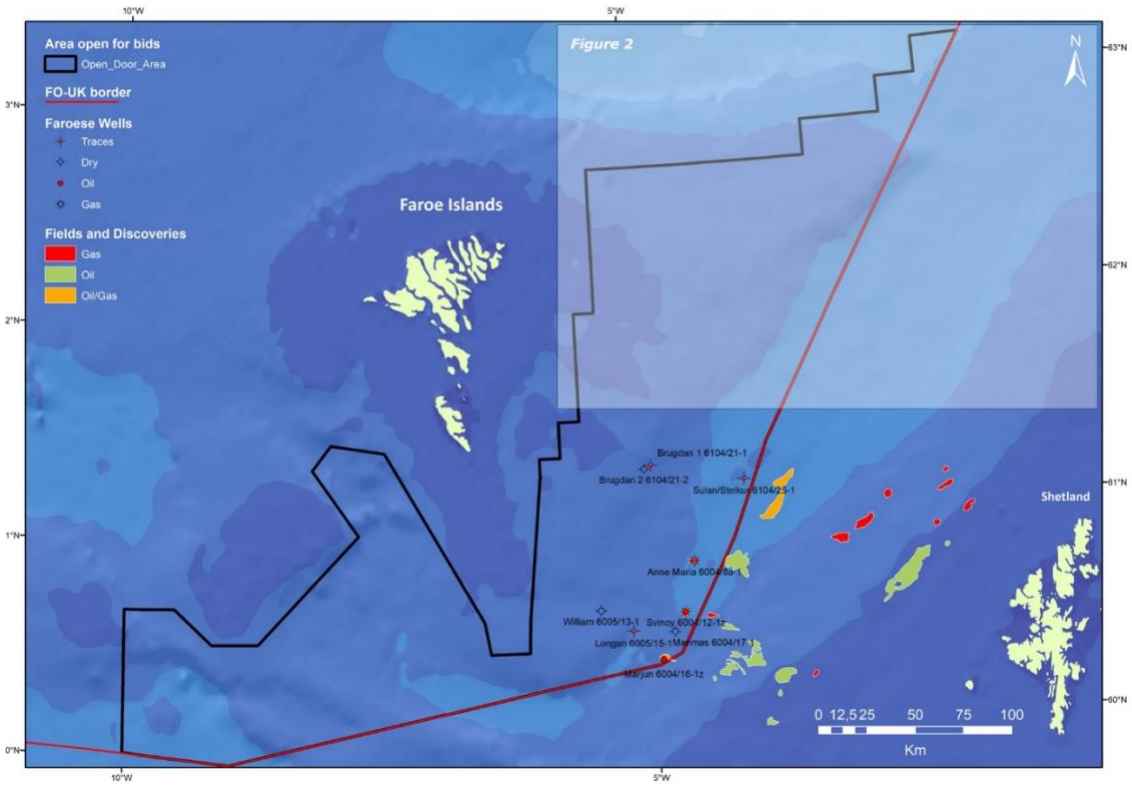


Maps showing the Open Door area (red outline) in Faroese *sector*

AREA SOUTH OF FAROE ISLANDS



AREA EAST OF FAROE ISLANDS



- exploration and development: N/A

Please describe in further detail exploration or development activities on offshore leased or licensed lands including:

- seismic

3D Seismic recently collected (FO18)

- coring N/A
- drilling N/A
- platform installation N/A
- production N/A
- pipelines N/A

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA

LEGISLATION

Full text of Parliamentary Bill 72/2016

Prospecting License
Pursuant to Parliamentary Act No. 31 of 16 March 1998 on Hydrocarbon Activities, as amended by Parliamentary Act No. 52 of 26 May 2010, the Faroese Earth and Energy Directorate hereby grants:
permission to undertake prospecting for petroleum.

The provisions laid down in the above mentioned Act, as well as other provisions or decisions issued now or later, shall apply for this license. In addition the following terms and conditions shall apply:
1 Coordination with and relation to other activities
2 License area
3 Scope of License
4 Term of License
5 Environmental and Fisheries Considerations
6 Fisheries Representatives and Observers
7 Authorities Representatives
8 Notification
9 Reporting and Submission of Data
10 Confidentiality
11 Liability and Insurance
12 Fee
13 Relation of Other Legislation

ACTS AND EXPLANATORY NOTES

Applications for Exploration and Production Licences--Application Guidance 2020
1. Introduction
2. Obtaining access to a licensing round
3. Type of licence
4. Contact details
5. Block list
6. Opportunity details
7. Work Programme(s)
8. Safety and environmental capability information
9. Financial information
10. Payment..
11. Submission of Application..
12. Contacts.. .

Applications for Exploration and Production Licences--General Guidance 2020
1. Terms and type of license
2. The applicant
3. Acerage
4. Work programmes
5. Application fee
6. How decisions are reached
7. Transparency
8. Out-of-round applications
9. General issues

Applications for Exploration and Production Licences--Technical Guidance 2020
Technical information for the licensing rounds.
Innovative License.
The elements of a work programme.
Interviews..
Operator competence

ACTS FROM PREVIOUS LICENSING ROUNDS

Parliamentary Act on the Fifth Licensing Round for exploration and exploitation of hydrocarbons--Announcement A 2019 *Puplished 8 May 2019*

According to the decision of the Parliament of the Faroe Islands, the Prime Minister hereby confirms and promulgates the following Parliamentary Act:
§ 1. This Act stipulates the areas to be offered for licensing and the standard terms and conditions governing the granting of a license in the fifth licensing round for exploration and exploitation of hydrocarbons.
§ 2. Identifies the areas to be offered for licensing in the fifth licensing round.
§ 3. Pursuant to § 6 of the Hydrocarbon Activities Act, the Minister awards the licenses for the exploration and exploitation of hydrocarbons.
§ 4. This Act shall enter into force the day after it is promulgated.

Parliamentary Bill No. 72/2016: Proposed legislation governing the fourth licensing round for the exploration and exploitation of hydrocarbons28 February 2017.

§ 1. This Act stipulates the areas to be offered for licensing and the standard terms and conditions governing the granting of a license in the fourth licensing round for exploration and exploitation of hydrocarbons.
§ 2. The areas to be offered for licensing in the fourth licensing round are shown.
§ 3. Pursuant to § 6 of the Hydrocarbon Activities Act, the Minister awards the licenses for the exploration and exploitation of hydrocarbons.
§ 4. This Act shall enter into force the day after it is promulgated.

How have management activities changed since the 2010 OGA?

Established Out of Round Bids

Russian Federation (draft under review by Russia)

Please describe current and planned offshore oil and gas activities in the Arctic including:

- **leasing/licensing**

A subsoil license is a special government consent, which certifies the right of its holder to use a deposit within the stated boundaries, according to the stated purpose, during the stated period and in compliance with determined terms. Many such terms are determined in a licence agreement, which is an auxiliary and constituent part of a subsoil licence.

Current Licenses (exploration, production, and combined)

15 Barents Sea
10 Pechora Sea
24 Gulf of Ob/Taz Bay
18 Kara Sea
5 Laptev Sea
2 E. Siberia Sea
3 Chukchi Sea

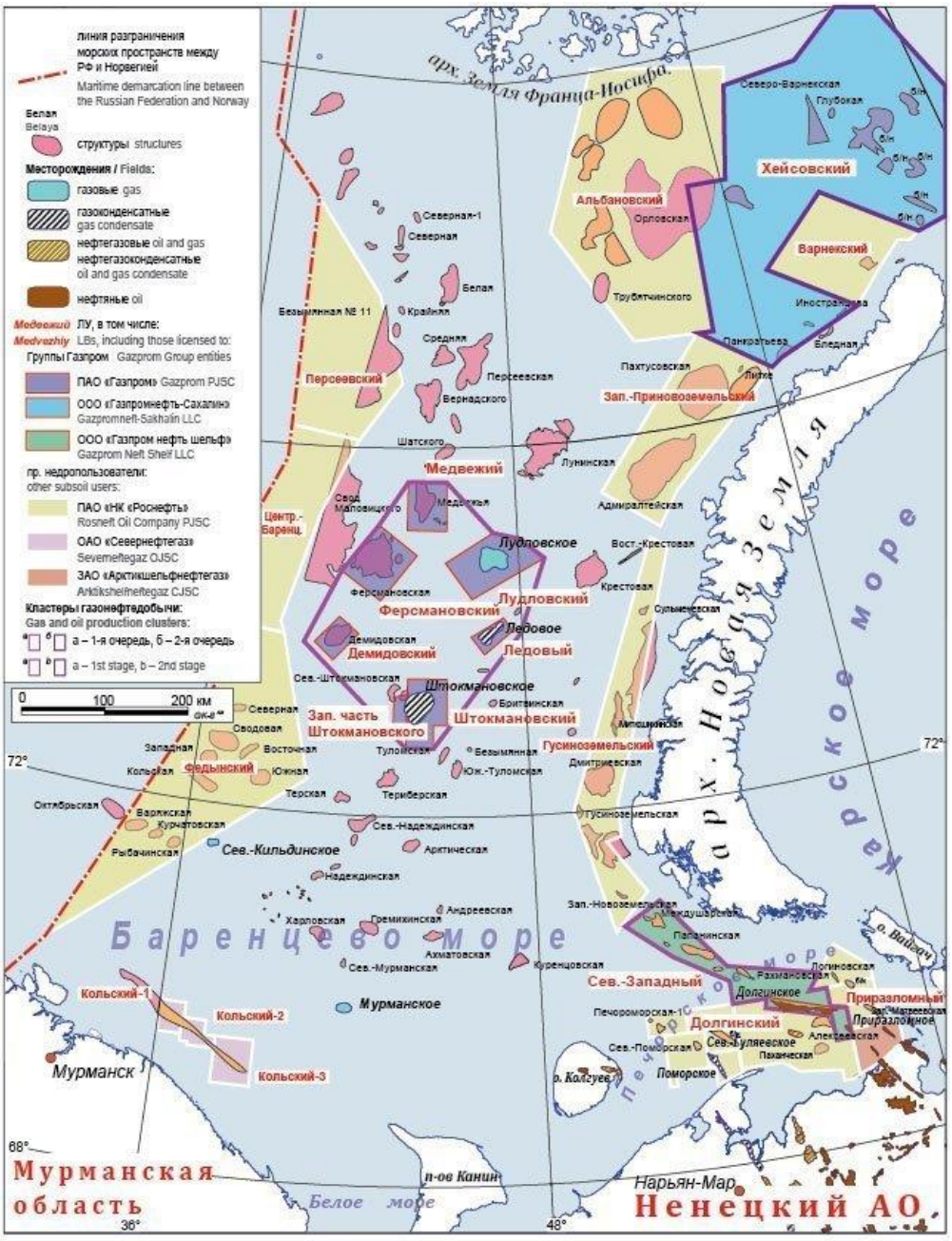


Рис. 1: Обзорная карта размещения ЛУ в пределах Баренцева и Печорского морей
Fig 1: Overview map showing the LB locations within the boundaries of the Barents and Pechora Seas

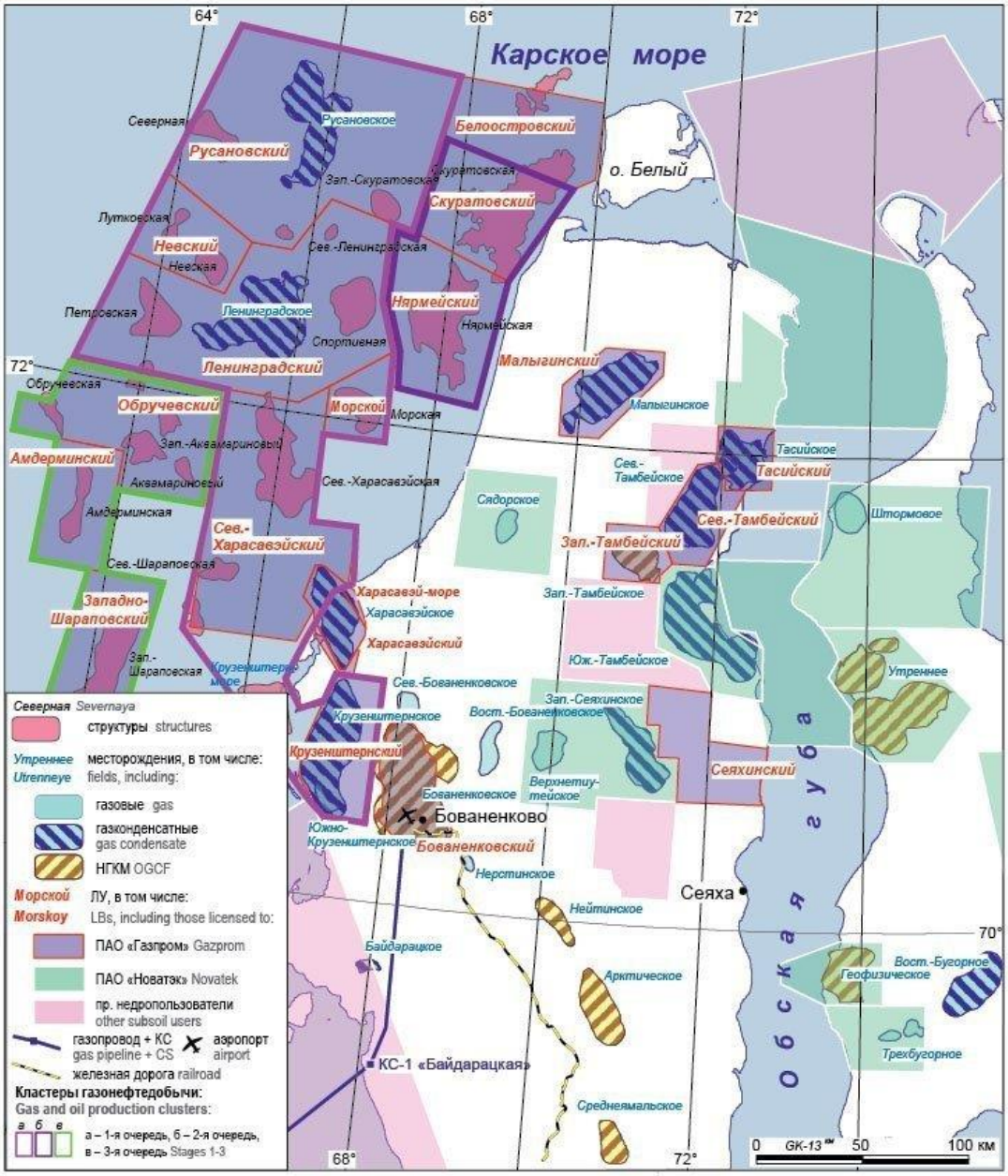


Рис. 2: Лицензионные участки в пределах Карского моря: КС – компрессорная станция
Fig 2: License blocks within the Kara Sea: KC – compressor station

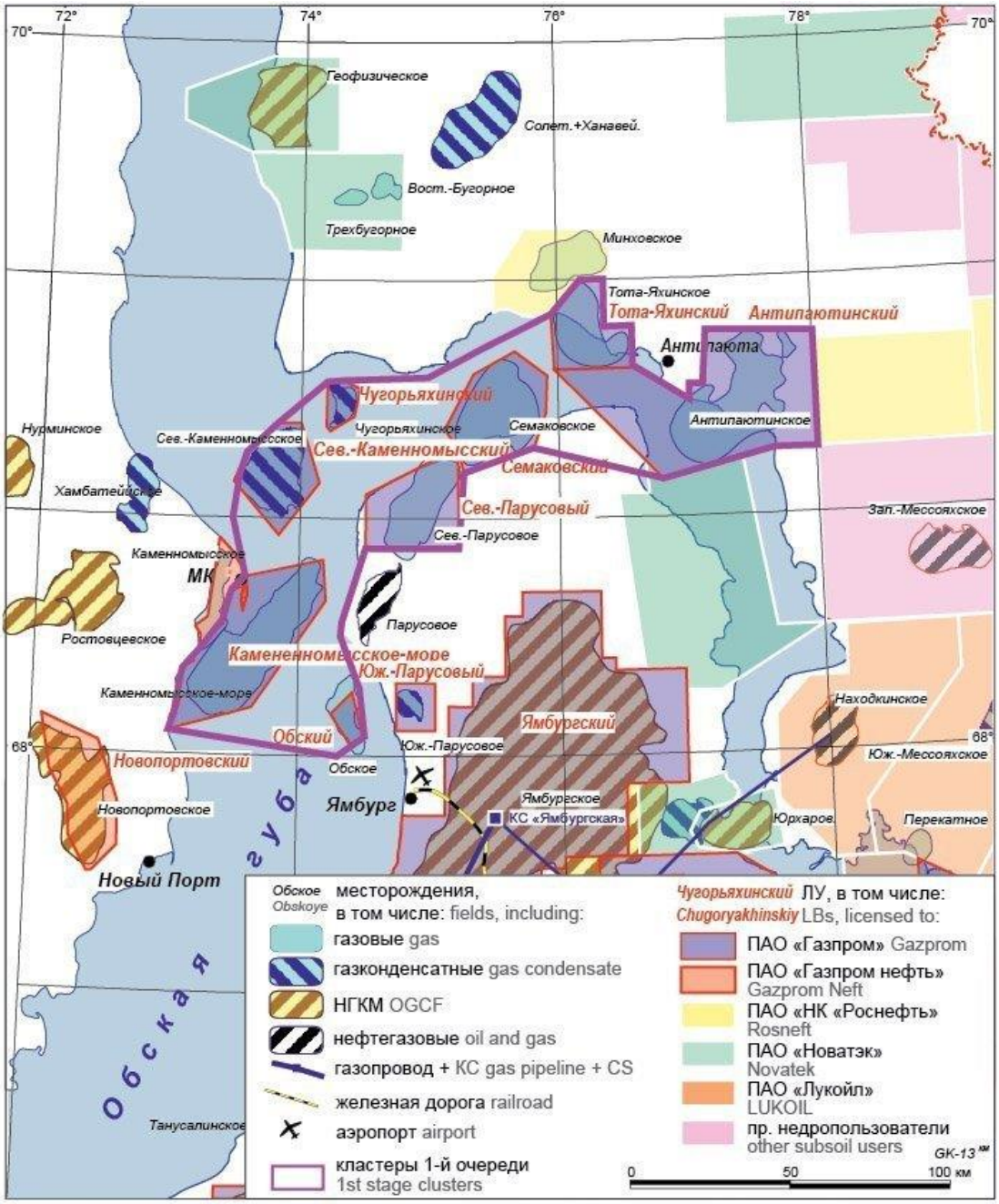
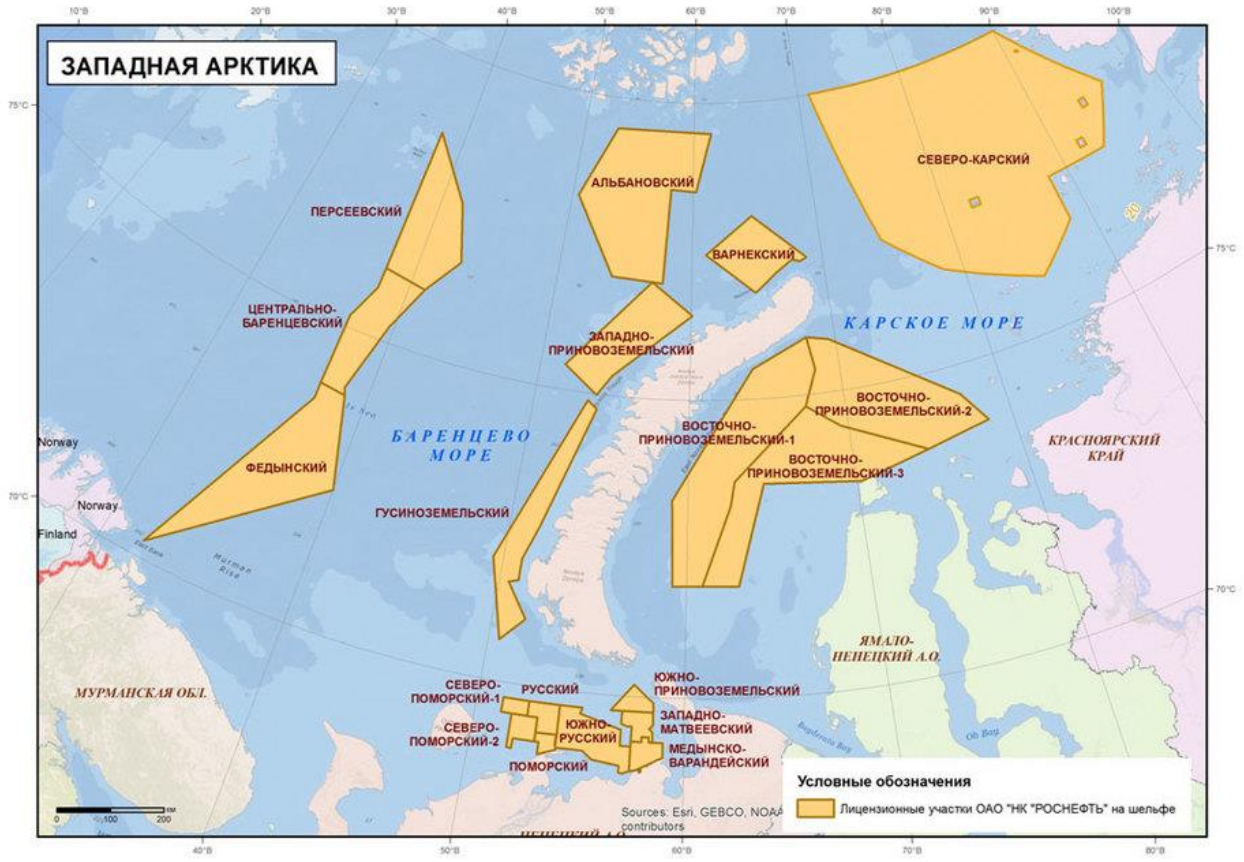
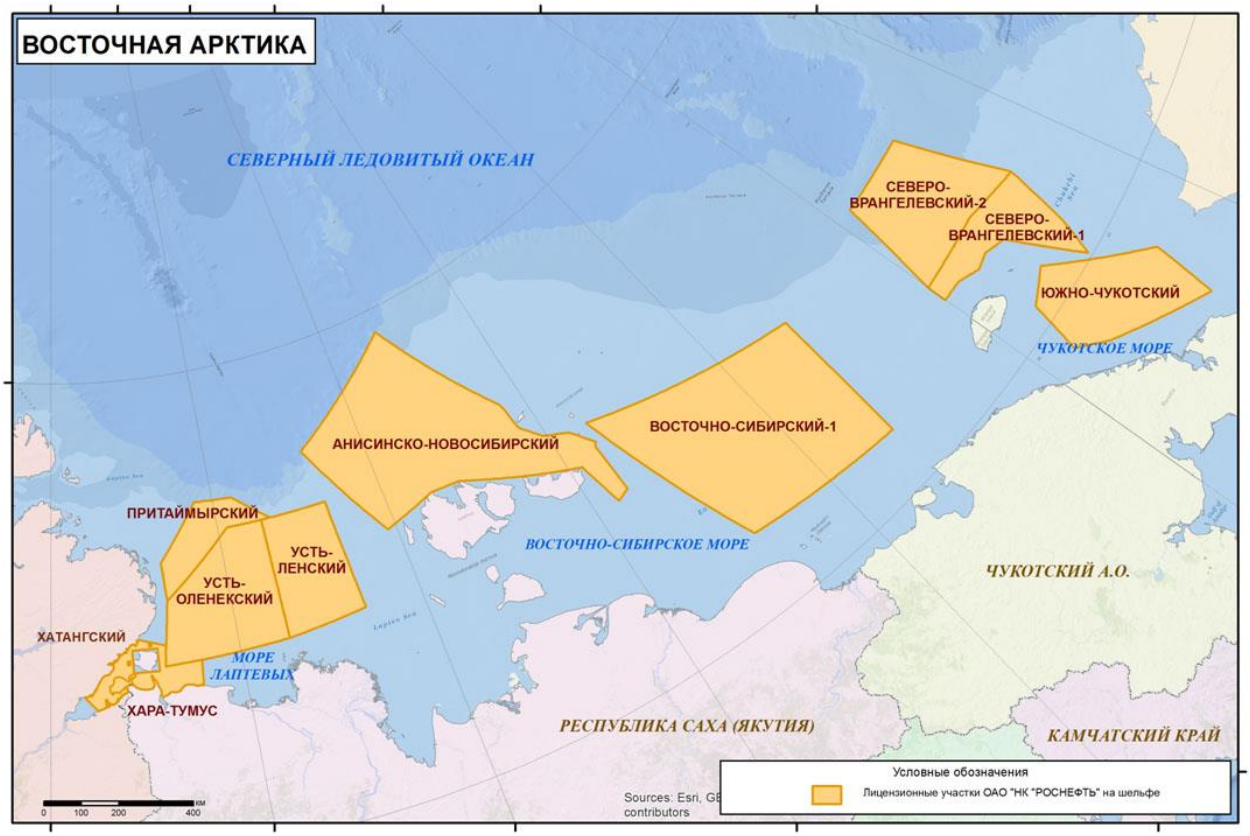


Рис. 4: Обзорная карта размещения ЛУ в пределах акватории Обской и Тазовской губ
Fig 4: Overview map showing LB locations within deep-water regions of the Gulf of Ob and the Taz Estuary


ЗАПАДНАЯ АРКТИКА
ПЕРСЕЕВСКИЙ
АЛЬБАНОВСКИЙ
СЕВЕРО-КАРСКИЙ
ВАРНЕКСКИЙ
ЦЕНТРАЛЬНО-БАРЕНЦЕВСКИЙ
ЗАПАДНО-ПРИНОВОЗЕМЕЛЬСКИЙ
КАРСКОЕ МОРЕ
ВОСТОЧНО-ПРИНОВОЗЕМЕЛЬСКИЙ-2
БАРЕНЦЕВО МОРЕ
ВОСТОЧНО-ПРИНОВОЗЕМЕЛЬСКИЙ-1
КРАСНОЯРСКИЙ КРАЙ
ФЕДЫНСКИЙ
ВОСТОЧНО-ПРИНОВОЗЕМЕЛЬСКИЙ-3
ГУСИНОЗЕМЕЛЬСКИЙ
Norway
Finland
ЯМАЛО-НЕНЕЦКИЙ А.О.
МУРМАНСКАЯ ОБЛ.
СЕВЕРО-ПОМОРСКИЙ-1
РУССКИЙ
ЮЖНО-ПРИНОВОЗЕМЕЛЬСКИЙ
ЗАПАДНО-МАТВЕЕВСКИЙ
СЕВЕРО-ПОМОРСКИЙ-2
ЮЖНО-РУССКИЙ
МЕДЫНСКО-ВАРАНДЕЙСКИЙ
ПОМОРСКИЙ
Условные обозначения
Лицензионные участки ОАО "НК "РОСНЕФТЬ" на шельфе
Sources: Esri, GEBCO, NOAA contributors


ВОСТОЧНАЯ АРКТИКА
СЕВЕРНЫЙ ЛЕДОВИТЫЙ ОКЕАН
СЕВЕРО-ВРАНГЕЛЕВСКИЙ-2
СЕВЕРО-ВРАНГЕЛЕВСКИЙ-1
ЮЖНО-ЧУКОТСКИЙ
ЧУКОТСКОЕ МОРЕ
ВОСТОЧНО-СИБИРСКИЙ-1
АНИСИНСКО-НОВОСИБИРСКИЙ
ПРИТАЙМЫРСКИЙ
ВОСТОЧНО-СИБИРСКОЕ МОРЕ
УСТЬ-ЛЕНСКИЙ
УСТЬ-ОЛЕНЕКСКИЙ
ЧУКОТСКИЙ А.О.
ХАТАНГСКИЙ
МОРЕ ЛАПТЕВЫХ
ХАРА-ТУМУС
РЕСПУБЛИКА САХА (ЯКУТИЯ)
КАМЧАТСКИЙ КРАЙ
Условные обозначения
Лицензионные участки ОАО "НК "РОСНЕФТЬ" на шельфе
Sources: Esri, GEBCO, NOAA contributors

- **exploration and development**

Recent Drilling
2019
Drilled at the gas field in the Kara Sea
Drilled at the Skuratovskoye field in the Kara Sea
Drilling at the Geophysical field, Gulf of Ob

2018
Drilled at the Rusanovskoye field in the Kara Sea
Drilled at the Severo-Obskoye field Gulf of Ob

2017
Drilled at the Dinkov Field in the Rusanovsky block, Kara Sea
Drilled at the Nyarmeyskoye Field in the Nyarmeysky block, Kara Sea
Drilled at the Leningradskoye field off the coast of peninsula Yamal, Kara Sea.
Drilled at the Severo-Obskoye field, Gulf of Ob
Drilled at the Tsentralno-Olginskaya-1 well in the Khatanga Bay, Laptev Sea

Seismic
Over the period from 2012 to 2018, Rosneft collected on its Arctic Shelf holdings more than 143,000 linear kilometres of 2D seismic exploration, approximately 24,000 square kilometres of 3D seismic data, conducted engineering and geological surveys at 15 sites for drilling of exploration and prospecting wells, and conducted 10 geological expeditions.

Producing Fields

Prirazlome Oil Field Pechora Sea

Please describe in further detail exploration or development activities on offshore leased or licensed lands including:

- seismic
- coring
- drilling
- platform installation
- production
- pipelines

Please describe any new or amended legislation and regulations governing offshore oil and gas activities since the 2010 OGA including for:

- Engagement with Indigenous Peoples and local communities
- Leasing or licensing offshore areas
- Environmental Impact Assessments or Statements
- Environmental protection and/or mitigation for exploration and development activities
- Environmental monitoring
- Compliance monitoring

- Human health and safety
- Use and discharge of chemicals, including dispersants
- Emissions
- Waste management
- Drilling safety
- Prevention, preparedness and response, including response practices
- New technology and research
- Decommissioning

See Appendix B

How have management activities changed since the 2010 OGA?

Laws, Orders, Decrees, Resolutions, and Regulations of the Russian Federation on oil and gas after 2010

See Appendix 2