



## **25<sup>th</sup> LICENSING ROUND**

# **GUIDE TO APPLICATION FOR PRODUCTION LICENSE**



**NORWEGIAN PETROLEUM  
DIRECTORATE**



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## General application information

### SUBMITTING AN APPLICATION

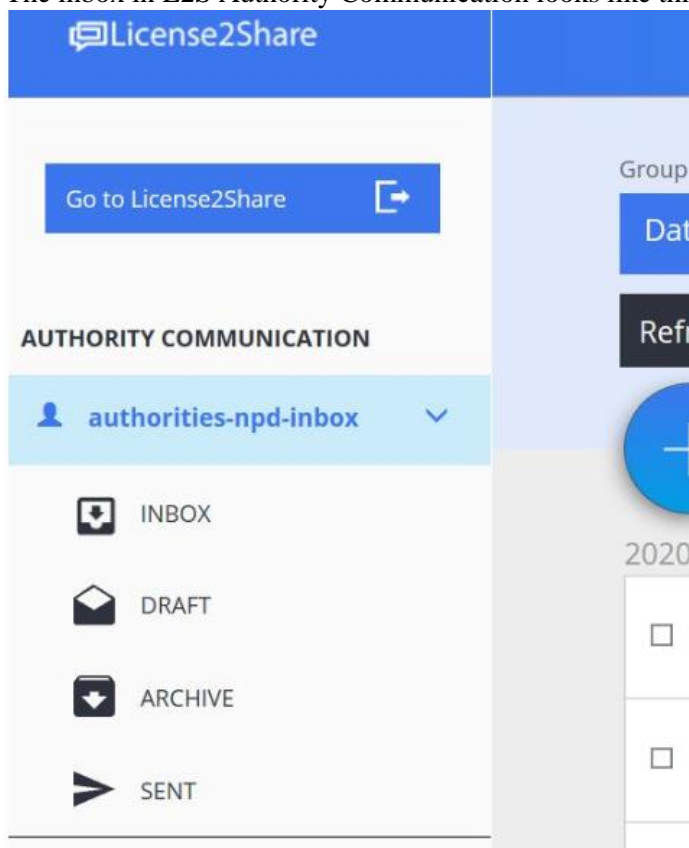
Each application must be submitted to both the Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate. Upon submission via L2S Authority Communication, both the Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate can be added as recipients in the same submission.

#### The Norwegian Petroleum Directorate

The application(s) including attachments must be saved in one folder named *25ROUND-"companyname"- "applicationnumber"-of-"totalnumber"* and the folder must subsequently be compressed (“zipped”). The folder must not contain subfolders and the file must not be password-protected.

The submission must be named *25RUNDE-"companyname"- "applicationnumber"-of-"totalnumber"* and submitted via L2S Authority Communication to the Norwegian Petroleum Directorate.

The inbox in L2S Authority Communication looks like this:



#### The Ministry of Petroleum and Energy

The application shall be sent to the Ministry of Petroleum and Energy (MPE) in any electronic format. L2S Authority Communication is one possible solution to submit applications.

The deadline for submission is **12:00 noon on Tuesday, 23 February 2021**. Applicants are encouraged to submit well before the deadline.

A receipt for the received application will be sent. Please allow for some handling time. You will immediately receive a receipt if you include your own e-mail address in the field “Receipt”:

|                            |                         |
|----------------------------|-------------------------|
| <b>To:</b>                 | Select recipient...     |
| <b>Cc:</b>                 | Select recipient...     |
| <b>Receipt:</b>            | Type receipt e-mails... |
| <b>Subject ..</b>          |                         |
| <b>Authority reference</b> | 2020 ▾ / Type here ..   |

## OVERVIEW OF SUBMISSIONS TO THE MPE AND THE NPD

- Application letter and Company information
- Application(s) including attachments

The total size of the application should not exceed 600 MB.

## THE FOLLOWING SHALL BE SUBMITTED IN EACH APPLICATION

- Appendices:
  1. Application
  2. Application summary
  3. Pdf version of Chapter 8 “Other factors”
  4. Application Data
  5. Discovery and Prospect data
  6. Company Information
  7. Map of area applied for
  8. Shapefile with the area applied for
  9. Shapefile with discoveries, prospects and leads
- Files must be structured and named as indicated below:

| Name of file   | Format | Description   |
|--|--------|---|
| <i>Application_ "block number"</i>                   | .pdf   | Application   |
| <i>Application summary_ "block number"</i>           | .pdf   | Application summary   |
| <i>Other factors_ "company name"_ "block number"</i> | .pdf   | Electronic copy of Ch. 8.   |
| <i>"block number"_ ApplicationData</i>               | .xlsx  | Completed Excel workbook<br>"ApplicationData"<br>One Excel workbook per application |
| <i>"Company name"_ CompanyInformation</i>            | .xlsx  | Completed Excel workbook<br>"CompanyInformation"                                    |

|   |       |  |
|---|-------|--|
| <i>"block number" _ "discovery, prospect and lead name" _ Discovery and Prospect data</i> | .xlsx | Completed Excel workbook<br>"Discovery_and_Prospect_data"<br>One Excel workbook per discovery, prospect and/or lead                                |
| <i>"block number" _ "company name"</i>  | .jpg  | Map of area applied for with discoveries, prospects and leads, max. 200 kb   |
| <i>AppliedArea_"applicationname_company"</i>  | .shp  | Shapefile with outline of area applied for. Max. 40 characters in the name   |
| <i>Prospect_Lead_"applicationname_company"</i>  | .shp  | Shapefile with outline of discovery, prospects and leads, attributes in the shapefile must describe resource class. Max. 40 characters in the name |

Suggested maximum number of pages and maximum number of figures/tables are indicated for the various parts of the application. This should be followed. A clear reason must be stated if there is a need to exceed the suggested maximum numbers of pages, figures and tables. Use a font size equivalent to Times New Roman 12 and single/standard spacing. All information in figures and maps must be legible. All maps must contain coordinates, as well as a scale.

The Excel workbooks to be used in the applications can be found on the NPD's website together with these guidelines at: [www.npd.no/25th-round](http://www.npd.no/25th-round)

#### **ApplicationData**

#### **CompanyInformation**

#### **ProspectData**

The Excel form formats must not be changed. Exceptions are adding new rows in Tables 1, 2, 3 and 4. All units (depth, area, volume, etc.) must be provided in metric units.

## **FORMS**

The forms requested for the applications can be found in the Excel workbooks:

1. Application Data
  - a. Table 1: Application summary
  - b. Table 2: Resource potential
  - c. Table 3: Work program and duration
2. Discovery and Prospect data
  - a. Table 4: Discovery and prospect data
3. Company Information
  - a. Table 5: Application list from company
  - b. Table 6: Size and experience
  - c. Table 7: Financial status
  - d. Table 8: Projected cash flow (only for companies without international credit rating)

The forms must be submitted together in the above-mentioned Excel workbooks. Legal intervals have been defined for values that must be filled in for parts of the information requested. An error message will be displayed if forms are filled in incorrectly. The accepted interval is specified in the headings of each column. The Excel workbooks are electronically uploaded to the NPD's database for licensing rounds. Formatting of the Excel forms beyond entering new rows at the bottom is therefore not permitted. The forms are only available in English but can be completed in both Norwegian and English where a selection does not have to be made from a drop-down list.

## SHAPE FILES

Shape files for the applied for area must be named *AppliedArea\_"applicationname\_company"* and contain polygons showing the area applied for. Use the underscore as element delimiter. Do not use special characters, including "æ", "ø" and "å". The shape file must also contain information on block number, company name, information regarding whether or not the application is stratigraphically split, and whether this is an application for additional acreage. The format in which we want this information submitted is described in the example file "*AppliedArea*".

Shape files for discoveries/prospects/leads must be named *Prospect\_Lead\_"applicationname\_company"*. At least one polygon for Base (Mean) must be provided for all discoveries/prospects/leads reported in "Table 4: Discovery and prospect data". Preferably, polygons for P90, Base (Mode) and P10 should also be included for the main prospect/discovery. The names of these prospects/leads must be spelled the same in all tables/files.

Note: All discoveries/prospects/leads mentioned in an application must be submitted in the same shape file. The required format is described in the example file "*Prospect\_Lead*".

## Application for additional acreage

Companies can apply for additional acreage where discoveries or mapped prospects extend continuously from the applicant's production licence into acreage announced in the 25th licensing round. The following criteria must be fulfilled in order to be awarded additional acreage:

1. All licensees in the existing production licence are applicants.
2. The distribution of ownership interests will be identical to the existing production licence.
3. Discovery or mapped prospect extends into relevant additional acreage.

The documentation requirement for applying for additional acreage is less comprehensive. It is important to provide a reason for why the area should be awarded as additional acreage, based on the above criteria, and to describe the work program and plans in the existing production licence, as well as the potential further work program for the additional acreage.

## Application for areas containing discovery

If the area applied for contains existing discoveries, information about plans for further exploration/maturation will have to be provided. If there are no current plans, please give an explanation of why this is not relevant.

## Application content

### 1. APPLICATION SUMMARY

The application summary must be included as the first part of the application. The application summary should be approximately three pages and must contain:

- A. Overview of applicants and the area applied for, indicating the block number in completed form "Table 1: Application summary"  
(Table 1 must also be in the Excel workbook "ApplicationData")
- B. Area description with completed form "Table 2: Resource potential"  
(Table 2 must also be in the Excel workbook "ApplicationData")
- C. Map with geographical coordinates, block number and scale which shows the applied for area with an outline of the discoveries, prospects and leads specified in the form "Table 2: Resource potential", and presented in the application.  
(The map must also be included as a separate .jpg file and the area outline as a .shp file)
- D. Completed form "Table 3: Work programme and duration"  
(Table 3 must also be in the Excel workbook "ApplicationData")

#### A. Overview

Provide a brief description of applicants and applied for area. For applications for additional acreage, provide a brief description of why the application is relevant for the production licence. The form "Table 1: Application summary" must be completed with the necessary data. If it is probable that the area has high pressure/high temperature (HPHT) issues, it is important that this is clear in the application summary (def: >690 bar/ >150° C)

An example of a completed form is shown below.

**Table 1:** Application summary

| Application for Production License in blocks: | Region    | If application for additional acreage <sup>1</sup> , PL no.: | Participants (Correct name of company from list) | O<br>P<br>O/P <sup>2</sup> | Participation share [%] <sup>3</sup><br>(0.00001 - 100) |       |       | Application delivered by: <sup>4</sup> | Fee paid by: <sup>4</sup> |
|---|-----------|--|--|----------------------------|---|-------|-------|--|---------------------------|
|   |           |  |  |                            | Preferred   | Lower | Upper |  |                           |
| 16/7  | North Sea |  | Selskap A  | O                          | 60  | 50    | 70    | x                                      | x                         |
|   |           |  | Vårt selskap AS                                  | P                          | 40  | 30    | 40    |  |                           |

<sup>1</sup> Additional acreage: where discoveries or mapped prospects extend into announced acreage from an existing production licence with the same licensee(s) and ownership interests, indicate licence number/unit

<sup>2</sup> O= operator, P= partner, O/P= no particular preference regarding operator or partner status

<sup>3</sup> The size of the ownership interests primarily preferred, as well as an upper and lower limit which the applicant can accept. The ownership interests must be in accordance with the interests listed in the application letter from each company. Do not indicate upper and lower limits for additional acreage

<sup>4</sup> Place an X by the company actually submitting the application, individually or on behalf of the group. Place an X by the company that paid the application fee, individually or on behalf of the group

#### B. Resource potential

Key data for the discoveries, prospects and leads described in the application must be listed on the form "Table 2: Resource Potential". A brief summary of the resource potential in the applied for area must be given and outlined on a map showing the discoveries, prospects and leads described in the application, and which are listed on the form "Table 2: Resource Potential". Use different colours to show different stratigraphic levels. An example is shown below:



**Table 2:** Resource potential

| Discovery/<br>Prospect/ Lead<br>name <sup>1</sup> | D/<br>P/<br>L <sup>2</sup> | Case<br>(Oil/<br>Gas/<br>Oil&Gas) <sup>3</sup> | Unrisked recoverable resources <sup>4</sup>       |                |               |   |                |               | Probability of<br>discovery <sup>5</sup><br>(0.00 - 1.00) | Resources in<br>acreage applied<br>for [%] <sup>6</sup><br>(0.0 - 100.0) | Reservoir   |                                       | Nearest relevant<br>infrastructure <sup>8</sup> |            |
|---|----------------------------|--|---|----------------|---------------|---|----------------|---------------|---|--|---|---------------------------------------|---|------------|
|   |                            |  | Oil [10 <sup>6</sup> Sm <sup>3</sup> ]<br>(>0.00) |                |               | Gas [10 <sup>6</sup> Sm <sup>3</sup> ]<br>(>0.00) |                |               |   |  | Litho-/ Chrono-<br>stratigraphic level <sup>7</sup> | Reservoir<br>depth<br>[m MSL]<br>(>0) | Name  | Km<br>(>0) |
|   |                            |  | Low<br>(P90)                                      | Base<br>(Mean) | High<br>(P10) | Low<br>(P90)                                      | Base<br>(Mean) | High<br>(P10) |   |  |   |                                       |   |            |
| 16/7 Karlsvogna                                   | P                          | Oil  | 6,80  | 11,70          | 15,90         | 0,80  | 1,80           | 2,20          | 0,22  | 100  | Skagerrak Fm/<br>Upper Triassic                     | 3640                                  | Sleipner Øst                                    | 20         |
|   |                            | Gas  | 0,10  | 0,70           | 1,80          | 4,00  | 13,40          | 24,20         | 0,13  | 100  | Skagerrak Fm/<br>Upper Triassic                     | 3640                                  | Sleipner Øst                                    | 20         |
| 16/7 Storebjørn                                   | L                          | Oil  | 1,71  | 2,78           | 6,98          | 0,94  | 2,61           | 4,56          | 0,17  | 100  | Sleipner Fm/<br>Middle Jurassic                     | 3500                                  | Sleipner Øst                                    | 20         |
| 16/7 Lillevogna                                   | L                          |  |   |                |               |   |                |               |   | 85   | Sleipner Fm/<br>Middle Jurassic                     | 3400                                  |   |            |

<sup>1</sup> The name of the prospect or lead is informal and can be chosen freely. Ensure the name is used consistently throughout the application documentation. For discoveries, the correct name should be obtained from the NPD FactPages

<sup>2</sup> D =discovery, P =prospect, L = lead

<sup>3</sup> If there are different alternatives for the same prospect (case), the prospect must be listed with the associated discovery probability for each phase.

<sup>4</sup> The low and high values should correspond to P90 and P10. Any deviations from this must be clarified. For leads, the form should be completed with the greatest possible degree of detail.

<sup>5</sup> The discovery probability must be stated between 0.00-1.00. Calculation of discovery probability is explained in the application

<sup>6</sup> Percentage of the prospect's/discovery's recoverable resources (mean) located in area applied for. This will normally be under 100% for additional acreage.

<sup>7</sup> Nomenclature approved by the Norwegian Stratigraphic Committee should be used where available, see <https://www.npd.no/en/facts/geology/lithostratigraphy/>

<sup>8</sup> The nearest relevant facility with petroleum processing plants

### C. Map

The applied for area and outline of the discoveries, prospects and leads mapped must be shown in a map containing geographic coordinates, block number and scale. The prospect outline must be stated as Base (Mean) in the application summary.

### D. Work programme and duration

The applicant's proposed work programme and duration of the production licence must be listed in the form "Table 3: Work programme and duration", shown below. Examples of/suggested work programmes and decisions that may be used are provided below the form. Other activities can also be entered. A more detailed description of the work programme must be provided in Chapter 4 of the application. An example of a completed form is shown below:

**Table 3: Work programme and duration**

| Period          | Phase (>0) | Duration [year] (>0.0) | Work program                          | Decision at milestone          |
|-----------------|------------|------------------------|---------------------------------------|--------------------------------|
| Initial period: | 1          | 1                      | Reprocess 3D seismic, Acquire EM-data | 3D seismic acquisition or Drop |
|                 | 2          | 2                      | Acquire 3D seismic                    | Drill or Drop                  |
|                 | 3          | 2                      | Drill exploration well                | Enter extension period or Drop |
|                 | Sum        | 5                      | Extension period [years] (>0.0):      | 30                             |

| Period          | Phase (>0) | Duration [year] (>0.0) | Work program                     | Decision at milestone          |
|-----------------|------------|------------------------|----------------------------------|--------------------------------|
| Initial period: | 1          | 2.0                    | G&G studies                      | Acquire new 3D seismic or Drop |
|                 | 2          | 2.0                    | Acquire 3D seismic               | Drill or Drop                  |
|                 | 3          | 2.0                    | Drill exploration well           | Continuation (BoV) or Drop     |
|                 | Sum        | 6                      | Extension period [years] (>0.0): | 25.0                           |

G&G studies  
 Procure 2D seismic  
 Reprocess 2D seismic  
 Acquire new 2D seismic  
 Procure 3D seismic  
 Reprocess 3D seismic  
 Acquire new 3D seismic  
 Procure and reprocess 3D seismic  
 Compile 3D seismic  
 CSEM feasibility study  
 Procure EM data  
 Drill (one) firm wildcat well  
 Drill wildcat well  
 Drill appraisal well  
 As for PL XXX

Procurement of 2D/3D seismic or drop  
 Acquisition of new 2D/3D seismic or drop  
 Drill wildcat well or drop  
 Drill appraisal well or drop  
 Continuation (BoV) or drop

## **2. DATABASE AND REGIONAL GEOLOGY**

This part must contain a description of the database which forms the basis for the evaluation of the applied for area. It must also contain a regional approach to the prospectivity in the applied for area. Separate studies and reports can be submitted together with the application, or prior to the application deadline. If separate studies and reports are submitted, they must be referenced, and there must also be a summary of the study in the application itself if they are of particular significance for the evaluation of the area. Separate studies and reports will generally be read, but not evaluated as part of the actual application.

*Part 2 must be limited to 10 pages of text.*

### **2.1 DATABASE AND DATA APPLICATION**

Seismic, wells and other data types such as EM data, used in the evaluation of the area/prospects must be listed in the table and clearly shown in a database map of the applied for area. Any special studies used must be summarised, and how they are used in the application design must be explained. Emphasis will be placed on the extent of data and how this data is used.

### **2.2 REGIONAL GEOLOGY**

There must be a relevant regional geological approach to the issues in the applied for area.

## **3. GEOLOGICAL EVALUATION OF BLOCKS**

This chapter must contain a petroleum geological analysis of the applied for area, as well as an evaluation of the different identified prospects and prospect leads.

### **3.1 GEOLOGICAL PETROLEUM ANALYSIS**

There must be a brief geological petroleum analysis of the applied for area, with particular focus on the factors considered critical for the prospectivity in the area and for evaluating this.

When applying for additional acreage, the geological petroleum overview does not need to be documented, unless the application is based on a completely new understanding of the petroleum geology (e.g. new plays, new source rock understanding, etc.).

*The documentation under Item 3.1 should be limited to 20 pages of text.*

### **3.2 GEOLOGICAL AND TECHNICAL FINANCIAL PROSPECT EVALUATION**

A geological and technical financial evaluation must be prepared for each prospect, as well as for prospect leads (Item 3.2.4) when these prospect leads are significant as regards the potential in the applied for area.

*Total documentation under Item 3.2 (3.2.1 – 3.2.4) should be limited to 12 pages of text for each prospect (or group of prospects if appropriate).*

For additional acreage applications, prospects/discoveries extending into the applied for additional acreage must be described, and the data/parameters used in the evaluation of the entire prospect/discovery must be listed in the form "Prospect data". Any prospect leads must be described in brief, including the mapping approach and potential resource estimate.

**3.2.1 Prospect description** There must be a brief description of the prospect/prospects with particular focus on critical factors. Key data for each prospect must be entered in "Prospect data".

**3.2.2 Resources** This is documentation and explanation of the estimation of resources and selected parameters.

**3.2.3 Discovery probability** Explain the discovery probabilities and associated partial probabilities listed in "Table 5: Prospect data".

**3.2.4 Prospect leads**

In blocks/areas with identified prospect leads, there must be a brief description of these.

"Table 5: Prospect data" must be used for the available data and parameters.

## **4. EXPLORATION STRATEGY AND WORK PROGRAM**

There must be a description of the plan for exploring the applied for area, see "Table 3: Work program and duration" in the form "ApplicationData".

If the application relates to additional acreage for a production licence in the initial phase, indicate the remaining work program and duration of this in "Table 3: Work program and duration".

In those cases where there are no remaining work commitments in the existing production licence that will cover exploration/drilling of the resources in the additional acreage, there must be a proposed work program for the additional acreage with a plan for exploration and/or exploitation of the resources.

## **5. TECHNICAL RESERVOIR FACTORS/CONDITIONS**

There must be a brief description of the drainage strategy for each prospect and/or for the combination of prospects that is assumed to provide the most optimal development solution. The grounds and assumptions for the chosen drainage strategy should be described, as well as special technical reservoir challenges that are relevant for the applied for blocks.

The application must provide a brief overview of the company's expertise and experience as an operator/licensee within use of reservoir management and chosen drainage strategy.

*The description should be limited to 5 pages.*

## **6. DEVELOPMENT TECHNOLOGY AND EXPERTISE**

The development and transport solutions used as a basis for the chosen drainage strategy and profitability calculations in Chapter 7 must be described and illustrated. If relevant, there must be a description of the area solution and special technological challenges.

The application must provide a brief overview of the company's expertise and experience as operator/licensee within use of technology, and the following should be addressed:

- a) Development technology
- b) Environmental technology
- c) Research and development
- d) Project implementation

Documentation that is discussed and presented must be relevant and adapted to the technical challenges represented by the applied for area.

*The chapter should be limited to 5 pages of text.*

## **7. PROFITABILITY CALCULATIONS**

Financial key figures that constitute the basis for the application for award of acreage must be calculated for each prospect and/or for the combination of prospects assumed to result in the most profitable development. The assumptions which form the basis for the financial calculations must be clearly stated, with reference to Chapters 5 and 6.

## **8. OTHER MATTERS**

The documented expertise presented must be relevant and adapted to the technical challenges represented by the applied for area.

Emphasis must be placed on the following:

1. Overarching philosophy for safety, working environment and the external environment.
2. System for managing safety, working environment and the external environment in activities the applicant will face in Norway, including as concerns continuous improvement of these factors.
3. Organisation of the operatorship, including experience, expertise and resources.

Companies applying for operatorship for the first time on the Norwegian shelf must document operational experience that is considered to be particularly relevant for safety and working environment factors for the applied for blocks.

*Must be limited to 10 pages of text.*

## **9. REFERENCES**

References to reports, studies and publications used in the evaluation work.