

**Guidelines
for
Annual Status Report
for
Fields in Production**

**Cf. Section 47 of the Regulations to Act relating to petroleum activities
and Section 29 of the Resource management regulations**

Rev. September 2020

1.09.2019

Introduction

The Annual Status Report (ASR) for fields in production shall be submitted to the Norwegian Petroleum Directorate (NPD) by October 15th each year, cf. Section 47 of the Regulations to Act relating to Petroleum activities and Section 35 of the Resource management regulations.

The information given in the ASR shall conform the prognoses and resource estimates given in the reporting to Revised National Budget (RNB).

The ASR forms an important basis for the authorities' evaluation of whether a field is being operated in accordance with the preconditions in the legal framework, cf. Section 4-1 of Act 29 November 1996 No. 72 relating to petroleum activities (Petroleum Act):

Production of petroleum shall take place in such a manner that as much as possible of the petroleum in place in each individual petroleum deposit, or in several deposits in combination, will be produced. The production shall take place in accordance with prudent technical and sound economic principles and in such a manner that waste of petroleum or reservoir energy is avoided. The licensee shall carry out continuous evaluation of production strategy and technical solutions and shall take the necessary measures in order to achieve this.

The ASR also forms the basis for evaluation of the production permission, cf. Section 4-4 of the Petroleum Act, Stipulation of production schedule etc. and Section 23 of the Regulations to Act relating to Petroleum activities, Stipulation of production schedule etc. This includes permissions relating to flaring and venting.

The ASR shall also explain deviations from the existing production permission(s) and reported prognosis. For actual vs previous prognosis, explanations should reflect the past 12 months, unless otherwise specified. Preferred period is 1st October last year to 1st October this year, dependent on the availability of data Deviations should be commented on.

Other relevant information available to the NPD (detailed studies, etc.) may be referred to. Data for fields with several installations and an extensive number of activities may be provided as attachments to the report. If a common ASR is preferred for two or more fields please contact NPD for advice.

The ASR and the excel attachment shall be reported to postboks@npd.no. Please name the excel attachment as the following examples:

- ASR2020_Alvheim
- ASR2020_Snorre
- ASR2020_Maria

NPD requests the operator to enclose the most recent Long-Range Plan (LRP), and the technology plan for the field, if any. If possible, show where main activities/projects are linked to the LRP.

**Annual Status Report 2019
for
< Field name >**

| | | | | |
|----------------------------------------------|-------------|---------------|-------------|--|
| Field name: | | | | |
| PL: | | | | |
| Operator and licensee (name and %-interest): | | | | |
| | | | | |
| | Name | e-mail | Date | |
| Contact | | | | |
| Contact | | | | |
| Contact | | | | |

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Attachement

1 General field status

Give a short summary of the overall status for the field reflected in the content of the other chapters. Describe significant work performed the last 12 months, the key future activities and key challenges to the field.

Describe key activities on the field last year(s) and activities for the near future.

1. *Production status (producing as intended/more/less, tail end, decline or at plateau). Measures planned that will affect the production status.*
2. *Changes to drainage strategy and measures to increase the recovery.*
3. *New drilling-, intervention or plugging campaigns.*
4. *Plans for the field to host nearby resources.*
5. *Plans for further development of the field.*
6. *Plans for production shutdown (permanent or temporary) expected in the next 1-2 years*
7. *Decommissioning plan in preparation/delivered/processed*

2 Governance

2.1 Reference documents

List the licensee's current main joint venture(s)/unit shared documents (ref. JOA Article 11). Examples of such documents are Long Range Plan, Reservoir management plan, Area studies, Increased recovery plan etc.

2.2 Risk management

Include a short summary of risk management principles (ref. JOA article 11.6). Present the most recent, highest level risk matrix with explanations for the field.

2.3 Time critical projects

Time critical projects are those defined by the operator in the Revised National Budget reporting (RNB). Describe the time critical projects and a plan how to realize the projects.

Comments should include consequences and risk of delay, as well as mitigating actions (ref risk matrix).

3 Reservoir management and increased recovery

3.1 Reservoir management

Give a summary and the key elements related to reservoir behaviour and current main strategy for reservoir management. Describe what kind of activities (data acquisition, studies, model work, new wells etc) that have been undertaken to fulfil the plan. Describe also any changes to the current drainage strategy (e.g. gas blowdown, low-pressure production, cease of injection).

Describe implemented and planned improvements for reservoir and production monitoring, e.g. seismic acquisition, reservoir modelling.

Give a summary of reserves and changes in reserves in the field and explain significant changes in original resources in place and recoverable reserves.

Fill in excel table 3.1 in attachment.

3.2 Improved recovery

Describe the increased recovery (IOR)- and enhanced recovery (EOR) projects under evaluation for the field. Describe the strategy and plans for how to implement the projects in short and long term, and challenges. Describe any known showstoppers for field tests that have been considered. For EOR methods studied, that are not regarded as relevant, give a short description.

Fill in excel table 3.2 in attachment.

4 Production and injection

4.1 Production and injection status

Provide a brief account of how targets (production, injection, pressure maintenance) have been fulfilled the last 12 months. Discuss factors that have caused significant deviations and discuss the future production profile based on the last year experience.

Revisions related to the last annual or long-term production permission and significant changes in relation to previous forecasts (RNB) and preconditions must be summarized. This also includes updates in relation to possible special production permissions for gas. For fields with separate production permissions for gas, include information on any permission carry-forward of October 1st.

Explain deviations in production and injection volumes, including figures and tables as illustration.

4.2 Production and injection plans

Describe the production strategy that forms the basis for planned activities the upcoming years and the basic production forecasts. Describe the expected pressure development in the reservoirs, and discuss the uncertainty and challenges related to the production profiles.

5 Drilling, completion and intervention

5.1 Drilling, completion and intervention – status and plans

Describe the main challenges related to drilling and well intervention activities for the field, including mitigating actions / technologies.

Describe the well activity program for the field and explain deviations between planned drilling program last 12 months and actual progress for the period. Describe any new well technologies that have been used or planned. New and planned wells should be shown in a map.

Describe the drilling and well intervention strategy of the field for the upcoming three-year period.

Fill in excel table 5.1 in attachment.

Also fill in table 5.2 in attachment, to give an overview of performed and planned interventions, as well as performed and planned permanently plugged and abandoned (P&A). Provide explanation; Main reason for closed well, P&A challenges and methods.

5.2 Drilling, completion and intervention – improvements

Give a short description of any new technology within drilling, completion, intervention and permanent plugging that has been applied or tested the last 12 months or is planned for in the future.

Describe to what extent best practice from other fields or operators is implemented.

6 Operation, maintenance and modification (OMM)

OMM, as defined here, includes operating investments and operating costs, excluding well maintenance, reservoir and business development and tariffs (ref. JOA article 12.4, budget items 5.2). For flaring and venting, see 6.3.

Different measures in OMM may increase the overall performance of a field/installation. Measures may include integrated operation concepts, organizational changes, new equipment, new contract philosophies, major modifications, increased competencies, increased capacities, new maintenance strategies etc. The measures may also include coordination with other fields (e.g. logistics).

Reduced costs, improved regularity, increased production, reduced flaring and venting, better HSE performance, better availability for third parties, reduced tariffs for external processing and transportation etc. are possible effects.

6.1 Operation, maintenance and modification – status

Provide a summary of the current situation and activity within the area of OMM for the last 12 months. Describe the key challenges and mitigating actions.

State the expected and actual regularity for the field for the last 12 months. Discuss factors that had an impact on regularity. Significant unexpected shutdowns must be explained.

6.2 Operation, maintenance and modification – improvements

Describe relevant implemented or planned new technologies, methods, operational management etc. Initiatives related to digitalization/automation should be highlighted. Recent developments in actual and planned collection, usage, storing and sharing of facility and process data (including 3. Party sharing) should be commented on. For implemented measures, give a short review of experiences or state if any review is planned.

6.3 Flaring and venting

Give a short description of strategies for flaring and venting related both to normal operations and unexpected events, including reference to documents where this is further described. Any change in strategies should be commented on. Include a graph of the actual (9 months) and permitted flaring and venting per month for the current calendar year. In the same graph, include prognosis and application for the rest of the current calendar year, and the upcoming year.

Events that have significantly impacted volumes of gas flared or vented, should be commented on. If recent events may lead to an application for increased volumes for last quarter of current year, this should be commented on.

Fill in excel table 6.1 and 6.2 attachment.

7 Environment

Various initiatives can increase the overall environmental performance of a field/facility. Possible measures may include electrification from shore, more energy-efficient technologies, reduced flaring, reduced use of chemicals, etc.

7.1 Environment – status and improvements

Describe the key environmental challenges regarding emissions to air and sea and how these challenges may have changed since the last ASR.

Describe the use of new technologies, pilots or R&D projects related to environment that are planned for the field or considered. Specify to what extent this technology is new (for the operator, for the field or for the NCS).

8 Area Development

This chapter should include activities according to JOA, Article 12.4, Exploration; Exploration drilling and testing, Field evaluation, Concept studies, Development investments, Business development and any activities relating to resources not yet decided to be developed.

8.1 Capacities, tie-ins and new volumes

Give an overview of infrastructure capacities (oil, gas, water, liquid, weight, space, risers, slots etc.) with focus on capacities that may restrict own resource development, and current and potential third-party users. State any plans for capacity upgrade.

Give an overview over existing and potential users, including both own new and third-party new resources.

8.2 Exploration

Describe key exploration activities in the last 12-month period. Describe key challenges and explain deviations from planned exploration activity and forecast for the period.

Give a brief description of the plan to explore the prospects (including undrilled field segments) and leads in the area.

Also explain and make reference to prospects or leads that are no longer part of the field's prospect inventory, compared to the last ASR.

With reference to current long-term plans or similar documents, describe key elements in the future exploration strategy. Include major challenges/critical success factors for realizing the strategy. Indicate ambitions for resource growth from exploration.

Fill in excel table 8.1 in attachment.

9 Field- and facility lifetime and cessation

According to the Petroleum Act, Chapter 5, a decommissioning plan must be submitted to the Ministry of Petroleum and Energy within two to five years prior to the use of a facility ceases. If a decommissioning plan, for all or for any facility on the field, has been submitted, the plan should be referred to, and the reporting to this chapter may be simplified.

9.1 Field and facility lifetime

List current facility lifetime and compare this to the current expected economic lifetime of the field or facility. Describe the main factors influencing the economic lifetime of the actual facility. Refer to lifetime studies, if any.

9.2 Cessation and disposal

State current timeframe relating to preparation for cessation activities and disposal of facilities.

State any preparations for future decommissioning plan(s), and / or state significant deviations from already submitted decommissioning plans (if any).

Give a short summary of planned method(s) for disposal of the facilities.

Include the main assumptions for cost estimates as in the RNB reporting.

Attachments