Guidelines for initiation and scope - Revised national budget (RNB)

This guideline replaces the former guideline for project lists. As part of the digital transition of the reporting to RNB, the reporting of project list will be a pilot to test reporting in Collabor8 RNB administered by Offshore Norge. All companies shall enter their lists into Collabor8 RNB and The Norwegian Offshore Directorate (NOD) will give feedback in the same system.

Collabor8 RNB has options for machine-to-machine interface and input via a predefined template. For most companies we believe the template will be used for RNB2025.

A company specific list is available to download from Collabor8 RNB. Content will be project information as reported to RNB2024. All possible reporting objects for a company are also available, for input in reporting scope for RNB2025.

Initiate

We need information from discoveries made after the previous reporting, as well as an evaluation on status for fields and discoveries located within production licences awarded after the previous reporting.

In the first phase we will need feedback from the reporting companies to clarify need for new valid reporting objects, solve issues regarding reporting companies and changes to the deposit lists.

- Change to reporting objects will typically relate to name changes and maturing of development projects containing multiple discoveries or when discoveries will be includes in a field. New infrastructure projects will also need to be included in our Master Data before they will be available in INIT for reporting.
- Report issuer is based on the current operator for a reporting object and last year's reporting. If there are planned changes, we need to clarify which company would be the best candidate for reporting to RNB this year.
- The deposit list per reporting object is taken from last RNB. Changes to names and definitions of deposits must be changed in Master data before they can be entered into scope.

To avoid unnecessary delays to the scoping process, the above point should be processed during June. Later changes will occur, but it would be an advantage if the bulk could be handled in ample time for reporting.

Scope

Updated scope must be related to previous reporting, with updated status, descriptions, and comments as applicable.

The new template for reporting has new features, with information traditionally collected from the October-reporting. This year, in the pilot, the reporting will be double, but we believe that this will ease the October reporting process.

We will no longer track the serial number for the projects. We will still need information when projects are moved into or out of this year's projects, compared to last reporting. This is now carried out by the columns associated projects.

New Items

Project Attributes

From the RNB reporting file, profile_sheets cell area AB7:Al25. Relevant information must be entered for all projects in RC 3-5. Different compensation projects for transfer of volumes between objects must fill inn project type "CommercialAgreement". Detailed definitions in Appendix.

Decision gates

- From the RNB reporting file, profile_sheets cell area AJ7:AM25 and the sheet "Generell info og kommentarer" cell area G63:G77.
- DG4 from the RNB reporting file, profile_sheets cell area N31:P32

Detailed definitions in Appendix. Input as date format.

Deposits

Mandatory for F projects and other projects were there is a one-to-one relation between project and deposit.

As an example, an infill well will normally be drilled into one deposit. Projects like lifetime extensions or low-pressure will normally affect all producing deposits, and there will not exist a relationship between the recoverable volumes in a project and a single deposit.

Organisation of data will make It easier to retrieve the right deposits and discovery wells for a reporting object.

Information to be edited in the template

- Template contains formatting, guiding the user how to fill in data. For this formatting to work as intended, fill out each row from left to right
- Reporting dataset must be changed in column B
- Changes to name or type for the reporting objects, must be updated by NOD in INIT data
- Project groups may be updated if there are plans to change
 - Projects in different RC and category cannot be reported in same project group
 - o Generally, all PDO-projects must be reported in separate project group
 - o Projects within the temporary 2020-taxaion rules must be in separate project group
 - Different project types should be reported separately
 - Projects with different DG3 should be reported separately
- Project status shall be completed for all rows in the list. Please delete old information an enter relevant information from the drop-down menu in the cells

Please, do not delete rows. Cancelled projects, or projects included in other must be marked with the proper text in the column Project Status

New projects entered into the template

- New rows must be entered with the information requested. Project names should be describing work titles.
- For new projects in existing report objects, relevant information should be copied from other entries
- New reporting objects, with official names and NPDID should be included from the template
- All global identification codes will be created at Offshore Norge

List of available entries of Project Status

ContinuedSameRC: The same project, same RC as last reporting ContinuedNewRC: The same project, changed RC from last reporting ContinuedChangeToRC6: The same project reported last year, changed RC to development not likely NewMeasureFromAnotherProject: New project, with volumes from a project reported last year NewMeasure: New project without transfer of volumes from another project reported last year NewObject: New discovery,new field or new pipeline which was not reported by your company last year IncludedInOtherProject: Project not to be reported, volumes transferred to another project ProjectCancelled: Project not to be reported, volumes will not be considered NewReportIssuer: Will not be reported by your company

Please give important information about the projects under the header "Changes and comments to project".

- If a project is cancelled, please explain why
- A short explanation to new objects and projects will also be very helpful

For questions, please contact:

Contact	Phone	E-mail
Tom Andersen	51 87 62 75	<u>rnb@sodir.no</u>
Magnar Haugvaldstad	51 87 60 74	<u>rnb@sodir.no</u>

Appendix

Chapter 6.10 Project Attributes, from guideline to RNB2025 Reporting

For all projects/discoveries in RC3-5, project-specific information shall be provided under the collective heading "project attributes" in the table at the top of each profile collection in the reporting file. (Please note that the project attributes are in Norwegian). It is possible to use the light grey cells to fill in project attributes for projects/discoveries in RC2, but this is optional.

This information will be used in various analyses the authorities perform regarding the offshore activity. To ensure a uniform basis for the analysis, the project attributes are based on lists with pre-defined selections (drop-down lists). Therefore, only one value can be selected in each cell. The selections shall be reflected in the profile collection below.

Project	Develop-	Need for	Project	Technology	Technology	Technology	Time	Year for	Year for	Year for	Year for
type:	ment	new power	stopper:	usage:	areas:	status:	criticality:	the decision to	the decision to	the decision to	the decision to
Chose from	solution:	generation:	Most important	Is the project	Within which	What is the	Is the	initialize	concretize	continuation	implement
drop-dow n	Chose from	Indicate how	cause for the	based on	areas will	status as	realisation of	(feasibility	(concept	(concept	(detailed
menu.	drop-dow n	the project will	project not	conventional	new	regards	the project	studies)	studies)	choice,	engineering
	menu.	get supply of	being realized	methods or	technology be	technological	time-critical,			preliminary	PDO if
Use for		pow er	or suffering	w ill new	used or	development	and, if so,			engineering	relevant)
Project-	Use for project-		significant	technology be	developed?	for projects	w hat kind of			phase)	
category "A"	category "F"		delay.	used or		w hich are	time-	DG0	DG1	DG2	DG3
and	and "A"=			developed?		conditional	criticality?				
commercial	Videreutvikling					upon new					
agreements						technology?					
-								(уууу)	(уууу)	(уууу)	(уууу)

For pipelines and land facilities the name of the various projects must be entered in H7 in the profile collection.

When none of the options fit

In some cases, none of the options in the respective lists will be appropriate for the specific project. The parameter that comes closest shall nevertheless be selected. An explanation can be entered in the comments space to the right in the project attributes, or a more suitable parameter can be given. The same applies if several of the choices are equally relevant; select one parameter and, if applicable, list the others in the comments space.

The comments space can also be used to provide information e.g., that realization of the project is contingent on specific assumptions, more detailed information about the use of new technology, or technology development needs, and explanations for the decision plan.

Project type

Use this attribute to describe the main method applied to recover the additional volumes reported with project attribute A. A drop-down list has been assigned to this column.

The table below shows available options for project category A.

Table 6-1 Options for project category A

Project type in Excel file	Description
Water injection	New or increased water injection to increase oil or gas recovery
(Vanninjeksjon)	
Gas/WAG injection	New or increased gas- or WAG injection to increase oil or gas
(Gass- og WAG-injeksjon)	recovery (most likely oil)
Wells	New production wells to optimize recovery
(Brønner)	
Advanced methods	Improved recovery through advanced methods including CO ₂ –
(Avanserte metoder)	injection and chemicals injected together with water or gas.
	Also including other types of water treatment (e.g. low salinity and bacteria/microbial)
Further field development	New facilities to be installed on a field, to optimize recovery or
(Videreutvikling)	operations as well as prolong field life. May be subject to PDO.
	The actual facility type must be reported under attribute
	development solution.
Low-pressure production	Improved recovery of gas or oil (most often gas) by reducing
(Lavtrykksproduksjon)	inlet pressures in the process system through installation of
	compressors (subsea or topside) or booster pumps etc. and / or
	reservoir depressurization, also called blow-down.
Change of energy source	Projects on existing field for partially or full replacement of
(Endret kraftforsyning)	current energy supply. Power from shore, wind turbines or
	alternative fuels are possible projects for this type.
Late-life production	Prolonged production (and improved recovery) through
(Senfaseproduksjon)	extension of facility lifetime, e.g., involving modifications,
	upgrades and/or reclassifications
Other	When none of the alternatives suits the project. When multiple
(Annet)	methods are used, please select the main contributor to the
	volumes stated
Commercial agreement	Commercial agreements that involve swap/borrowing/deferral
(Kommersiell avtale)	of volumes between fields. Please choose this project type
	regardless of resource class.

Development solution –use this attribute to describe the planned solution for development of resources with project category F. If multiple facilities are possible, pick the most relevant solution in the table below. This attribute also applies for project category A when the attribute, "further development" is selected.

More detailed information about assumed development concept can also be described using free text in the comments space in cell H28.

The table below shows the available options corresponding to project category F:

Table 6-2 Options for project category F

Project type in Excel file	Description
New stand-alone floating	Production ship with process facility (FPSO), semi sub, TLP
facility	
(Ny selvstendig flytende	
innretning)	
New stand-alone fixed facility	Integrated platform with process facility, e.g., jacket, jack-up,
(Ny selvstendig, bunnfast	GBS
innretning)	
Rental of production facility	Used when the main production facility, normally FPSO or Jack-
(Leie av	up, will be leased
produksjonsinnretning)	
Wellhead platform to existing	Platform without process facility
facility	
(Brønnhodeplattform mot	
eksisterende innretning)	
Sub-sea development to	New facilities located subsea and connected to existing facilities
existing facility	
(Havbunnsutbygg. mot	
eksisterende innretning)	
Well(s) from existing facility	New production or injection wells drilled from existing facility
(Brønn(er) fra eksisterende	either to infill targets or to undrained segments or prospects
innretning)	
Other	Used for other specified or unspecified projects that do not fall
(Annet)	under other categories. To be specified in the comments space
	to the right of the attribute lists

Power solution

Many projects will be of such a character that there will be no need to install new power intensive equipment, and installed capacity must be used. This applies to both field- and development projects.

In the environmental part, independent data should be reported. We ask you to state what will be the most likely requirement at project implementation.

These choices are possible:

- Use of existing equipment (Bruk av eksisterende):
 - There will be no need to install new power generating equipment on the field/ host field/ power plant, installed capacity is sufficient
- New power generating equipment (Nytt kraftgenererende utstyr).
- Power from shore (Kraft fra land)
- Wind turbines (Vindturbiner)
- Alternative fuels (Alternative brennstoff)

Project stoppers

We ask for an identification of the most obvious condition that may hinder project implementation as reported. For projects with resources in RC4-5 the most important cause for the project not being realized or suffering significant delay is to be chosen. The table below shows the available options:

Table	6-3	Proiect	stoppers
TUDIC	0 0	rioject	Stoppers

Project stoppers	Description
None	It is not identified any obvious condition that can cause a halt
(Ingen)	or significant delay in the project
Uncertainty in resource volume	The resource estimate is associated with substantial
(Usikkerhet i ressursvolumer)	uncertainty and more information is required about the size
	of the deposit before making a decision about realization
Reservoir properties	Low reservoir productivity expected acidification/H ₂ S, sand
(Reservoarforhold)	production, etc. which are challenging, with the current solutions
Technology is lacking	Realization requires development of new technology
(Mangler teknologi)	
Lack of infrastructure in the area	Realization requires tie-in to facilities that are not yet in place,
(Manglende infrastruktur i	physical or contractual e.g. pipelines
området)	
No gas solution	Realization requires a solution for handling of produced gas,
(Manglende gassløsning)	but no profitable gas disposal is available
Lack of capacity in existing	Realization assumes tie-in to facilities (process facilities,
systems	pipelines, land facilities) which do not have available capacity
(Manglende kapasitet i	in the relevant period
eksisterende systemer)	
No commercial agreement	Realization assumes agreements with third parties, and this is
(Mangler kommersiell avtale)	expected difficult to achieve
Rig availability	No mobile drilling rigs available in the market
(Riggtilgjengelighet)	
Environmental requirements	Realization can entail unacceptable environmental
(Miljøkrav)	emissions/discharges that with current solutions cannot be
	removed in a profitable manner
HSE requirements	Realization can entail unacceptable HSE conditions that with
(HMS-krav)	current solutions cannot be resolved in a profitable manner
Other	Specify in the comments space
(Annet - se kommentar)	

Technology

Is the project based on conventional methods or will new technology be used or developed?

The table below shows the available options:

Table 6-4 Technology options

Technology	Description
Conventional methods	The project will use technology known and commercially
(Konvensjonelle metoder)	available for several years.
New available technology	The project entails use of, or is a result of, new
(Ny tilgjengelig teknologi)	technology/methods that are currently available
	commercially/ are fully qualified / recently developed, but not
	previously used on the reporting object
Requires development of	Realization of the resources in the project is contingent on the
technology	development of technology/methods that are not available
(Betinger teknologiutvikling)	commercially today.
Other	Specify in the comments space.
(Annet - se kommentar)	

Technology areas

Within which areas will new technology be used or developed? Provide detailed comments in the comments space, e.g., if the project includes technology development within several areas. The table below shows the available options.

Technology areas	Description
Seismic/resource mapping	Advanced seismic methods, 4D, geo-modelling, geo-
(Seismikk/res. kartlegging)	management, reservoir simulation, etc
Drilling/well technology	The drilling process, reduced drilling costs, well interventions
(Bore/brønnteknologi)	completion, etc.
Reservoir technology	Injection media, residual oil saturation, reservoir chemistry,
(Reservoarteknologi)	etc.
Production control	Zone control, sand control, water production, etc.
(Produksjonsstyring)	
Facility/process	Process facility, power supply, environment, integrated
(Innretning/prosess)	operations, subsea facilities/equipment, etc.
Other	Specify in the comments space
(Annet - se kommentar)	

Technology status

What is the status regarding technology development for projects that are contingent on new technology? The table below shows the available options:

Table 6-6 Technology status

Technology status	Description
Commercially available	No need for development of technology, available technology
(Kommersielt tilgjengelig)	will be used.
Not started	A need for technology has been defined, but no steps have
(Ikke startet)	been taken to start research / development.
Undergoing engineering	The owners are aware of/are financing
(Under prosjektering)	research/development.
Undergoing qualification	Technology has been developed but has not been qualified /
(Under kvalifisering)	is not ready for use.
Undergoing field testing	The technology is available, but further use depends on the
(Under felttest)	results of pilot tests.
Other	Specify in the comments space
(Annet)	

Time-critical aspect

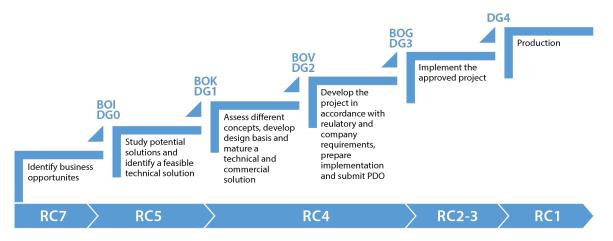
Is realization of the project time-critical, and if so, what is the time-criticality. The table below shows the available options:

Table 6-7 Time-critical aspect

Time-critical aspect	
Not time-critical	
(Ikke tidskritisk)	
Contingent on infrastructure	Time-critical due to limited technical or economic lifetime of
(Infrastrukturbetinget)	facility or time-limited window for process/transport capacity.
Contingent on reservoir	Time-critical due to planned gas export and/or accelerated
(Reservoarbetinget)	pressure reduction (blowdown) or expected natural
	depressurization, e.g., in connection with production from
	adjacent fields (regional pressure drop) which can lead to the
	loss of resources.

Decision plan

To ensure that the maturation of projects and discoveries can be followed, the authorities want an overview of the past and expected project decisions in the production licences. What kind of decisions will be made next, indicates how far the project has progressed in terms of studies/evaluations. The figure below illustrates the decision model used by the authorities for larger projects and developments, and that represents some of the possible selections in the list.



The connection between project maturation and resource classes

Decision year

- The expected/planned years for future decisions must be indicated. Even if, for example, initiation of the project lies quite far into the future, the operator must nevertheless indicate a year that represents the best estimate. The year selected should be realistic, and not just an ambition. Decision milestones that have already been passed shall also be stated, including the year.
- Decision on project initiation, BOI (DG 0)
 - Equivalent to start-up of feasibility studies. The project is a potential, but evaluation has not yet been started.
- Decision on concretization, BOK (DG 1)
 Equivalent to start-up of concept studies. The project is initiated, and feasibility studies are

underway. Work is proceeding towards a reduced list of concept options. The following activities are normally carried out in the feasibility study phase up to a decision on concretization:

- The concept or resource base for the project is reviewed, evaluated, and described.
- The market for the proposed products is evaluated.
- Based on technical studies, potential feasible technical solutions are outlined for the field development, transport system, treatment facility, etc.
- HSE consequences are evaluated.
- \circ A cost estimate is prepared for the project; this will normally satisfy +/- 40 %.
- The probable profitability of the business concept will be documented.
- An evaluation is made of the uncertainty associated with the project, including resource base, market, technical solution, HSE, feasibility, supplier market, cost estimate and profitability.
- Decision to continue, BOV (DG 2)
 - $\circ~$ Equivalent to start-up of pre-engineering and concept selection. A cost estimate with reduced uncertainty will be prepared.
- Decision to implement, BOG (DG 3)
 - The project is in the engineering phase and final approval by the licensees and submission of PDO (if applicable) is planned. The year will mark when the resources are expected to become reserves. This applies regardless of whether the final decision is submission of a PDO, or whether the decision is made in some other manner. The selected year should be realistic, and not merely reflect ambition. Even if the project is in an early study phase, a year must be entered as the best estimate, given certain assumptions. For discoveries/projects that will be phased into a (parent) facility when capacity becomes available, this field can remain blank, if necessary, but a notation should be made in the comments space.
- Start-Up (DG4)
 - o Date when production from a project or operation of an infrastructure project will start
 - DG4Base reflects the expected start-up date
 - o DG4Early could reflect an ambition start-up date
 - o DG4Late reflects possible delays that could occur to the project, delaying start-up

The DG years should be consistent with the resource class for the profile. Example: volumes from wells classified as reserves according to 3.3.1 in the Guidelines, shall have DG1-DG3 when these criteria are met even though DG3 (drilling plan) for individual wells are not yet approved.