NPD – Library of the NCS 2026

A view into the digitalization program of the NPD

Alf Veland – EPUUG Oct 2018
Background and framework
Organizational preparation

Steering committee – strategic management

- Operational management (HO er)
- Project office
- Team Digi
- Other project teams
- Team Agile
- Architecture
- Application Management
- IKT

* Premissettere tilstede (InternSikring/ODRamme/Økonomi, ODDokSenter)
Mapping existing processes

- Get the overview of processes NPD is part in and what we do
- Business Process Mapping Notation (BPMN 2.0)
Initiatives

• Re architecting the basis
• Revision of existing assessment systems
• Reporting system for Fish and seismic
• Petroleum register
• BioStratigraphy. Establish electronic paly-slide archive
• Licensing rounds
• RNB reporting process (resource reporting)
Digitalisation in NPD

Project team - Digitalisation

- Upgrading the infrastructure
  - Data migr.
  - Process map.
  - Archive

- Develop
- Implement
- Order

NPD – organization

- Renew, simplify and improve
  - Messaging FS
  - TFO
  - RNB
  - PetReg.

- Datadriven
- Automated
We are re-architecting the basis

**Our main goals are:**

- secure
- geography
- minimal maintenance
- flexible → development and changes
- significant better than current solutions
- engaging, simple and intuitive → satisfied customers
- updated data available at any time
- pioneers of data management
- transparent
- scaleable
- effective
To be - architecture

- User interaction nodes/pages/clients
- Management software
- Domain data
- Orchestration data

Process APIs
- System APIs
- Database
- Files

NPD users
- O&G companies users
- Other involved/affected users
  - OED, Fiskeridirektoratet, Miljødirektoratet
  - Others involved in NPD processes

Management software
- User interaction nodes/pages/clients
- Domain data
- Orchestration data
- Process APIs
- System APIs
- Database
- Files
It is a System of engagement

User interaction nodes/ pages/ clients

domain data
orchestration data

Process APIs
System APIs
Database
Files

Other involved/ affected users
- OED, Fiskeridirektoratet, Miljødirektoratet
- Others involved in NPD processes

NPD users
O&G companies users

System APIs

ID – porten (authentication)
Altinn (authorization)
Altinn (messaging)
Lovdata (regulations)

domain data
orchestration data

prospect
well
geology
seismic
facility
licence
play
Regulations
Entry and fact
Roles and righs
Case/ affair
To be – information architecture

“Space and time are the framework within which the mind is constrained to construct its experience of reality.”
- Kant
To be – information architecture

"Space and time are the framework within which the mind is constrained to construct its experience of real..."
Step 1:

- Authenticate (Is the user who he claims to be?)
- Authorize* (Does the user have credentials to start a «wellbore drill permit» process?)
- Select «wellbore drill permit» from list of available processes (that you are permitted to take part in) **

*Altinn handles delegation of authorization within a company/organization.

** Information about the «wellbore drill permit», regulations etc. will be provided to guide the process.
**Step 2:**

- Fill in the mandatory information needed
  - Select licence (from valid list)
  - Wellbore position (coordinates visualized and QCd in map)
  - Planned spud date
  - Planned completion date

- When user submits the information:
  - Submitted information validated
  - Case registered
  - Wellbore name provided
  - Submitted domain data saved
  - Affected domain data informed and asked for approval
    - Oljedirektoratet (case owner)
    - Fiskeridirektoratet
    - Miljødirektoratet
  - Well drill program checked
Step 3 – Approval (Fiskeridirektoratet):
- View relevant information
- Register any oppositions
- Approve or reject

- When user submits the information:
  - Information validated
  - Provided oppositions saved to the case
  - Approved or rejected; saved to case.
  - Affected parties informed.
Step 3 – Approval (Miljødirektoratet):
- View relevant information
- Register any oppositions
- Approve or reject

- When user submits the information:
  - Information validated
  - Provided oppositions saved to the case
  - Approved or rejected; saved to case.
  - Affected parties informed.
Step 3 – Approval (Oljedirektoratet):
- View relevant information
- Register any oppositions
- Approve or reject

- When user submits the information:
  - Information validated
  - Provided oppositions saved to the case
  - Approved or rejected; saved to case.
  - Affected parties informed.
  - If approved → Initiate new “follow-up well” case.
Target pictures:
Some examples of what it will look like...
Exploration

The 2018 Resource Report

The 2018 Resource Report for Exploration shows that large remaining resources on the Norwegian continental shelf continue to offer great opportunities on the Norwegian shelf, both in mature and less explored areas.

09.05.2018

Awards in predefined areas 2018 announcement

The Ministry of Petroleum and Energy has 9 May 2018 announced the APA 2018, comprising the predefined areas with blocks in the North Sea, the Norwegian Sea and the Barents Sea.

Five fields are under development. Estimated total production (according to PUD) xxx SM3 o.e.
User interaction nodes/pages/clients: SAD, CADD, Spar, Espur, Actin, Home, API-orchestration, ERAS, Lovdata (regulations)

Management software: ID-porten (authentication), Altinn (authorization)

NPD users: Oil & Gas companies users, O&G companies users, Others involved in NPD processes:
- OED, Fiskeridirektoratet, Miljødirektoratet

Other involved/affected users:
- Others involved in NPD processes

System APIs: Database, File, Process APIs

Prospect, Well, Seismic, Facility, Licence, Geology - Play

Phase and process: Entity and fact, Regulations, Roles and rights

Domain data: orchestration data
82 producing fields on the shelf

Search for information about fields, discovery, exploitation licenses (licenses), pipelines, wells and companies in our open data:

SEARCH

LAST UPDATED FIELD INFORMATION

28.09.2017 TROLL BRENT B
08.09.2017 GINA KROG
30.08.2017 JETTE

INVESTMENTS LAST 10 YEARS

Download widget
Download data

NUMBER OF PRODUCING FIELDS

FIELDS ON THE SHELF
a long and winding road...

Empowering wize heads to create value
NPDs digitalization vision
Empowering wize heads to create value

NPDs digitalization vision

Thank you!