CONCEPT & PRINCIPLES

Insight in EPIM, its services and the evolvement of collaboration on NCS
Exploration & Production Information Management (EPIM) is a non-profit administrative arrangement organized as an association constituted Nov. 2007 (registered as a legal entity)

Objective:
- Utilise and make available IT solutions that facilitate the best possible flow of information between any and all of its users, these being relevant authorities and licensees involved in exploration, production and transport on the Norwegian Continental Shelf

- Participants are operators of exploration permits, production and transport licenses and of joint ventures involved in activities on the Norwegian Continental Shelf. Users are all pre-qualified operators, authorities and partners.

- 40 Operators are members – 80 companies (partners and authorities included) utilize the services provided by EPIM
EPIM structure

Cooperation agreement → Services → Service contracts

Development
Software maintenance
Application management
Support
Hosting and operations
Consulting
Training

Participants

EPIM

E&P Information Management Association
EPIM Services

- **License2Share** - The official communication and archiving tool for administrative interaction between operators, partners and authorities for all licenses on the NCS. Designed to meet the requirements for information handling as stated in the license agreements.

- **License2share International**

- **EqHub** - A single sourced technical information repository for all operators and suppliers. The repository provides access to pre-qualified, classified and quality assured information when needed.

- **EqHub Int. (underway)**

- **EnvironmentWeb** - A database solution for gathering and analysis of data about releases to sea and emissions to air. Mandatory solution according to the The Pollution Control Act.

- **EPIM ReportingHub** - A reporting solution based on Semantic WEB technology & solutions/ NPD Fact Pages/ ISO 15926 to facilitate drilling & production reporting on NCS.

- **GSTR (Gas Sales Tax Reporting)** Solution for reporting gas sales to the Norwegian Oil Taxation Office.

- **Outcrop Data** - A digital database for outcrop data (DDOD), headed up by the FORCE Sedstrat Group (19 Operators). Uses L2S for storage and sharing.

- **Norwegian Deepwater Programme** - The deep-water licenses in Norway have joined forces in order to carry out cost effective preparations for safe and efficient drilling and field development, headed up by Norske Shell.

- **GSK** - A database for PSK-approved training providers to use the website sikkerhetskurs.org to register training activity for the courses GSK.
Pre-qualified equipment information delivered once and for all
Challenges for operator, contractor, package supplier - without EqHub

- 60% of data books consist of standard documents. Through the many steps in the supply chain there is a significant risk of increasingly reduced document quality
- Negative impact on time schedule
- Cost consuming
- Inconsistant and different information on same type of equipment
- Difficult to cover real documentation cost
Challenges for a manufacturer - without EqHub

- Serving many clients in the same project
- Inconsistent and different requirements from customers on same type of equipment
- Delivering the same information again and again but with different formats
- Difficult to cover real documentation cost
- Time consuming
EnvironmentalWeb

- Mandatory solution for reporting environmental data to authorities
- In operation since 2003
- EnvironmentWeb is a database solution for gathering and analyzing data about releases to sea and emissions to air.
- The solution is built on Microsoft.NET technology, and was the first of its kind in the world. EnvironmentWeb makes the gathering and systematization of the important environmental data more effective.
- It saves the oil companies a lot of work and at the same time provides a far better tool to analyse release trends and evaluate the effects on environmental measures
- Organised as a pay per use services in EPIM (to be changed)
- New technology to be implemented for managing 2013 reporting (march 2014)
**ReportingHub**

The reports operated by EPIM are:
- daily drilling report (DDR) to partners and authorities
- daily production report (DPR) to partners and authorities
- monthly production report (MPR) to partners and authorities will become a part of the reportinghub being implemented 4Q 2012

- The contents of these reports are structured according to ISO 15926 and constitute a significant part of the oil and gas ontology, providing the basis for data interoperability in the E&P sector.
- The oil and gas ontology is an important element in the IT architecture for NOROG IO Generation 2 where the infrastructure is a loosely-coupled integrated solution based on service oriented principles.
- Today the oil and gas ontology is available free of charge in PCA's RDS.

The current format of these reports are in compliance with Energistics' WITSML and PRODML specifications for drilling and production, respectively.
ERH - Main Objectives - Phase 1

- Shall receive drilling and production reports from operators on the NCS, validate, store and send them to authorities and partners.

- Shall provide drilling and production data to the partners on request.

- Shall be flexible for changes in the reports and easy to extend to new types of reports.

- Shall be based on NPD Fact Pages and PCA E&P ontology (ISO15926)
Logistics on the NCS - An overview 2012

- **Licensees**
  - 500+ Active Production Licensees
  - 80+ Fields in production
  - 10+ Active Transport Licensees

- **37 Operators**
  - 12 operators with production
  - 1 operator of pipelines
  - 6 operators with PDO (no prod.)
  - 18 operators with only exploration

- **Cargo & Passenger**
  - **Supply ships**
    - Cargo Carrying Units
    - Equipment
  - **Helicopter**
    - People (POB)
    - Equipment
  - **Tanker**
    - Oil

- **Suppliers of services**
  - Rig suppliers
  - Service companies
  - O&M contractors
  - Transport suppliers

- **Offshore supply bases**
  - Kirkenesbase, Kirkenes
  - Polarbase, Hammerfest
  - Norbase, Harstad
  - Helgelandsbase, Sannessjøen
  - Vestbase, Kristiansund
  - Kistiansundbase, Kristiansund
  - Fjordbase, Florø
  - Mongstadbase, Lindås
  - Coast Center Base, Sotra
  - Stordbase, Stord
  - Norsea base, Tananger, SOLA
  - Norsea base, Dusavika, Stavanger

- **RFID**