
GDF SUEZ

Gjøa development and operations

Vestlandsforskning – ISO 15296 and Semantic Web technologies

Sogndal 12 September 2008

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Gaz de France Norge

Gjøa

’New in Gjøa’

20.02.08

The Gjøa expedition

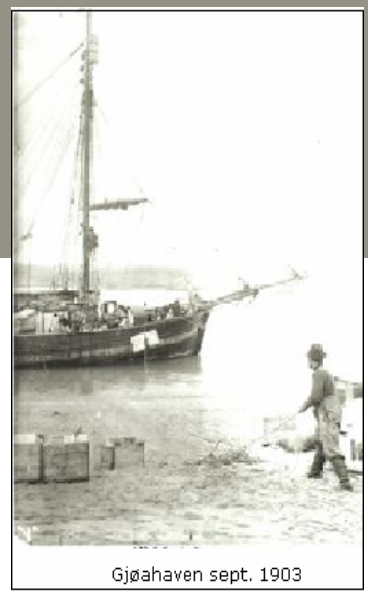
Was built in Rosendal, Norway, by Kurt Johannesson Skaale in 1872

The boat was named Gjøa after her owners wife.

Gjøa served as a fishing boat until 1900 when Roald Amundsen bought her for his forthcoming expedition to the Canadian Arctic

Amundsen wanted a bigger ship, but Gjøa was all he could afford.

The Gjøa expedition

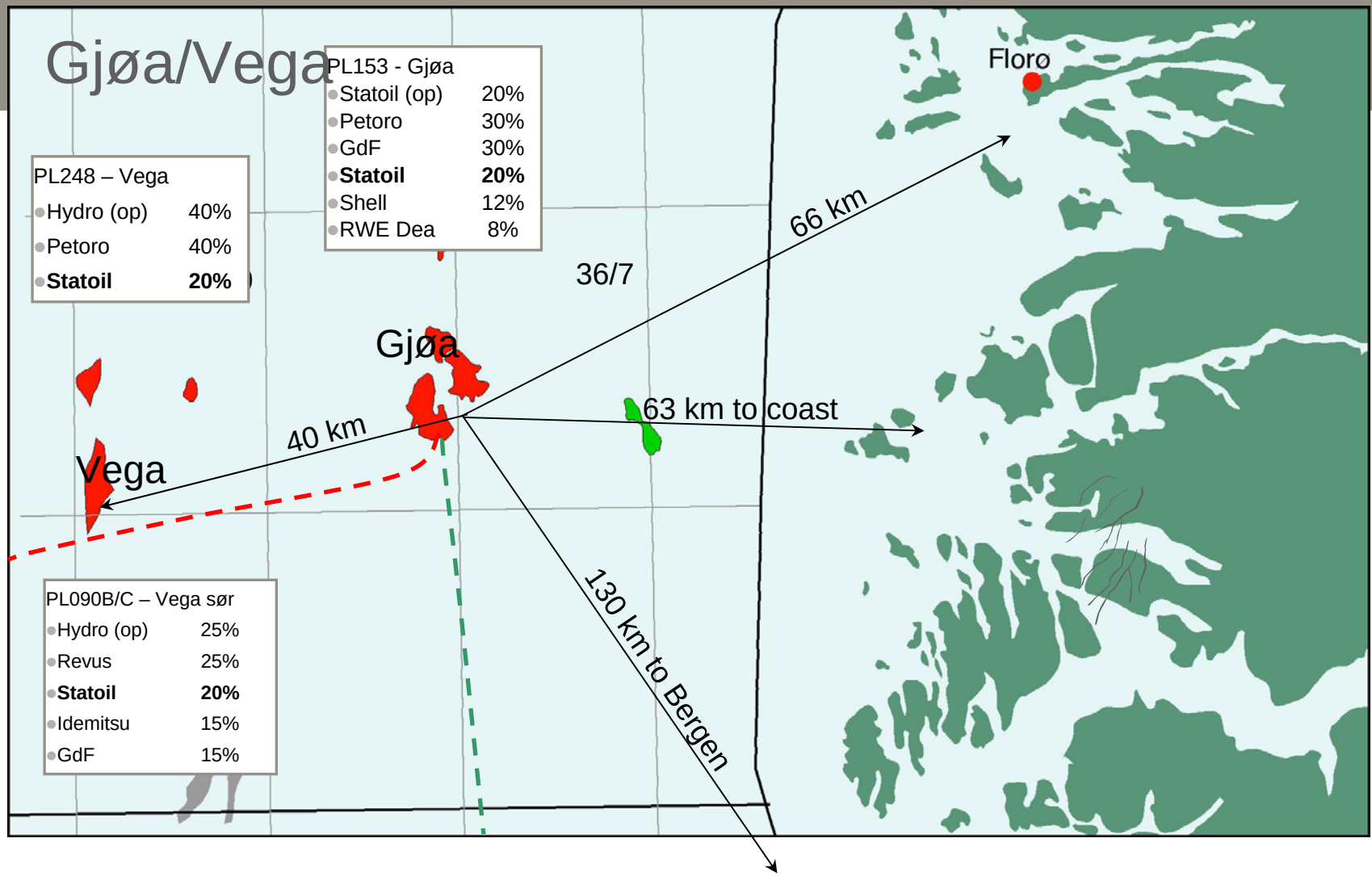

Gjøahaven sept. 1903

Gjøa left Oslo on June 16, 1903, with a crew of six people

The course was set for the Labrador Sea west of Greenland

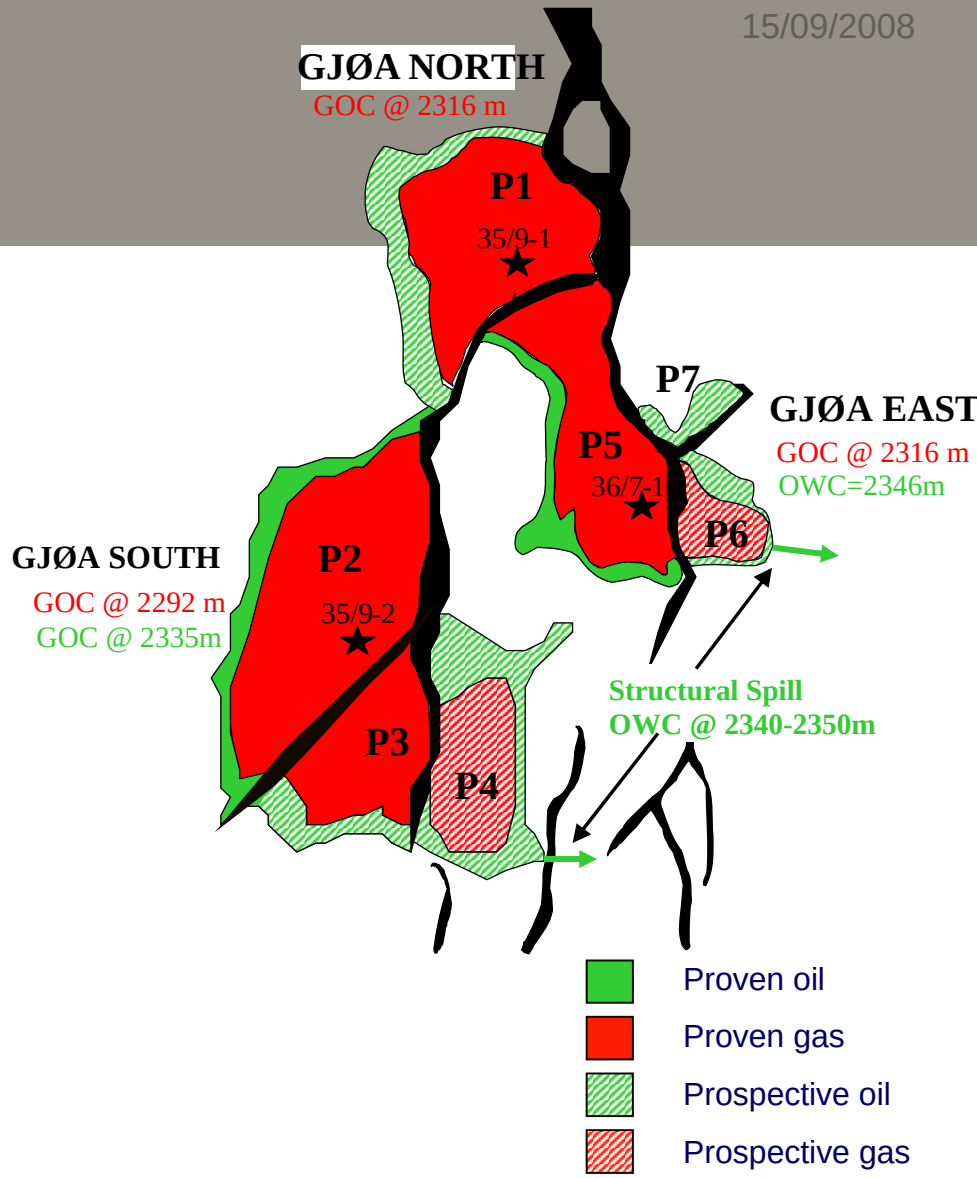
In October they were in King William Island, where they was iced in. They stayed her for nearly two years.

The harbour was later named Gjøa Haven, a name that also stands today.


Gjøa/Vega
PL153 - Gjøa
Statoil (op) 20%
Petoro 30%
GdF 30%
Statoil 20%
Shell 12%
RWE Dea 8%
PL248 – Vega
Hydro (op) 40%
Petoro 40%
Statoil 20%
PL090B/C – Vega sør
Hydro (op) 25%
Revus 25%
Statoil 20%
Idemitsu 15%
GdF 15%
36/7
Gjøa
Vega
Florø
66 km
63 km to coast
40 km
130 km to Bergen

The Gjøa reservoir

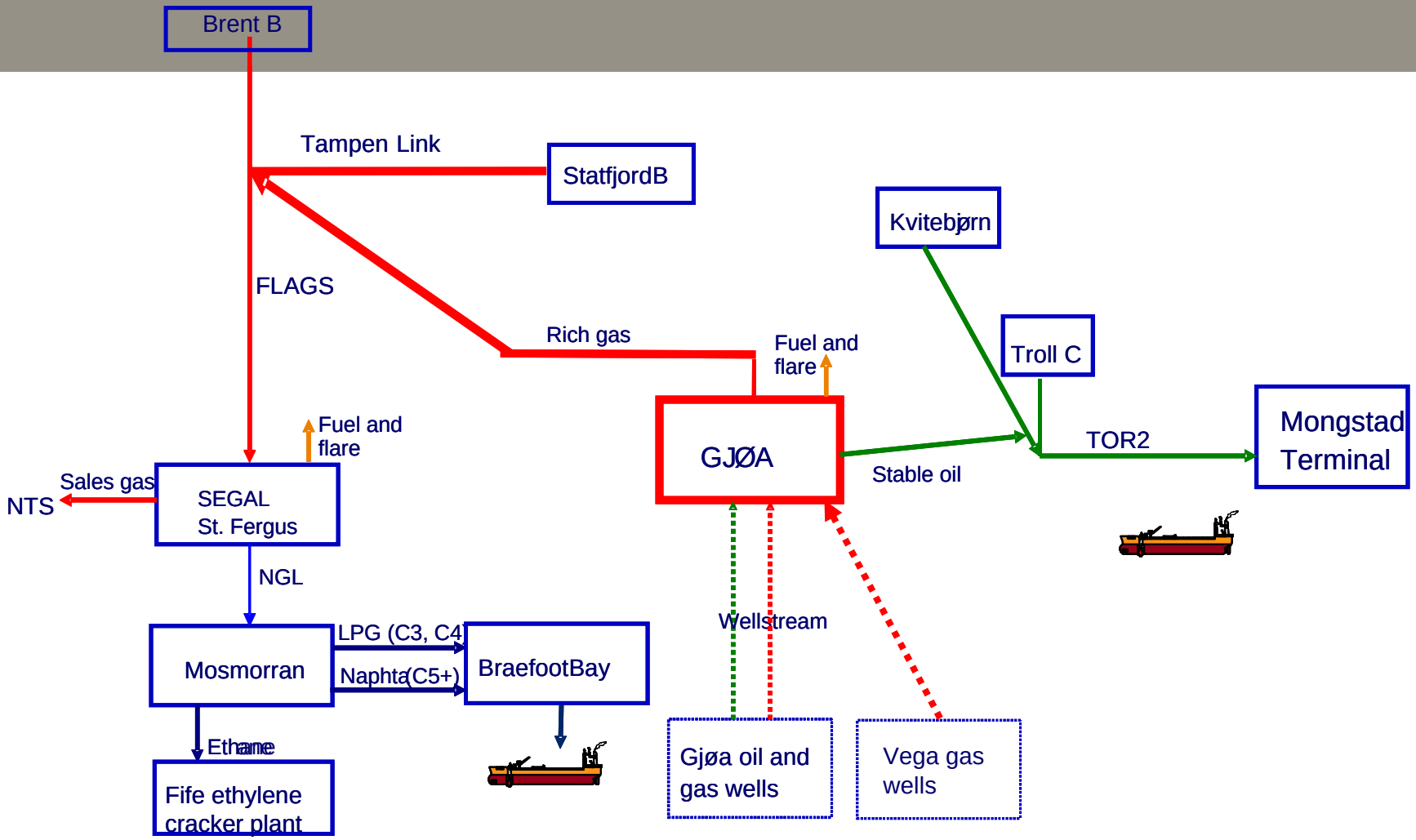
- Gjøa structure sub-divided into 7 segments (P1-P7)
- Main reservoir is Upper Jurassic Viking Group sandstones.
- Layered reservoir with varying quality from poor to very good
- Hydrocarbons (oil and gas) proven in 3 exploration wells in segments P1, P2 and P5
- Hydrocarbon column consist of a large gas cap (up to 200 m) with an underlying oil rim (30-45 m)



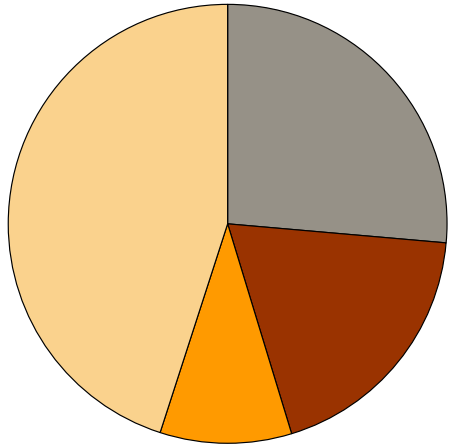
Reserves;

- **40 billion cubic meters of gas**
- **82 million barrels of oil/condensate**

Gjøa and Vega Export solutions / Value chain

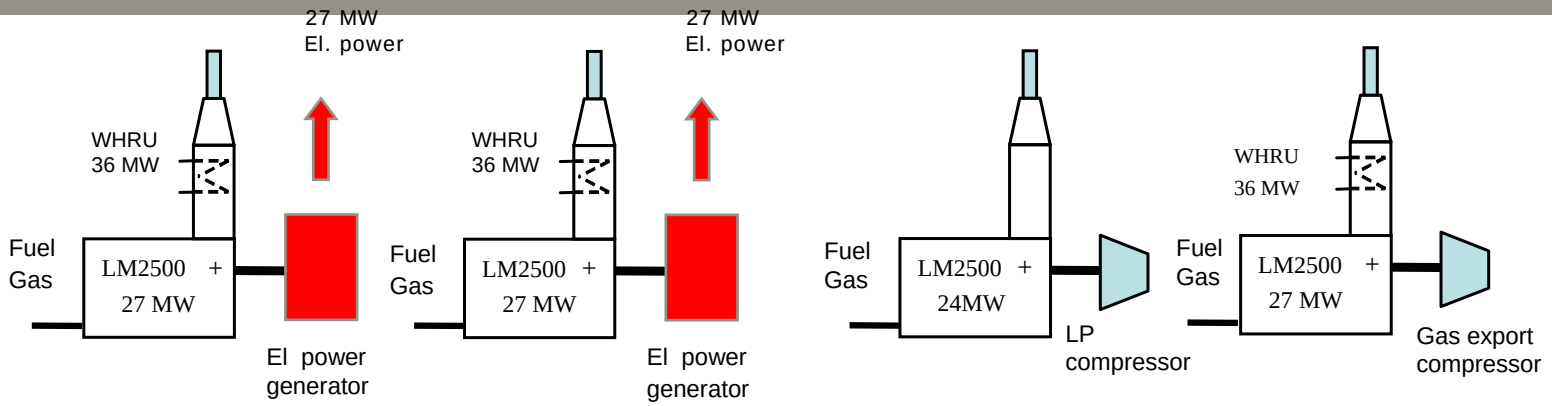


Total Capex 30 bill NOK

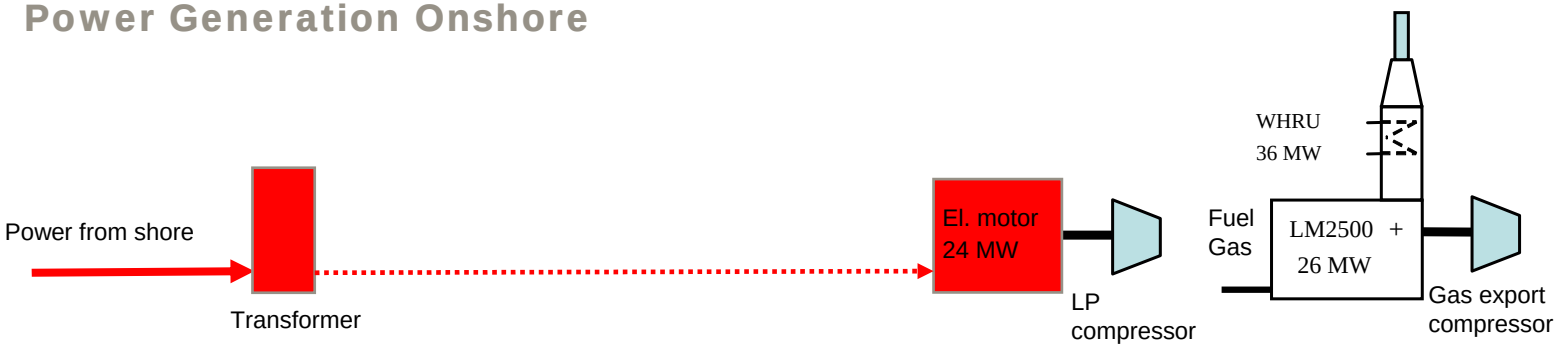


Topside dry weight	20 000	tonnes
Topside size	110 x 85	m
Hull dry weight	14 300	tonnes
LQ capacity	100	cabins

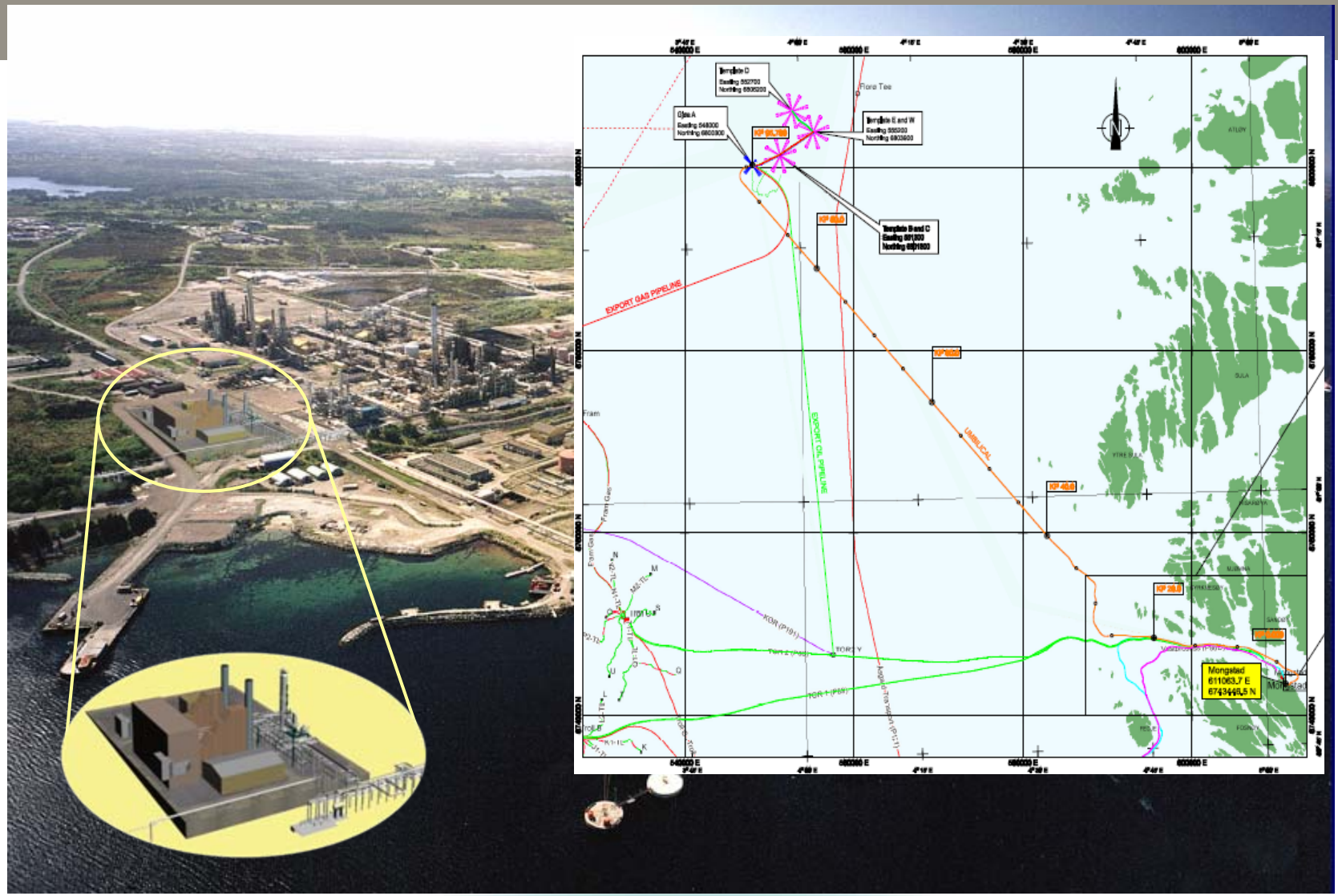
Power Generation Offshore



Power Generation Onshore



Gjøa - Power from shore

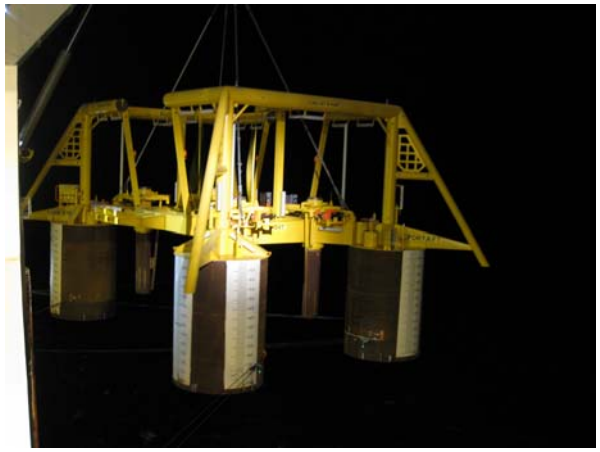


Gjøa Boligkvarter – LMT Stord

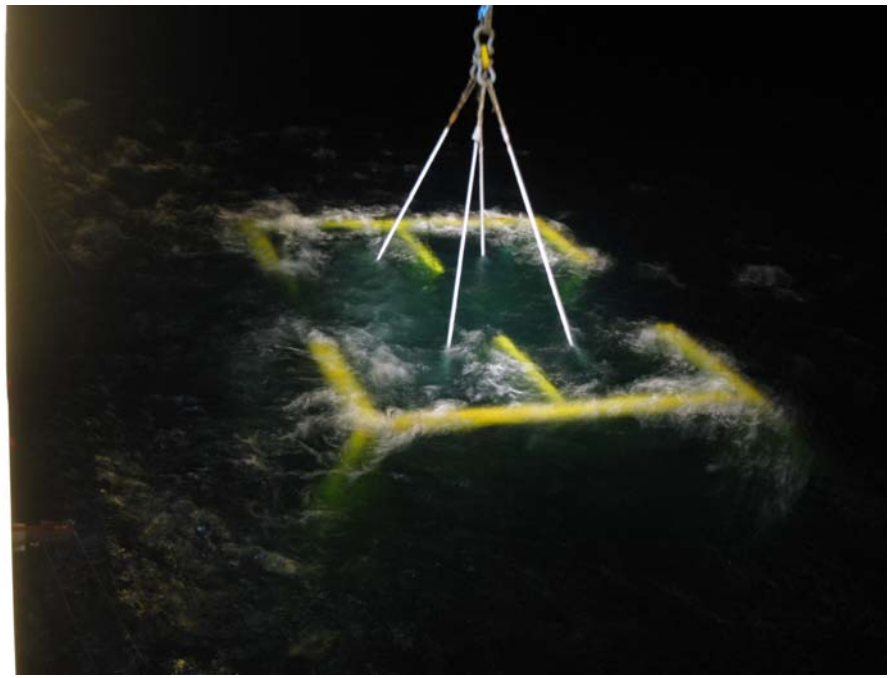
Skandi Acergy
Installation at Gjøa 10th September 2008
Integrated Template Structure E installed

Lifting…

…overboard…



…going down !!




안전
안전
안전

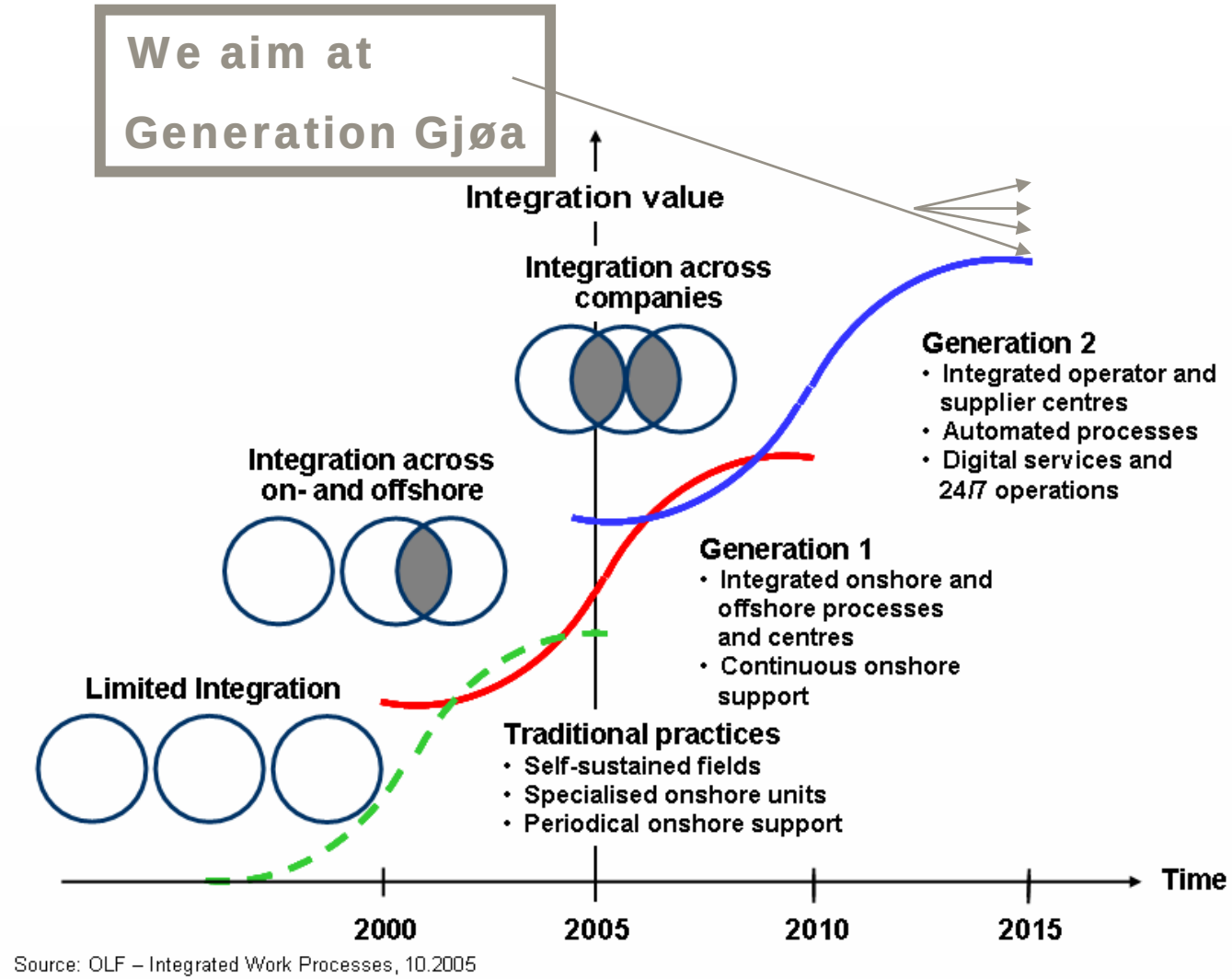
IT IS SORRY, AND NI PUT AROUND WITH THE MULTI SIDE AND GO,

죄송함니다 측면으로 둘러 가십시요,

→

MACHINE WORK SECTION CHIEF

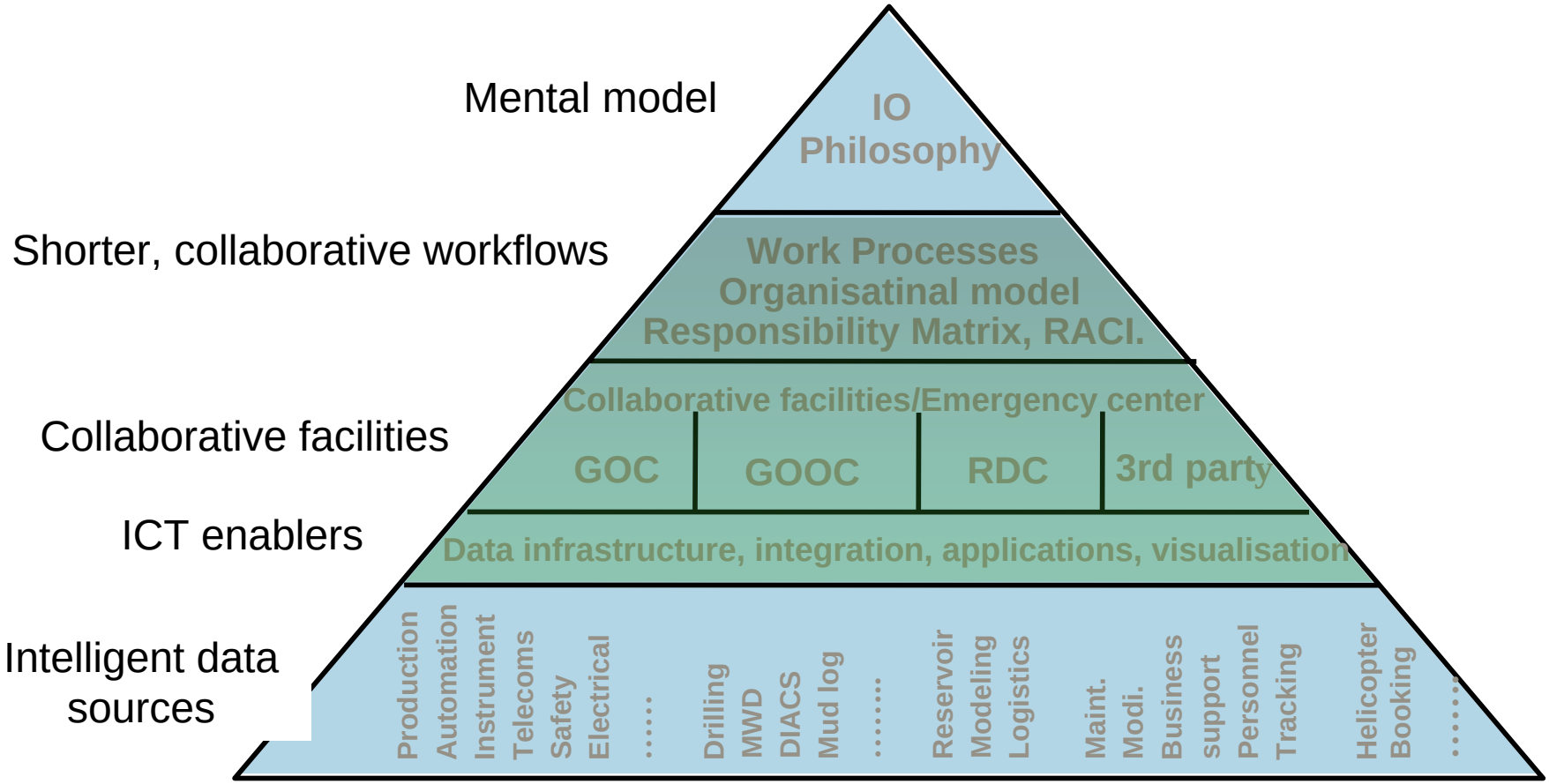
Stages of Integrated Operations



Source: OLF – Integrated Work Processes, 10.2005

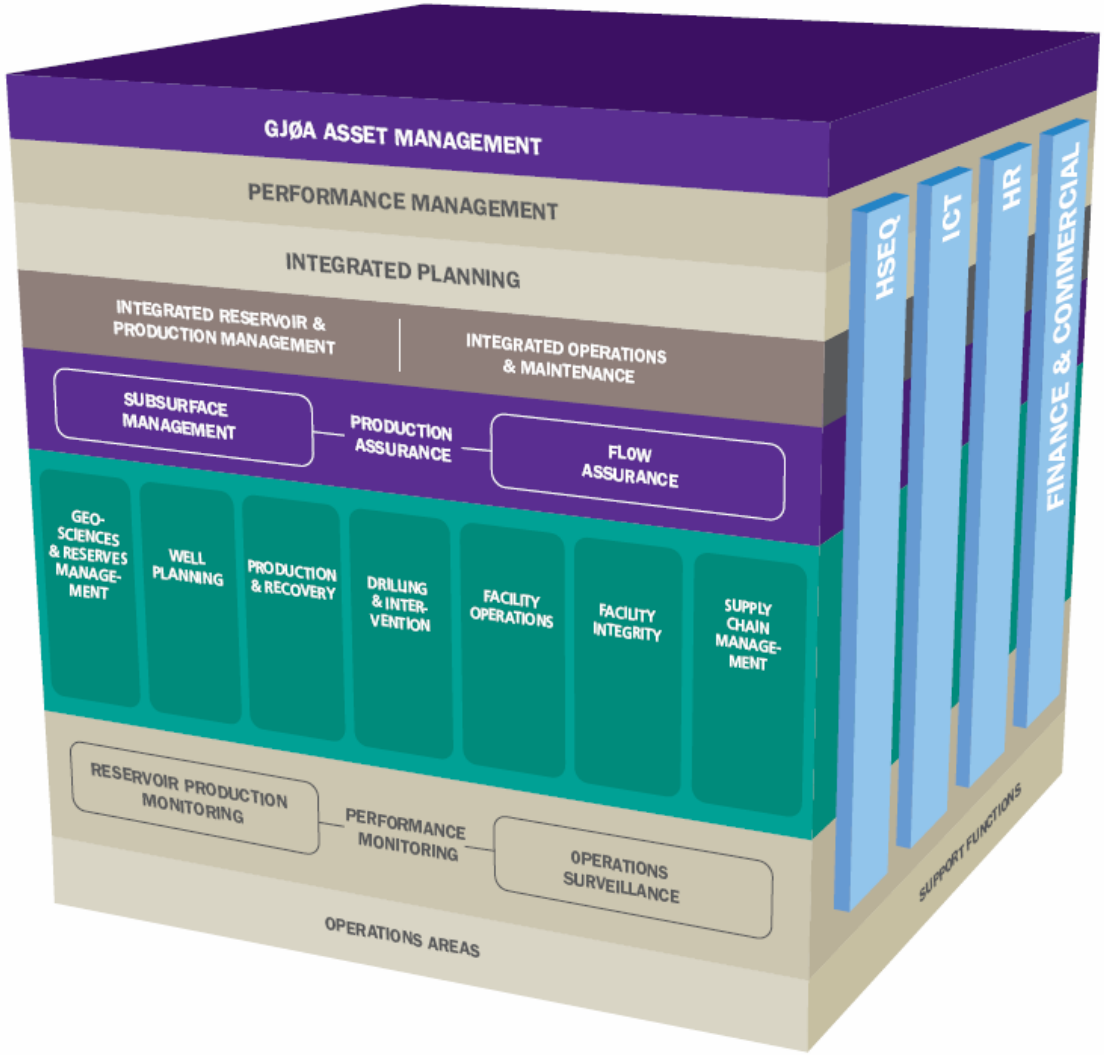
Gjøa IO Strategy

Areas of Focus



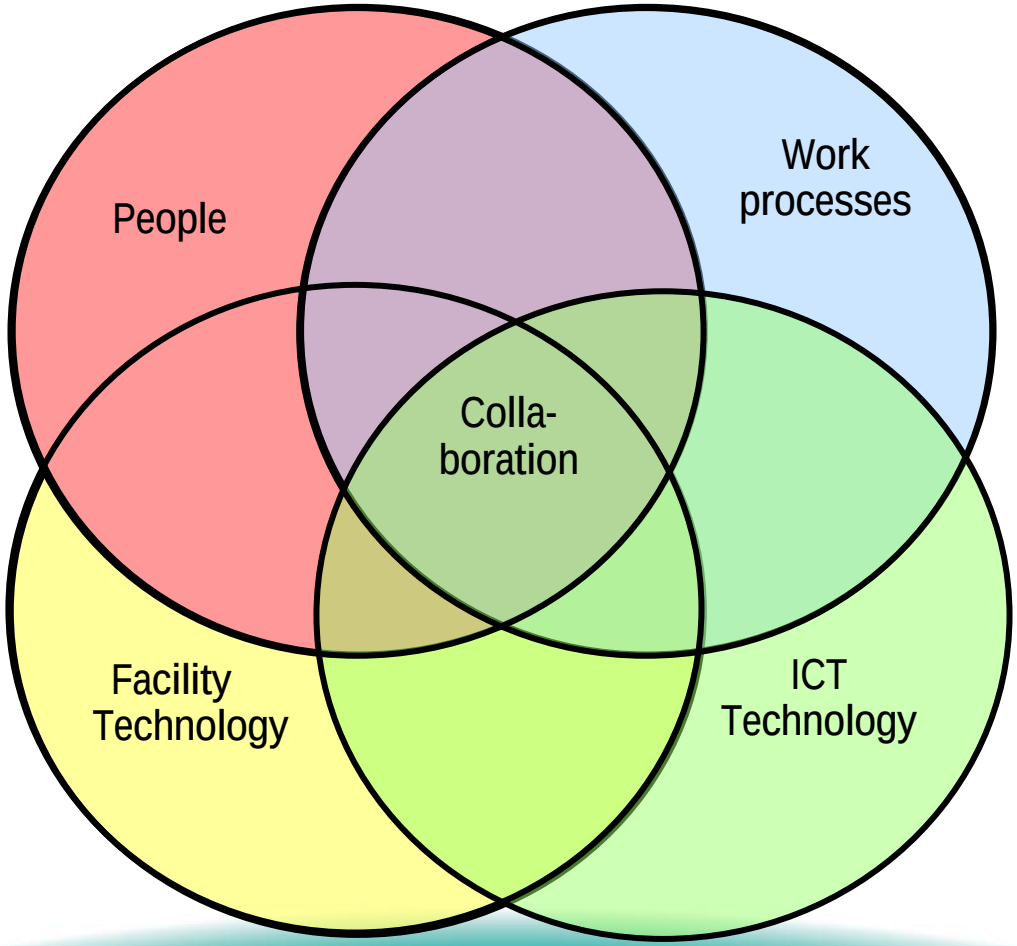
All of this combined enable a safe and efficient, integrated way of operating a complicated oil & ga platform offshore !

Gjøa Integrated Operations Model – The Gjøa IO Cube



Version 12.08.2008

The Extended Collaboration Model



IO Status per September 2008

-The extent of condition monitoring on Gjøa exceeds any prior offshore installation.

-New models have been developed for system monitoring, heat exchangers, filters, riser leakage and gas turbine monitoring.

-The diagnostic systems are on-line and accessible by vendor experts on-shore.

….but

-Export of condition parameters to high-level maintenance- and operation systems has not yet been defined.


H.ABEL
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