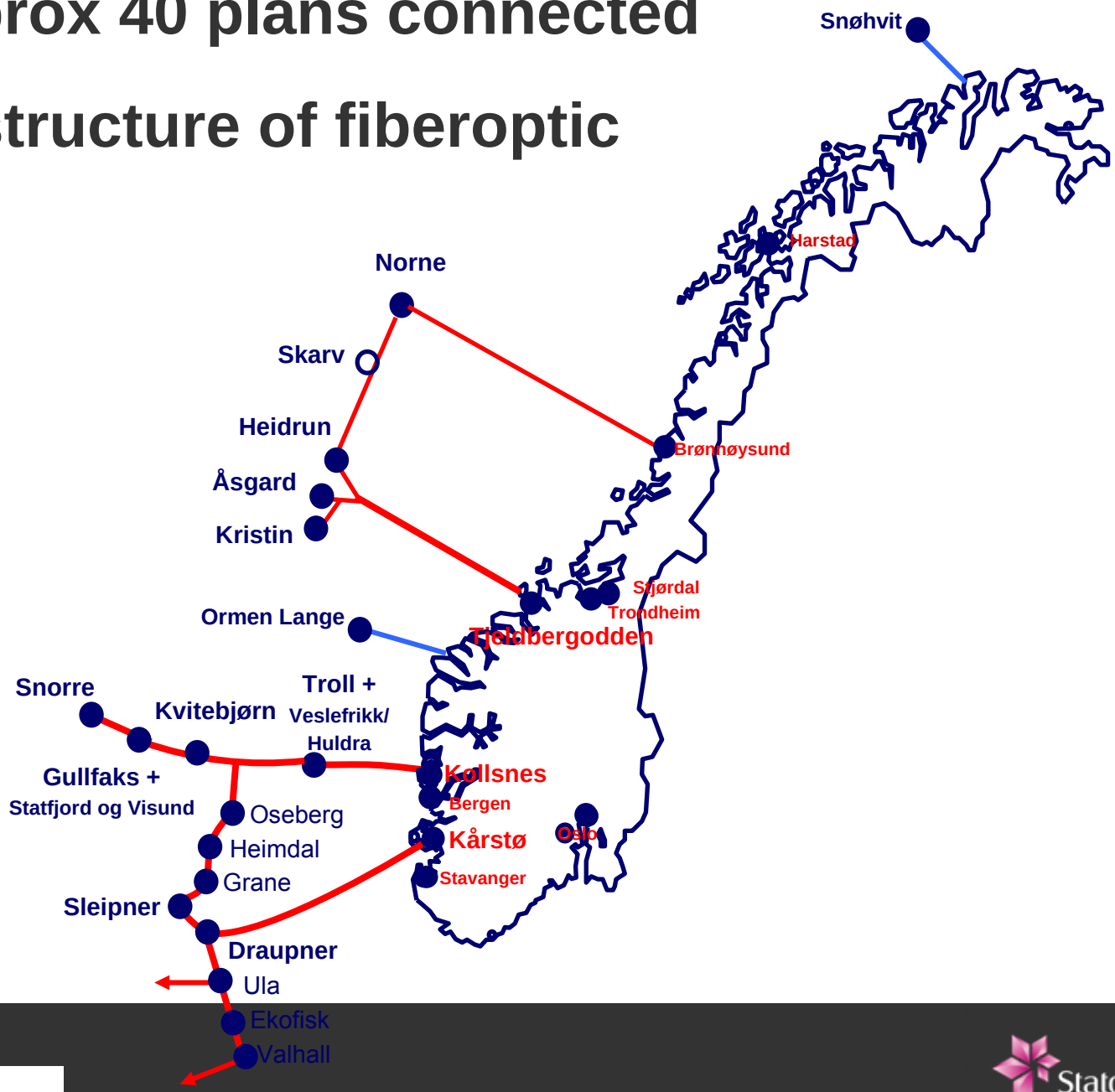
# PCA meeting Stavanger 2010

## Statoil and ISO 15926, the MapIT project

# Statoil, approx 40 plans connected to an infrastructure of fiberoptic cables

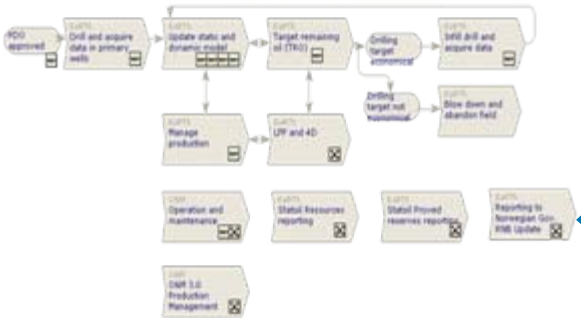


# Global Operation Data Integration - GODI

Oskar Fredagsvik
Leading Advisor IO Operation, Maintenance and Modifications,
StatoilMember of Corporate Initiative IO
Member of TAIL IO Steering Committee
Head of MapIT Steering Committee

# Integrated Operations
# IO Compliance in Production Optimisation

Skills and competences



**IO Compliance**

Common working practices and tools

Governing documents and work processes

ICT Solutions

Refining plant data into Knowledge



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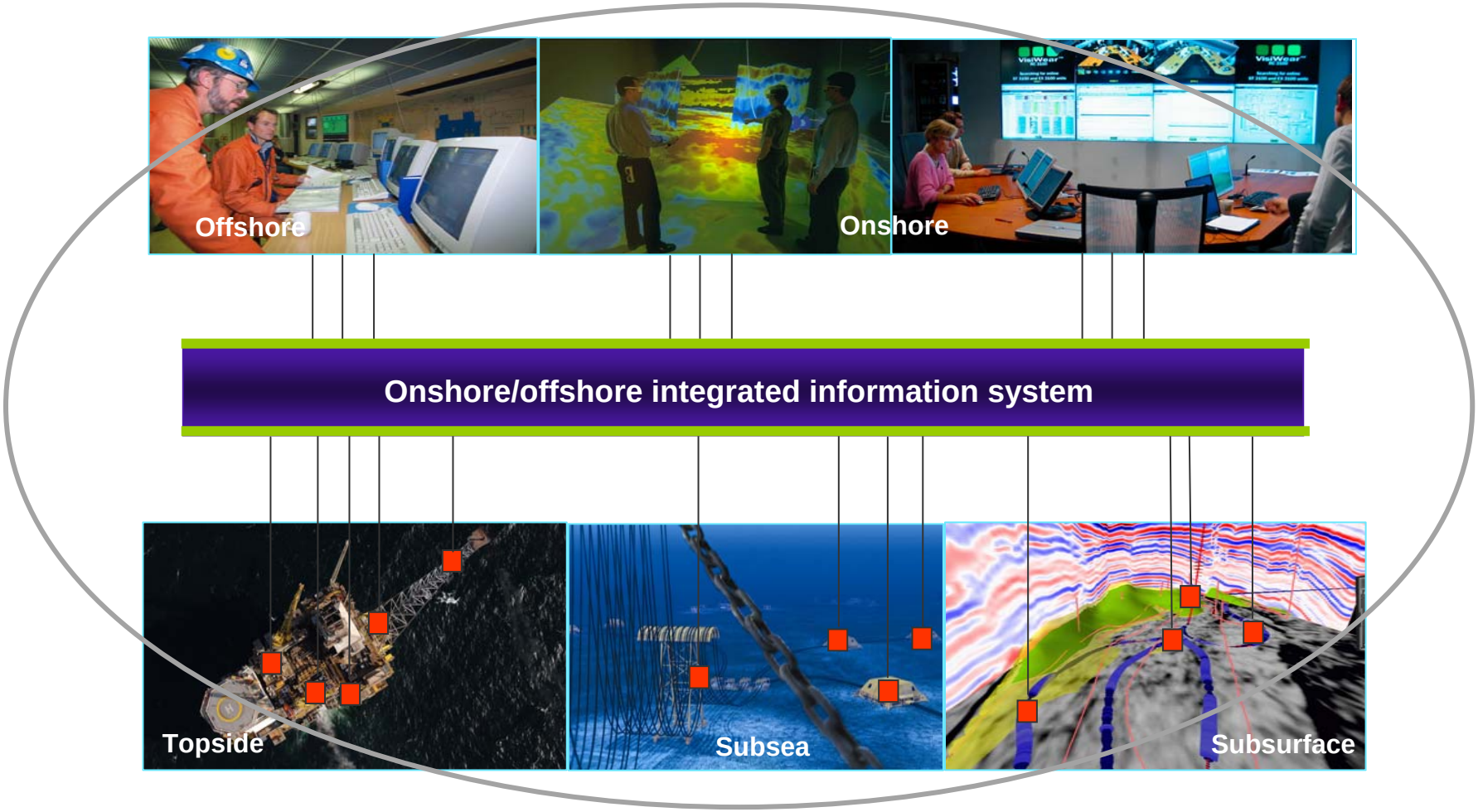
# Integrated operations: Collaboration across all boundaries



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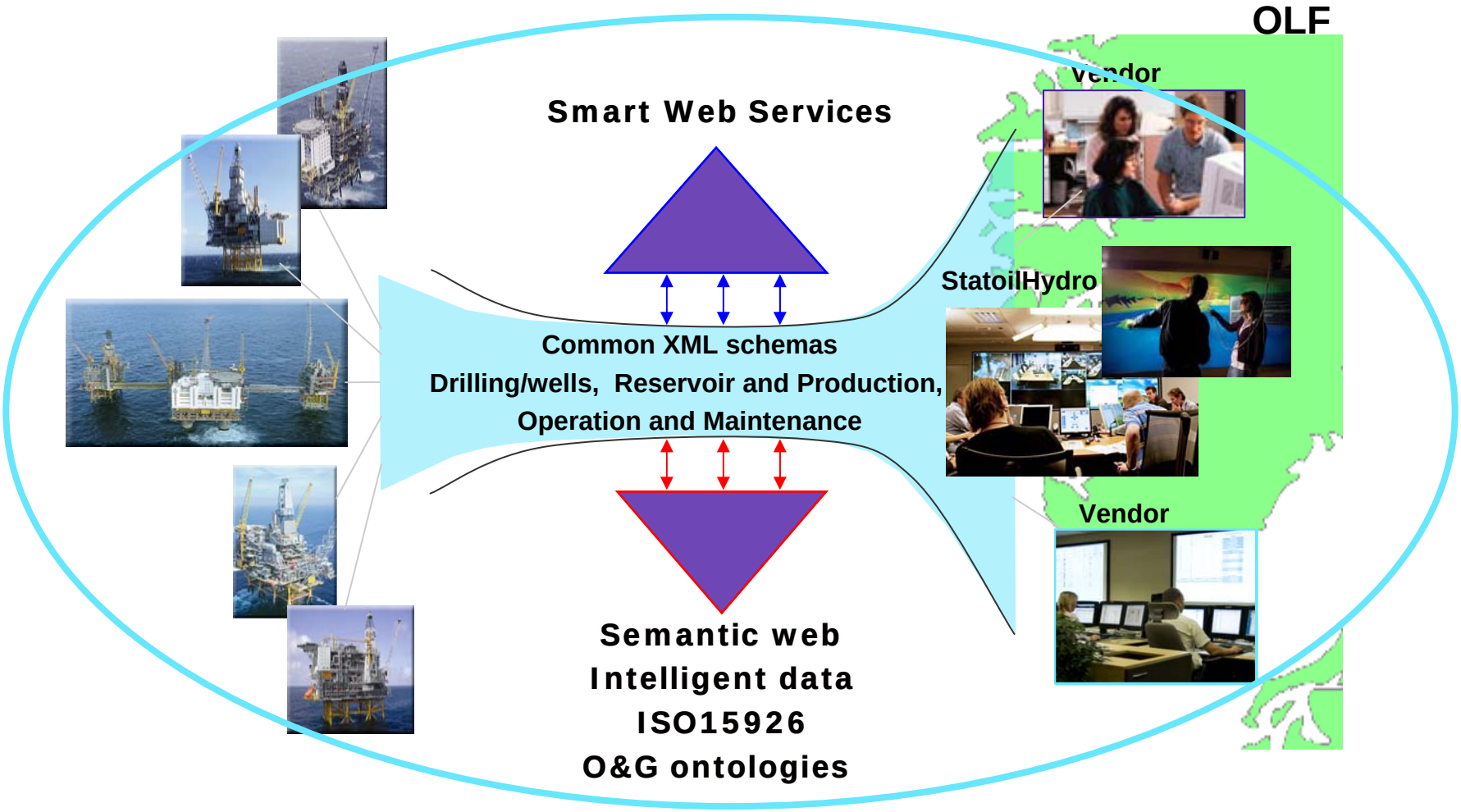
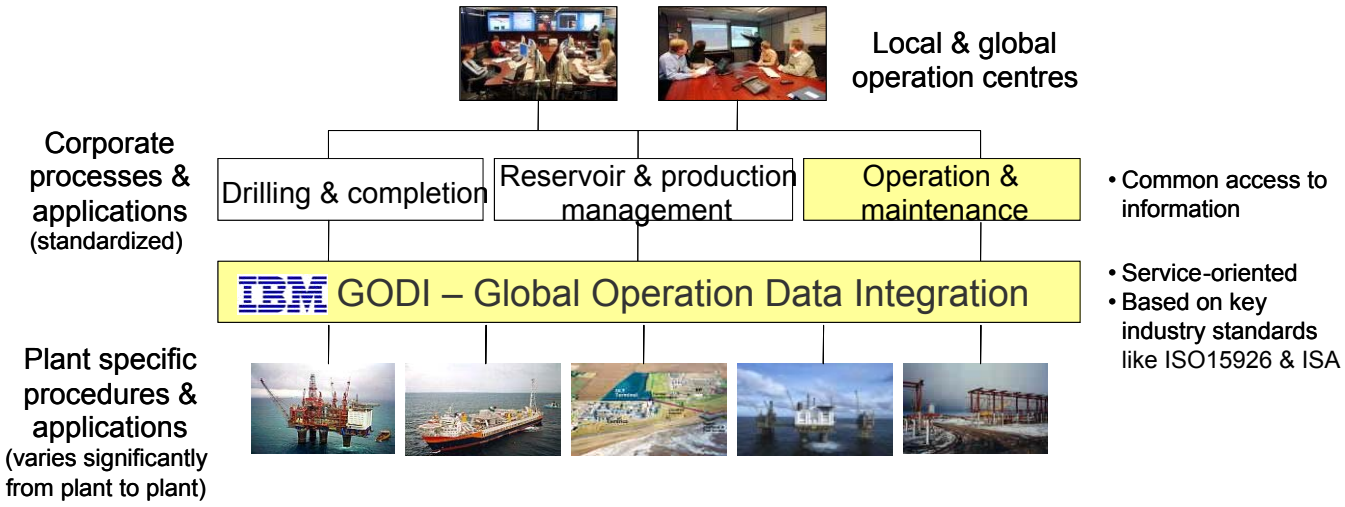
# New web based data- and communication standards …

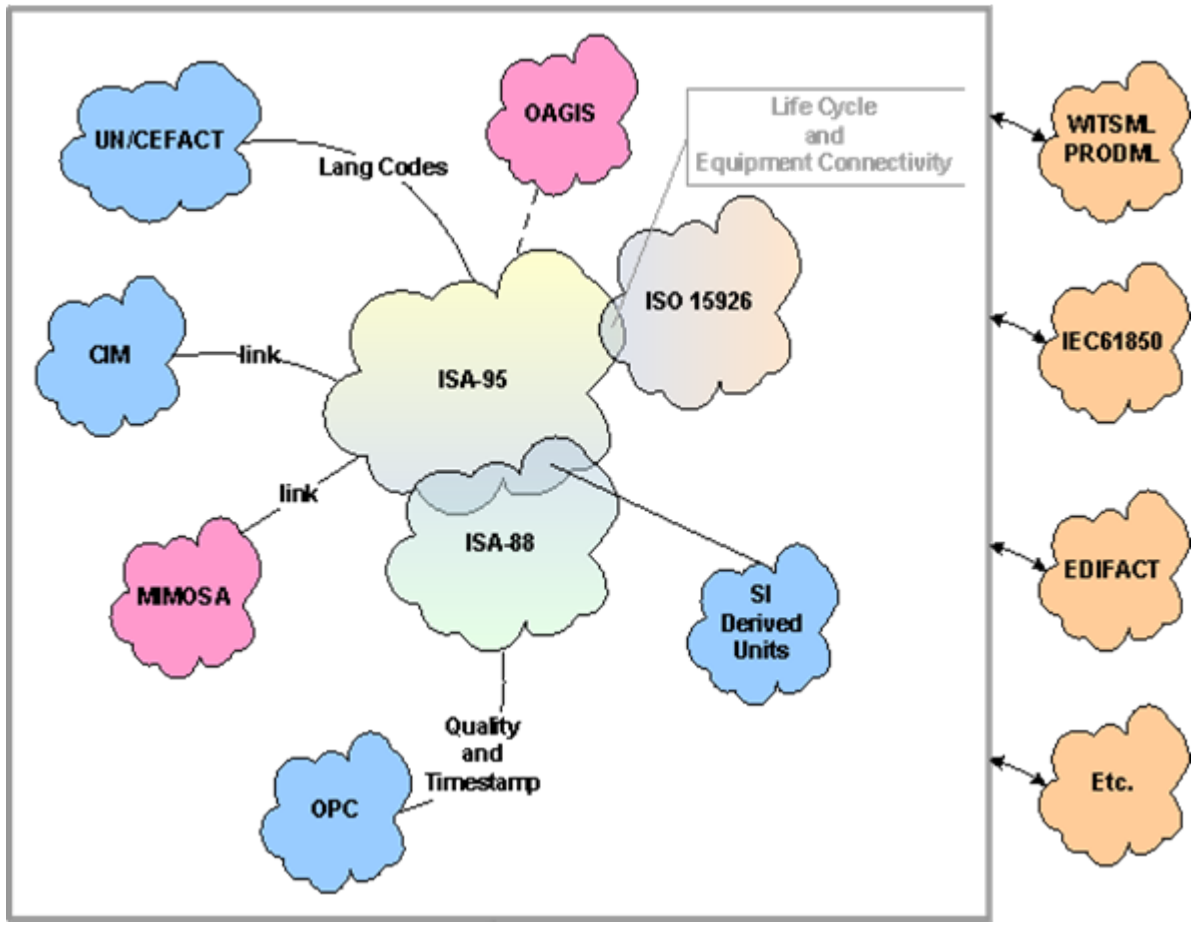


# OMM in Statoil



# Reference semantic model
## Participating associations and companies

- MIMOSA
- OAGi
- WBF
- Energistics
- ISA 88
- ISA 95
- POSC Caesar
- OPC
- OSIsoft
- DNV
- DOW
- SISCO
- IBM



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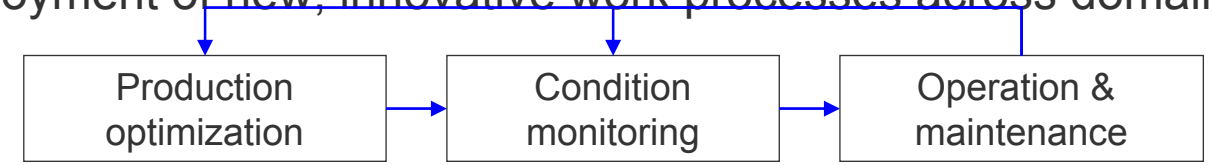
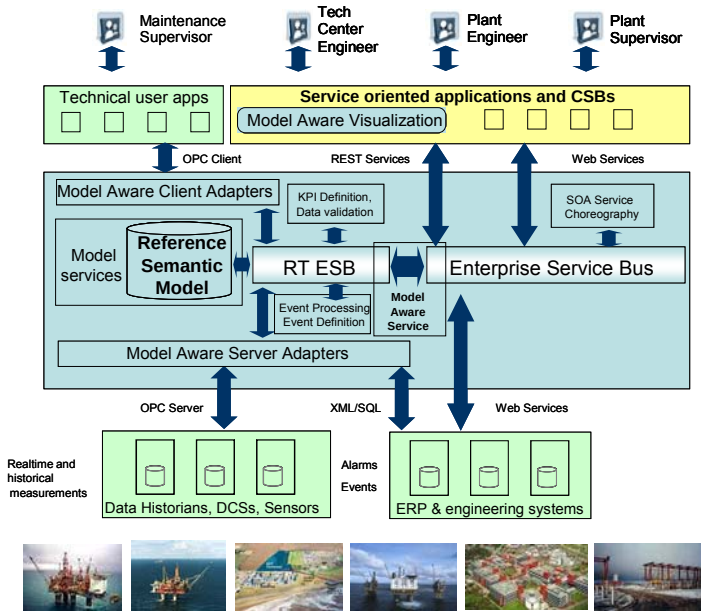
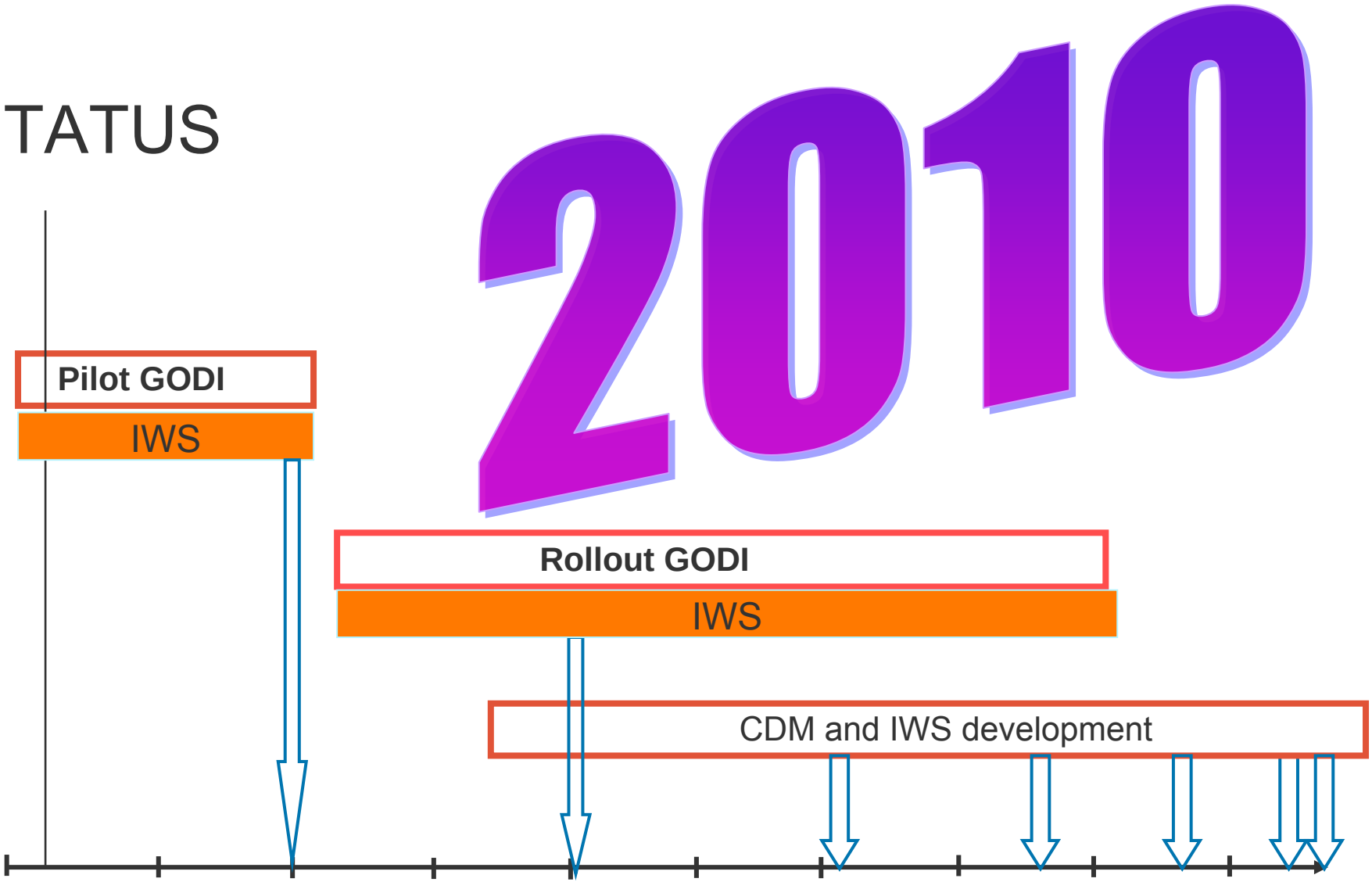
# Examples of challenges solved by the RSM and the IIF

- Non-intrusive integration of the many existing applications in both the plant & enterprise domains
- Fast deployment of new, innovative work processes across domains and facilities



# STATUS



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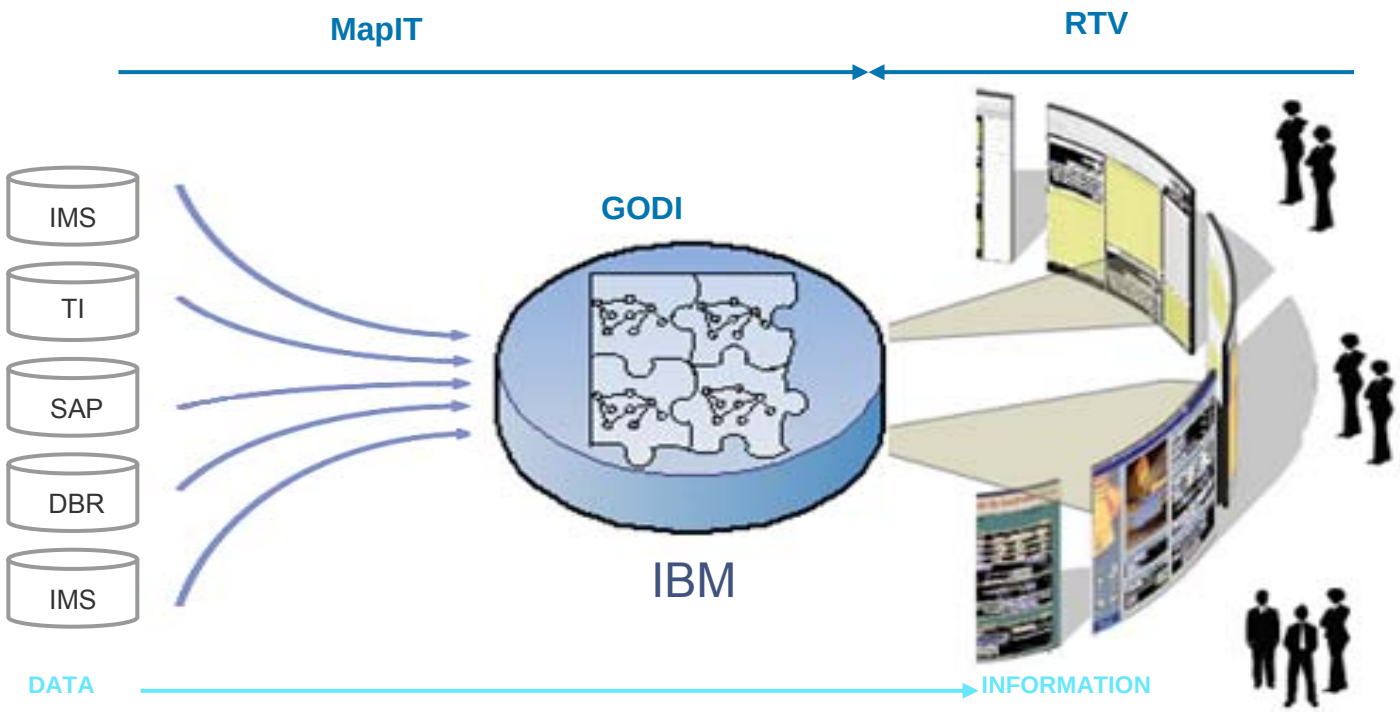
# RTV - MapIT

- The MapIT project will deliver standardised data access
- The RTV project will deliver information work spaces and collaboration tools




GODI - Global Operation Data Integration
RTV - Real Time Visualisation
MapIT- Master programt IT



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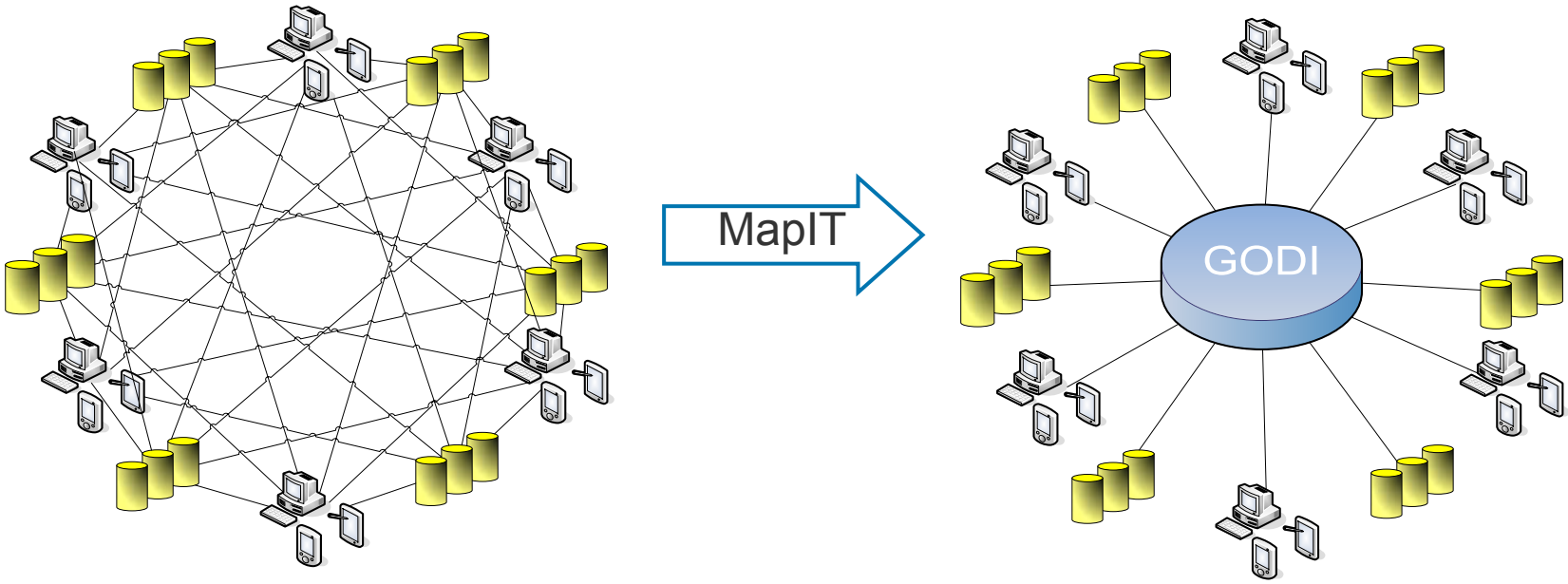
# As-is and to-be

- From point-to-point integration to GODI-integration



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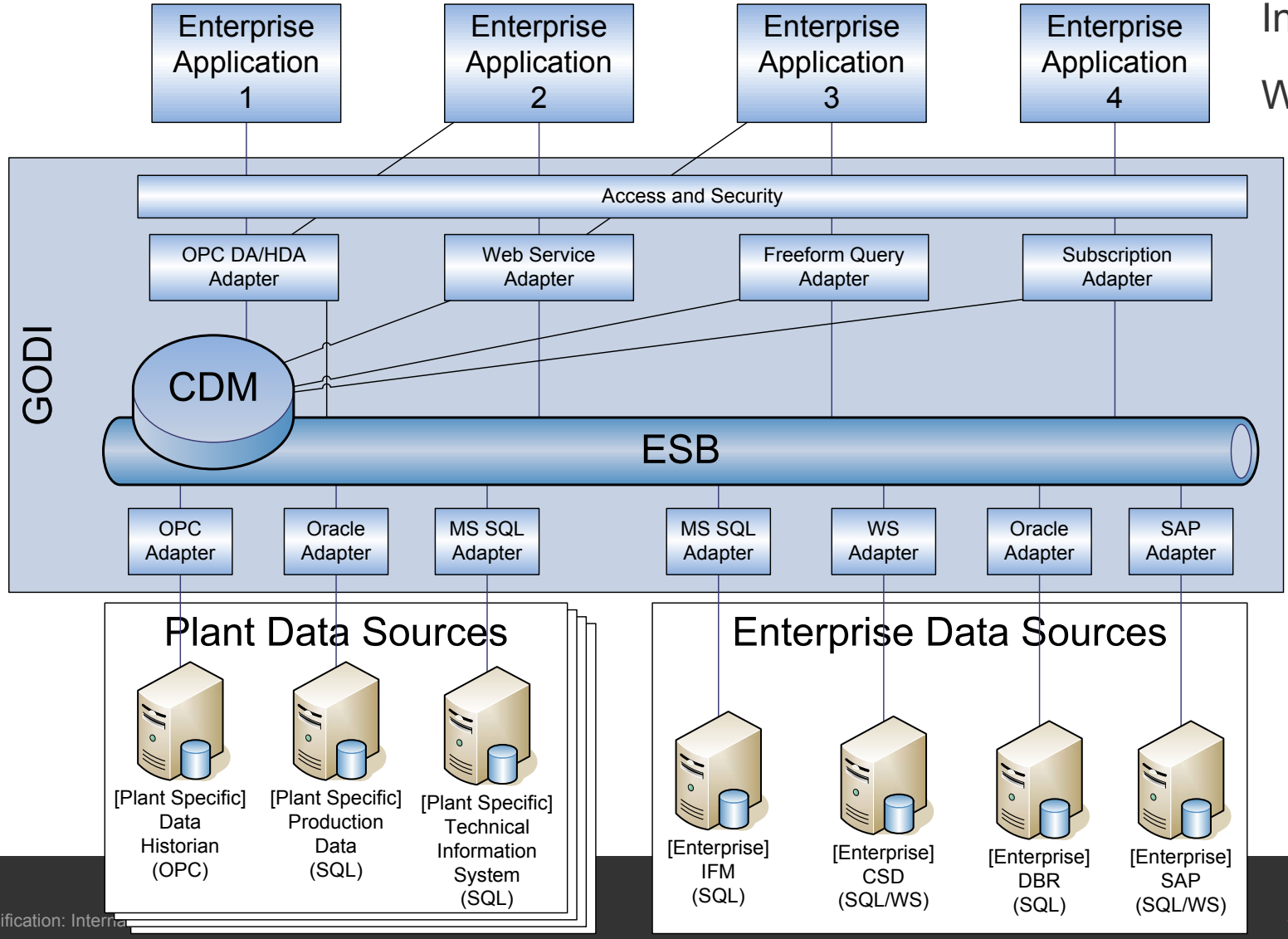
# GODI – Approved Concept Architecture



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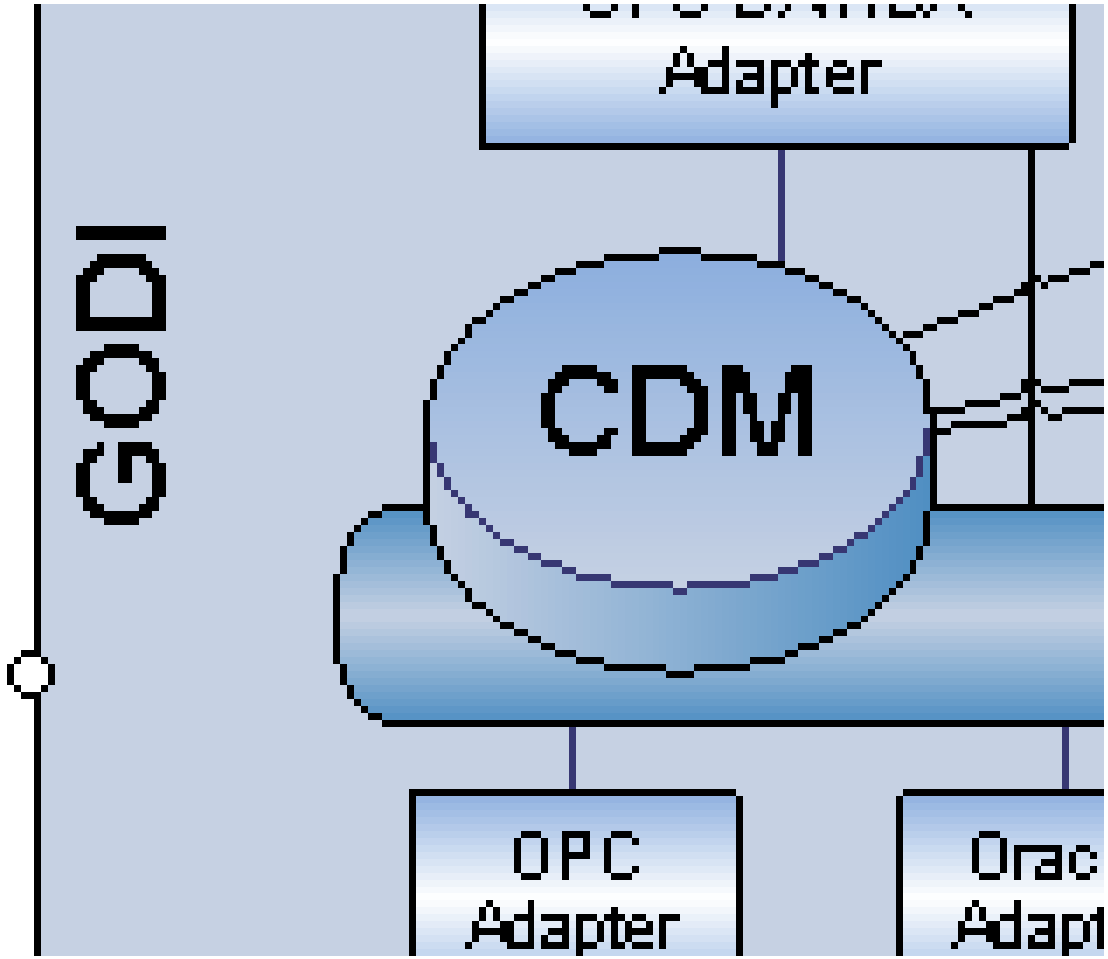
# The value of the model part 1 of 2



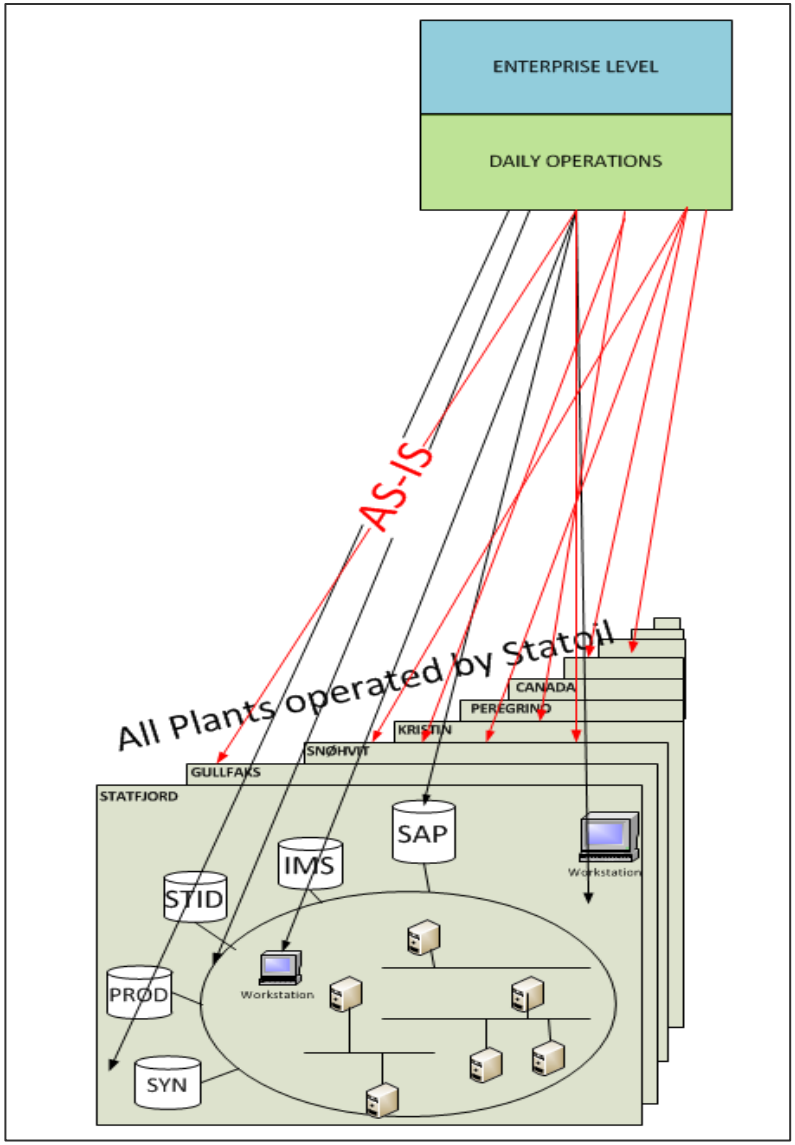
# GODI and ISO 15926

- international standards
- GODI this will be based om
  - Canonical Data Model (CDM) and Service Oriented Architecture- SOA
    - IBM's RSM (IIF).
- The instance model is established and maintained by Statoil. In this work we also aim to support international standards.
- Step by Step

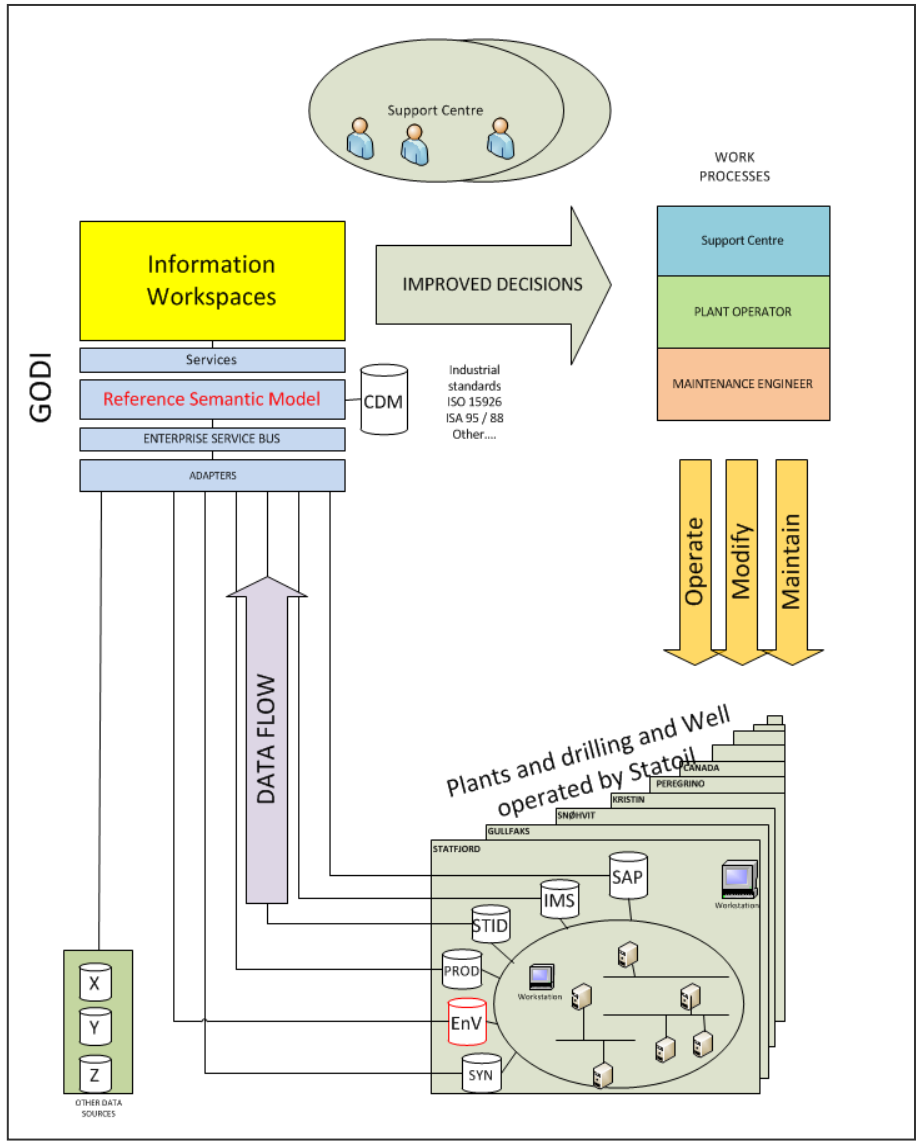
# The value of the model part 2 of 2

| Case | AS-IS | TO-BE (GODI) |
|---|---|---|
| Trend well head preassure at Statfjord C for well id xx xxxx | Need to know Tag id, IMS tools and Database information, involving technicans. | GODI will provide this data to new information workspaces by navigation if access allowed |
| Federation of data sources | If the engineer needs to compare measurements with historical work orders she needs to produce to files in different IT tools. | In GODI we can federate this information by use of one application on top of GODI. Easy to use design tools to be provided |

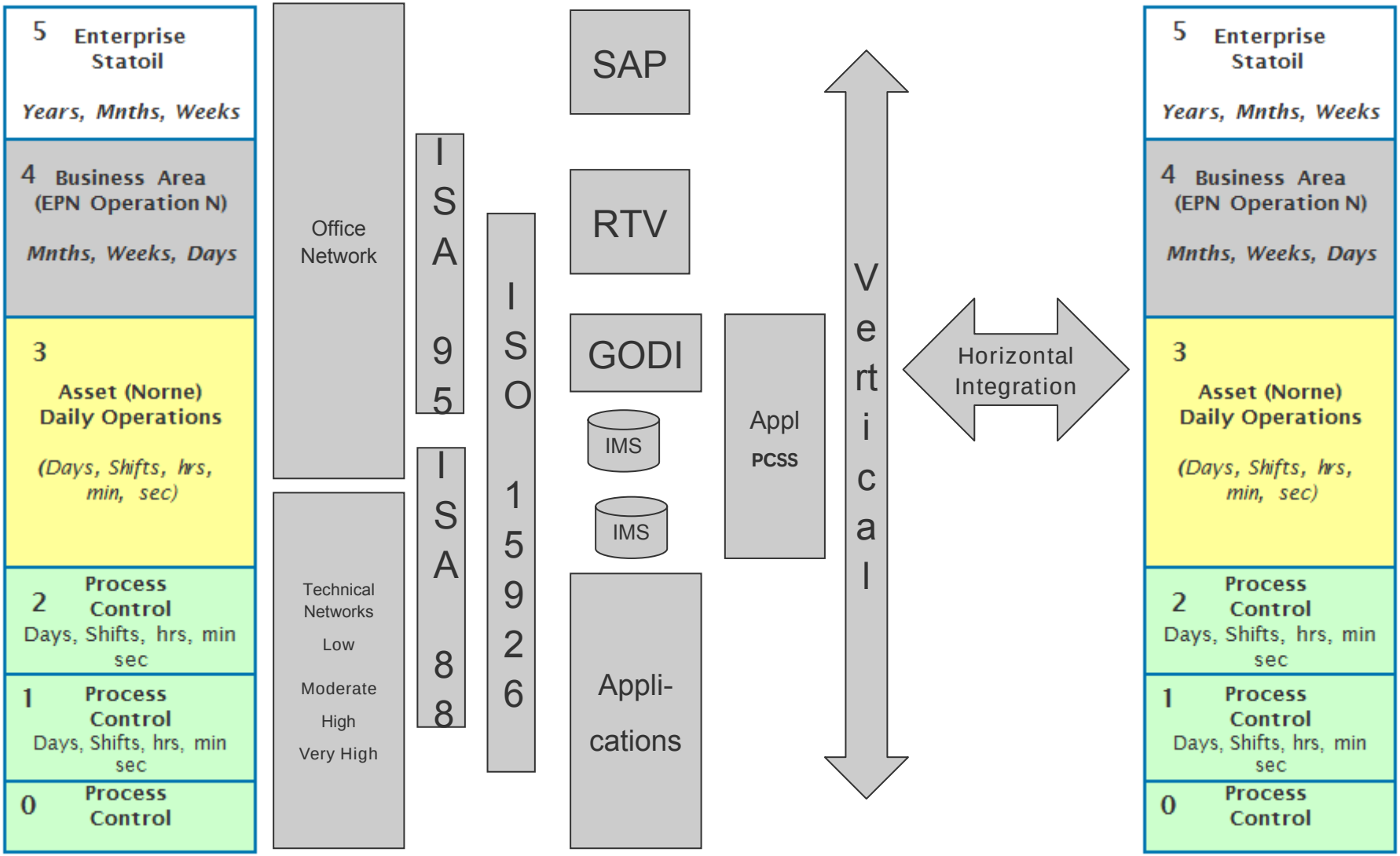
# AS-IS


ENTERPRISE LEVEL
DAILY OPERATIONS
AS-IS
All Plants operated by Statoil
CANADA
PEREGRINO
KRISTIN
SNØHVIT
GULLFAKS
STATFJORD
SAP
IMS
STID
PROD
SYN
Workstation
Workstation

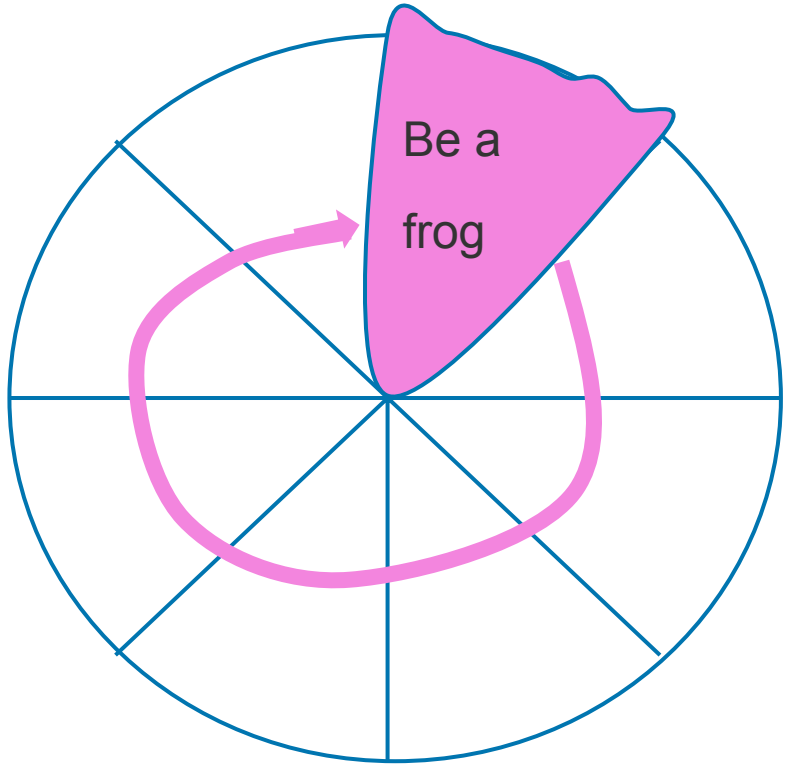
# TO-BE


Support Centre
WORK PROCESSES
Information Workspaces
IMPROVED DECISIONS
Support Centre
PLANT OPERATOR
MAINTENANCE ENGINEER
GODI
Services
Reference Semantic Model
CDM
Industrial standards
ISO 15926
ISA 95 / 88
Other....
ENTERPRISE SERVICE BUS
ADAPTERS
Operate
Modify
Maintain
DATA FLOW
Plants and drilling and Well operated by Statoil
CANADA
PEREGRINO
KRISTIN
SNØHVIT
GULLFAKS
STATFJORD
SAP
IMS
STID
PROD
EnV
SYN
Workstation
Workstation
X
Y
Z
OTHER DATA SOURCES

# Purdue Reference Model



# Awareness of Creativity and innovation



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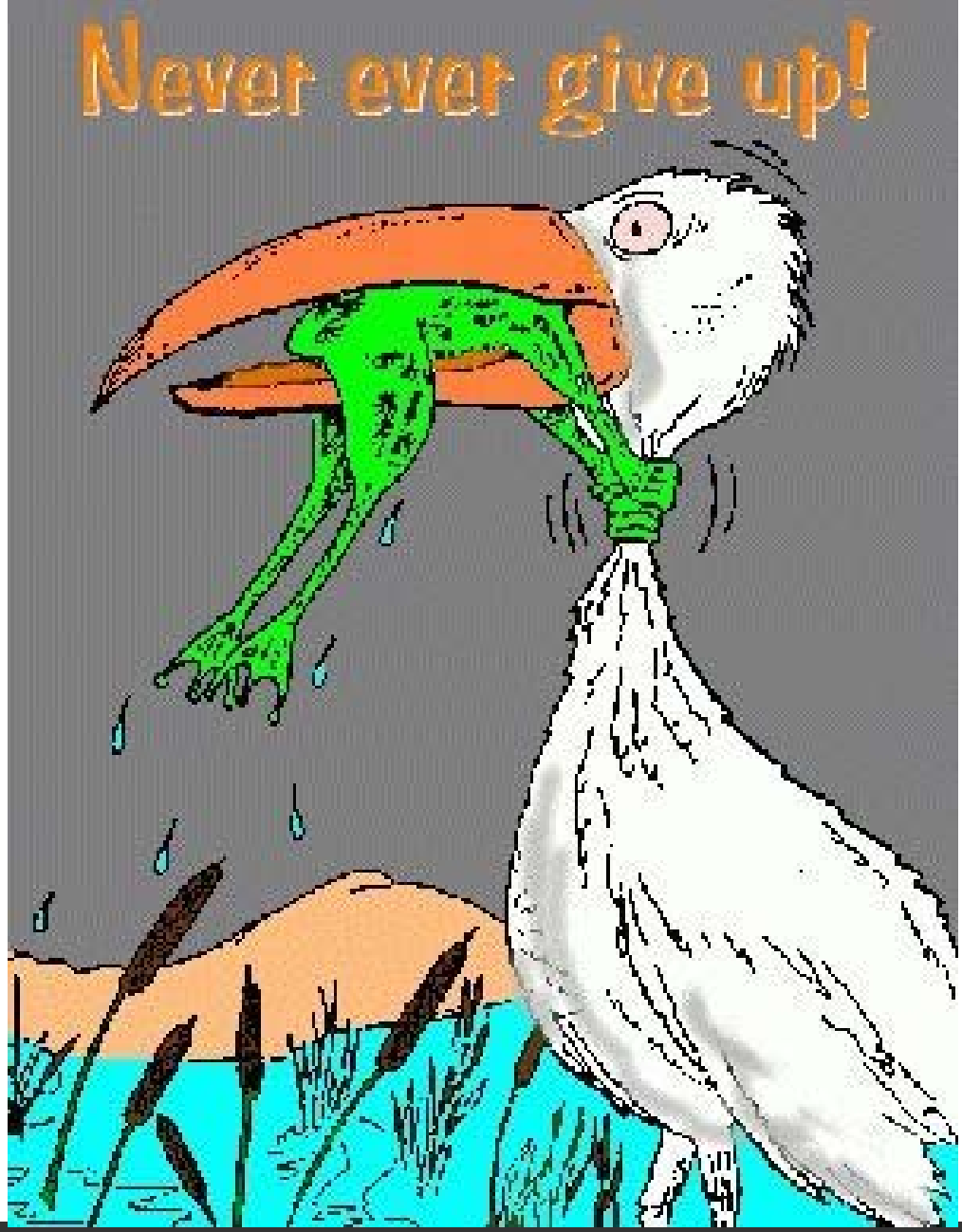




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# Thank you

**Access to real-time data in Statoil using CDM**

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