

# FFU seminar 2007

## Market prospects and business trends

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# Agenda

- HSE – status and challenges
- Personnel and competence
- Market
- Technology



# Subsea Intervention Technology - Trends

Subsea Intervention Technology is defined as all activities by use of Remotely Operated Tools/Vehicles related to Installation, Inspection, Maintenance and Repair of the Subsea Production System

Internal Statoil definition

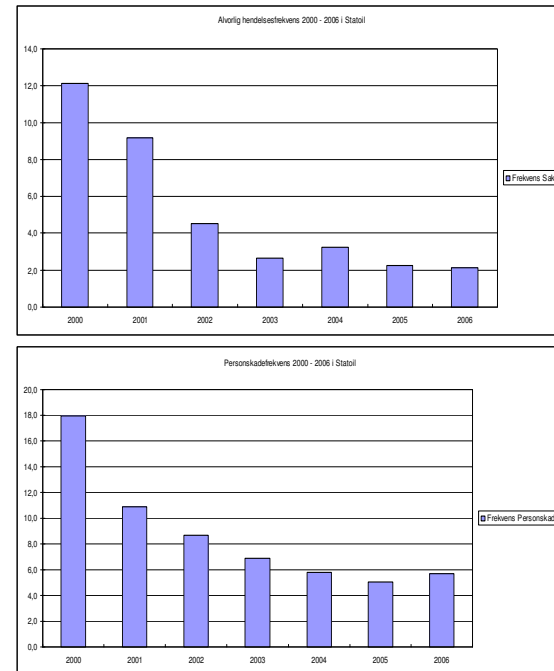


## FFU seminar 2007: Subsea beyond the sky (til himmels)



# HSE

- Trends
  - Good HSE results
  - Challenging way forward
- Challenges related to personnel and equipment
  - Operation in rough conditions
- Artic environment
  - Snøhvit on stream





# Personnel and competence

- Tight market
- Mismatch between accessibility and qualification
- Recruitment very important
  - The oil industry is popular
  - Link between popularity and oil price?
- Good initiatives among suppliers
  - Apprentices
  - Formalised education

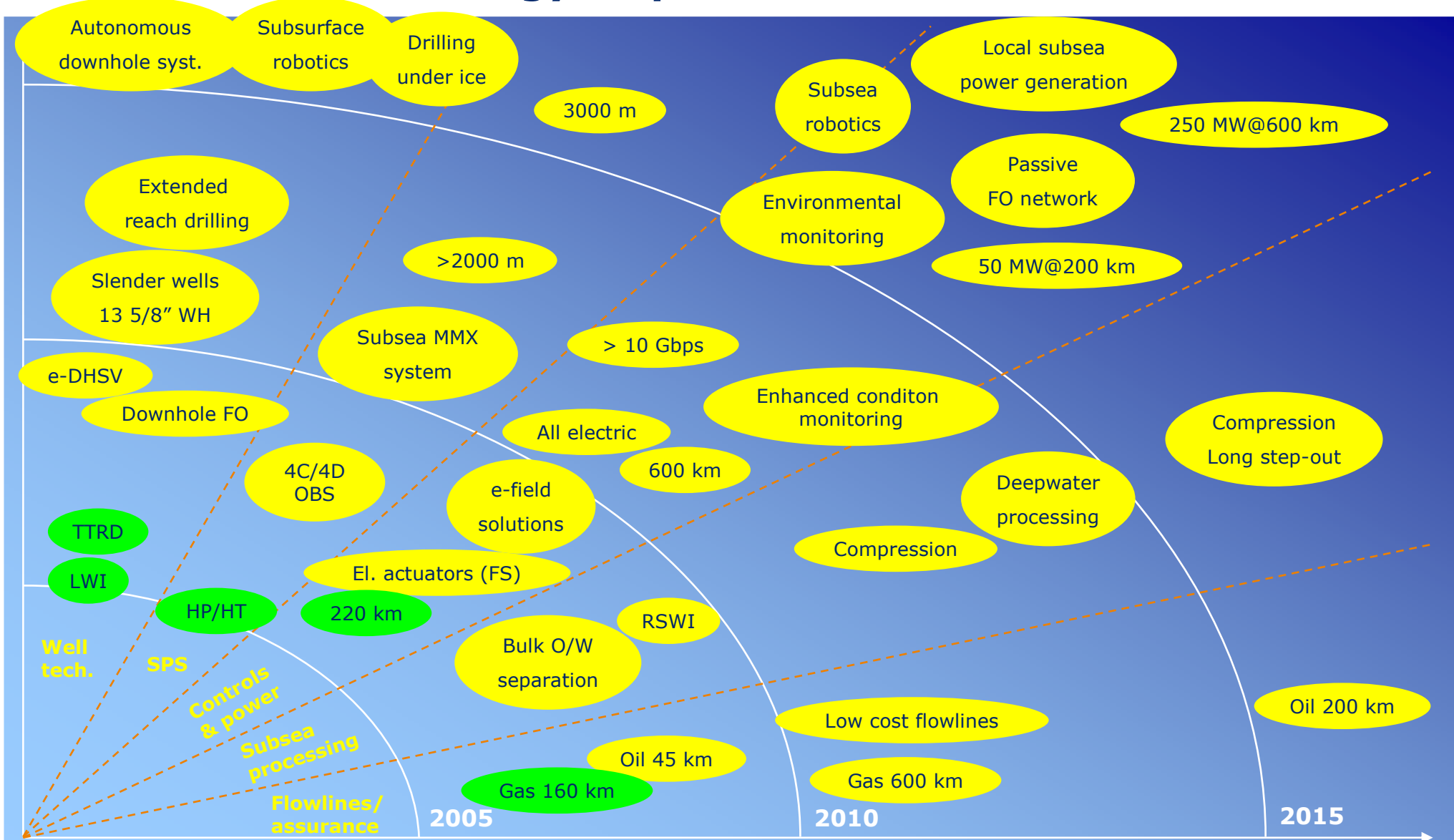


# Market

- Suppliers
  - Strong demand for the time being
  - Still “problem solvers”
- Customers
  - More smaller companies presence
  - Statoil/Hydro
  - Standardisation



# Statoil subsea technology map



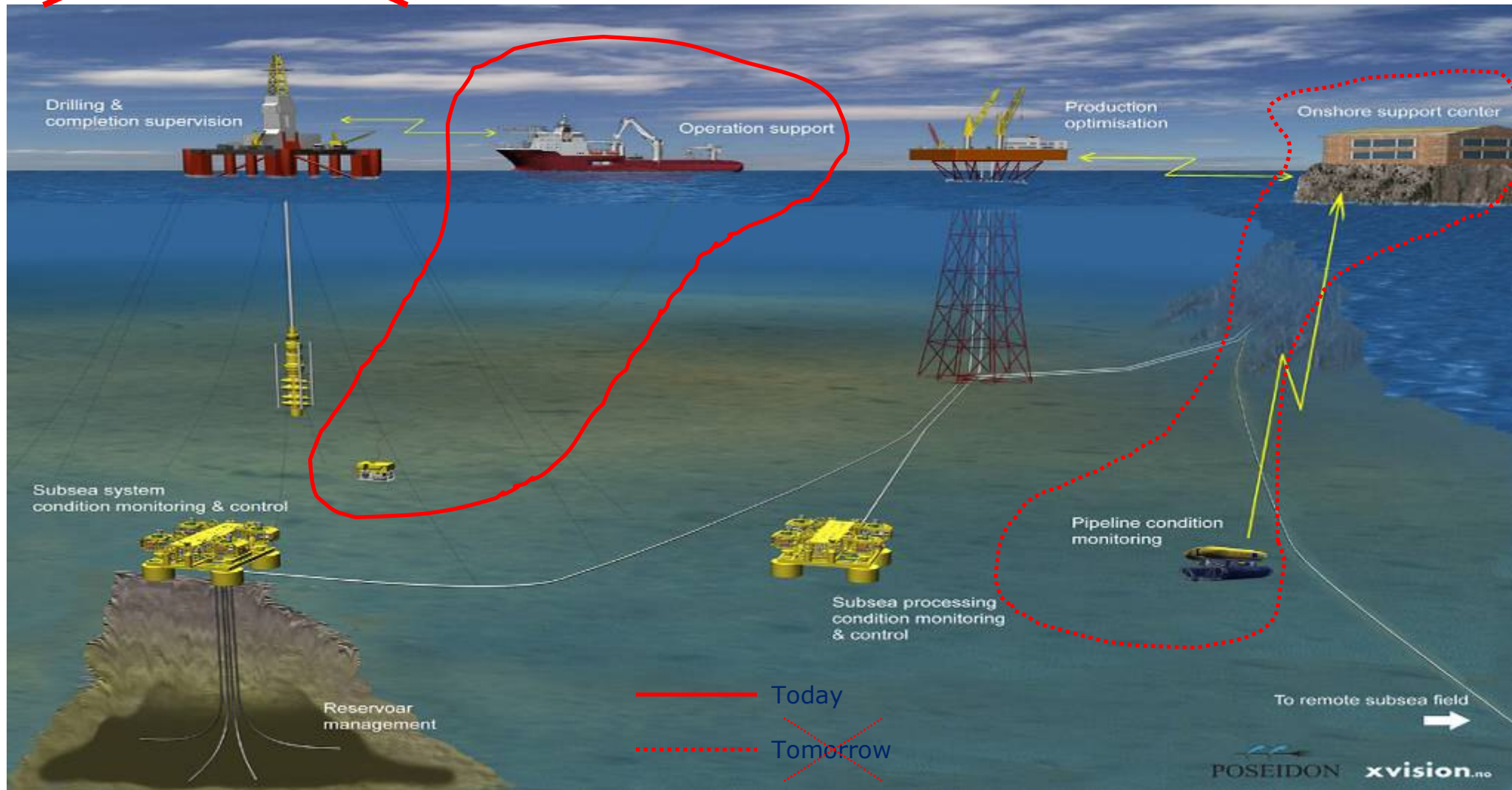
Technology implementation

# Technology as a door opener



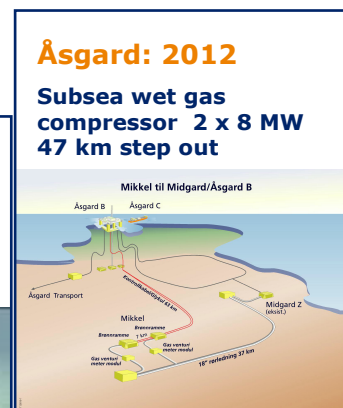
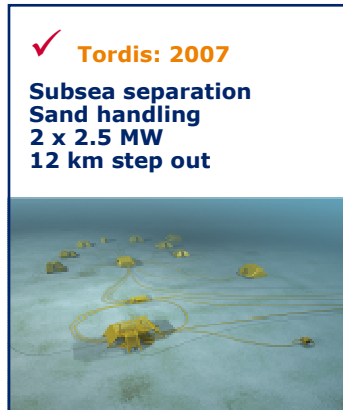


# ~~Near future – Integrated Operations~~



# Technology trends (1)

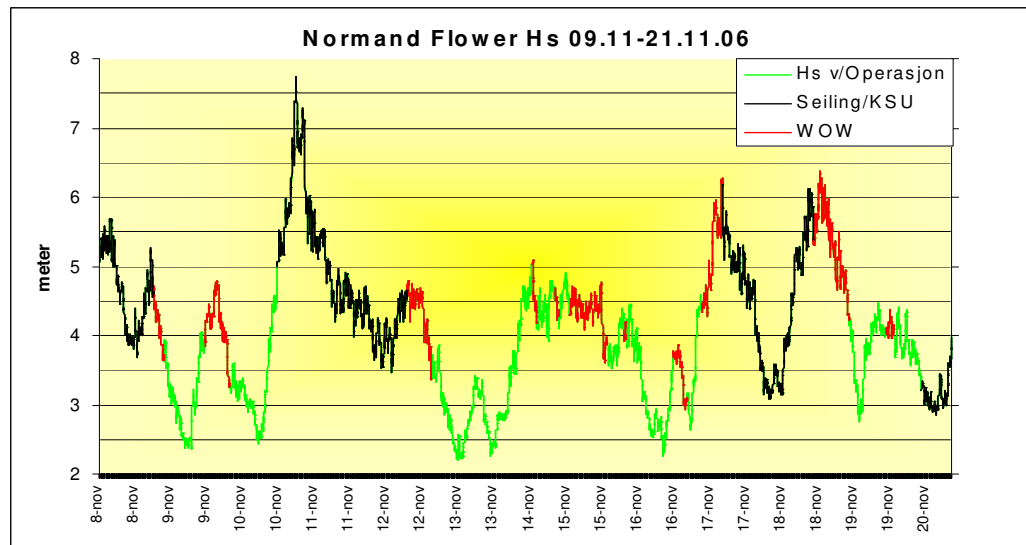
- New design is “pushing” the limits
  - Operation in rough conditions
  - New subsea technology elements
  - Compact technology
  - Scale squeeze – intervention in practice



✓ Sanctioned

# Technology trends (2)

- Simulation and visualisation by use of MIMIC
  - Good track record
- Establishment of environmental friendly intervention systems
- Hybrid AUV/ROV
- New vessels -> less Waiting on Weather (WoW)



# Trends for the future.....

- Standardisation
- Environmental friendly solutions
- “Intervention mentality” throughout design
- Modification and refinement of early generation equipment
- Improve visualisation and simulation tools
- AUV technology
- Good HSE results
- Market continue to grow.....
- Future oil price: up or down?

