



OLJE- OG ENERGI-DEPARTEMENTET

Ministry of Petroleum and Energy

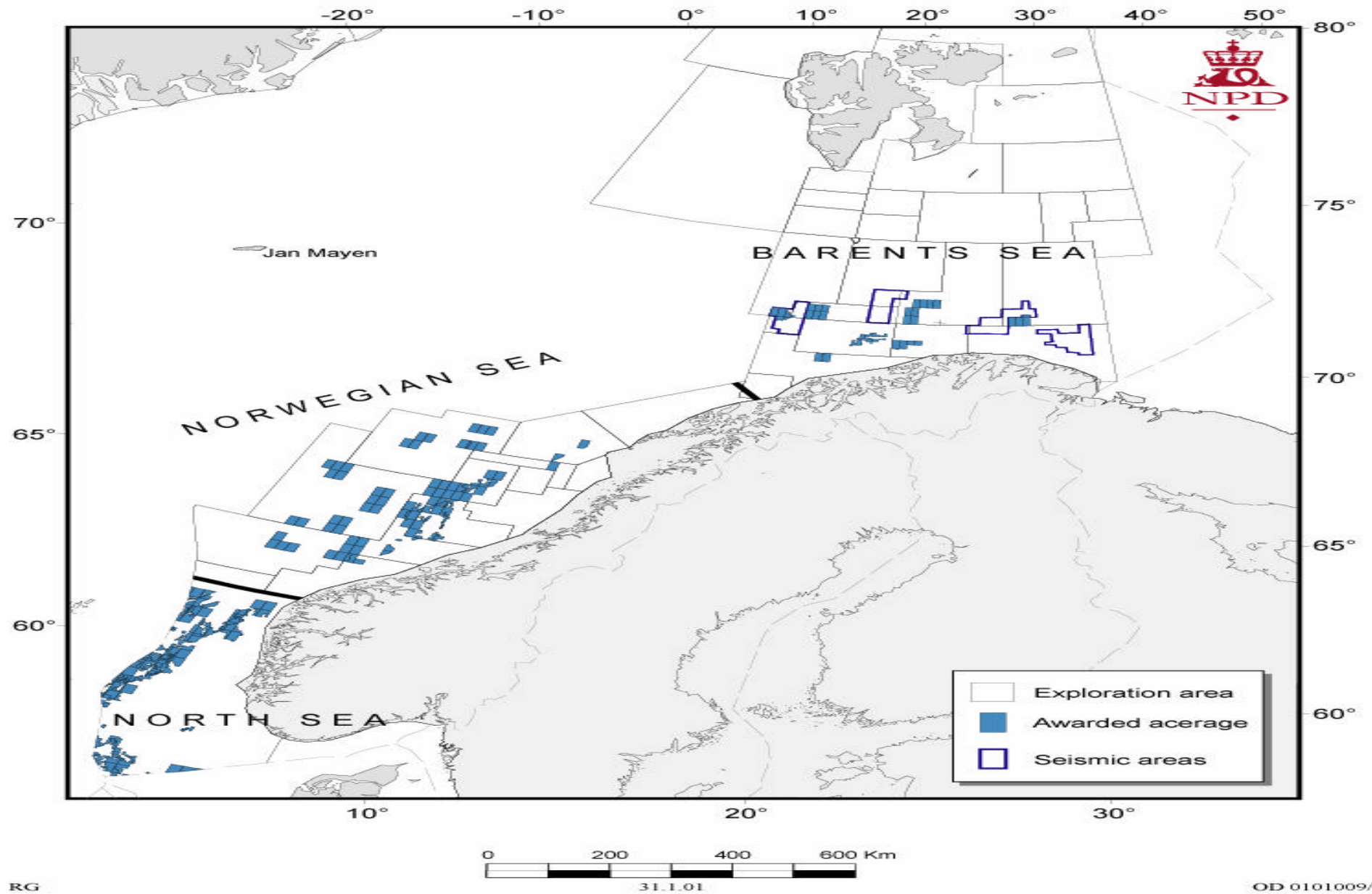
Petroleum Resource Management

Einar Steensnæs

Minister of Petroleum and Energy

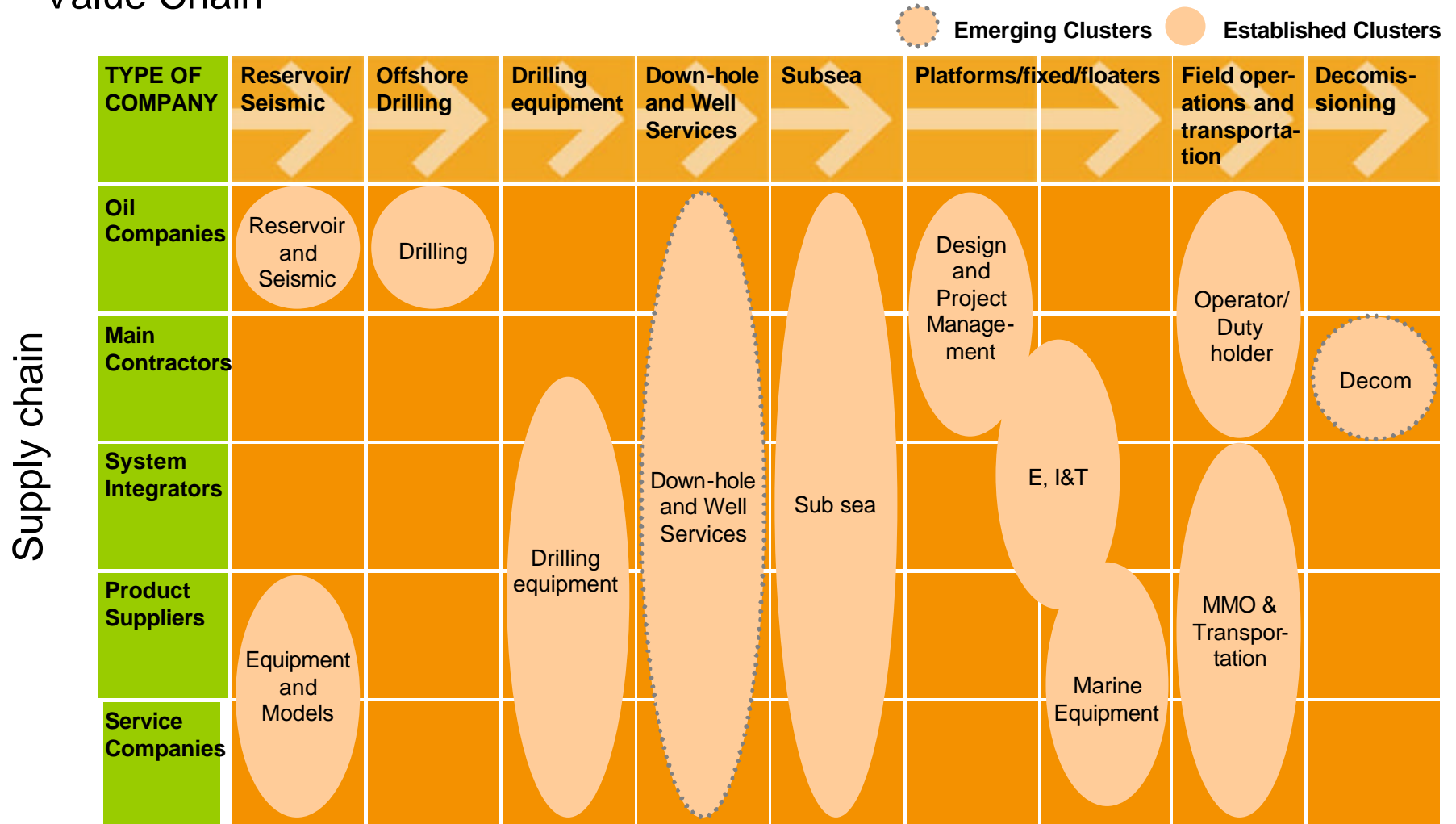
Losby gård 03/04/03

NORWEGIAN CONTINENTAL SHELF



Norwegian Oil & Gas "World-Class" Clusters

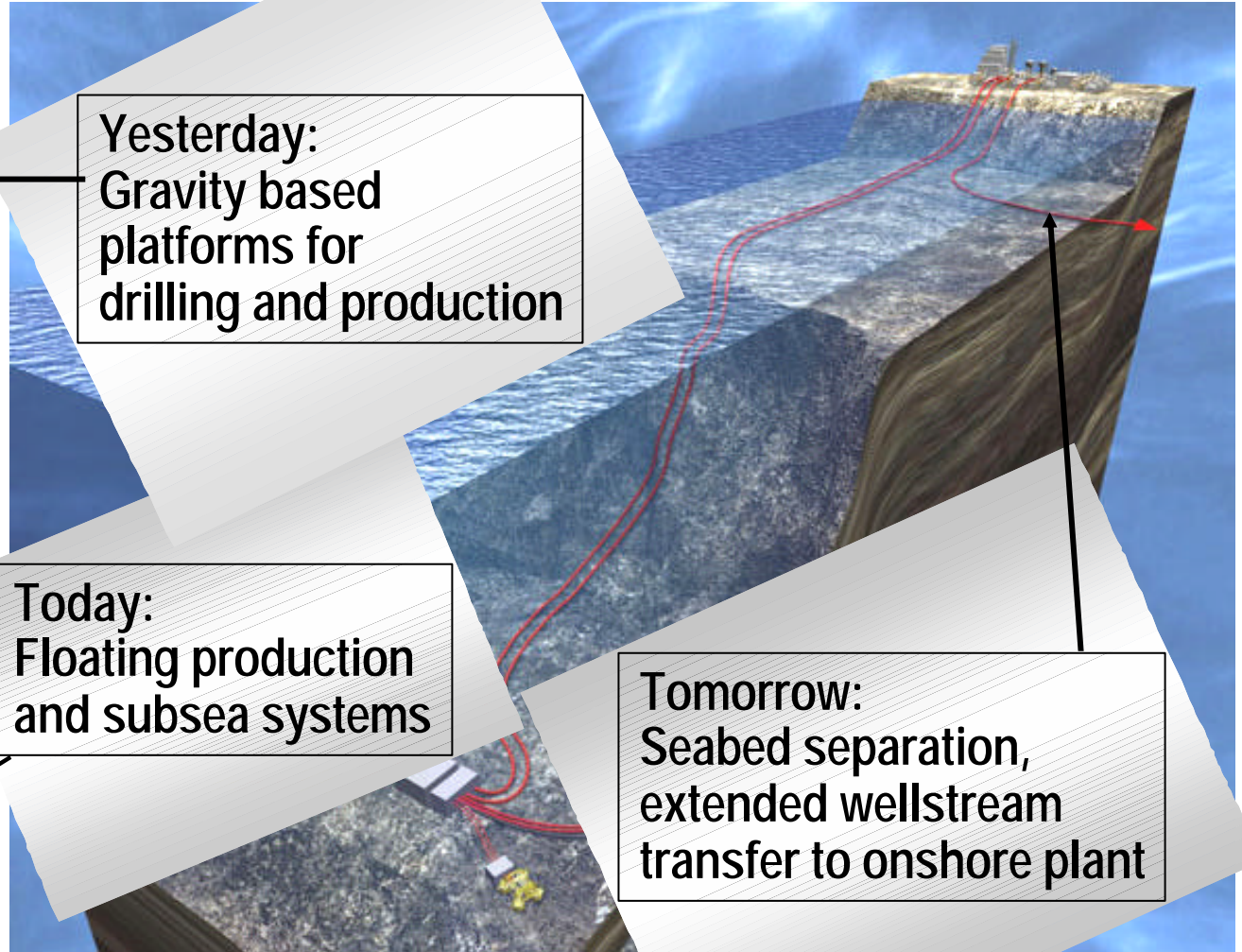
Value Chain



Subsea technology



Yesterday:
Gravity based
platforms for
drilling and production

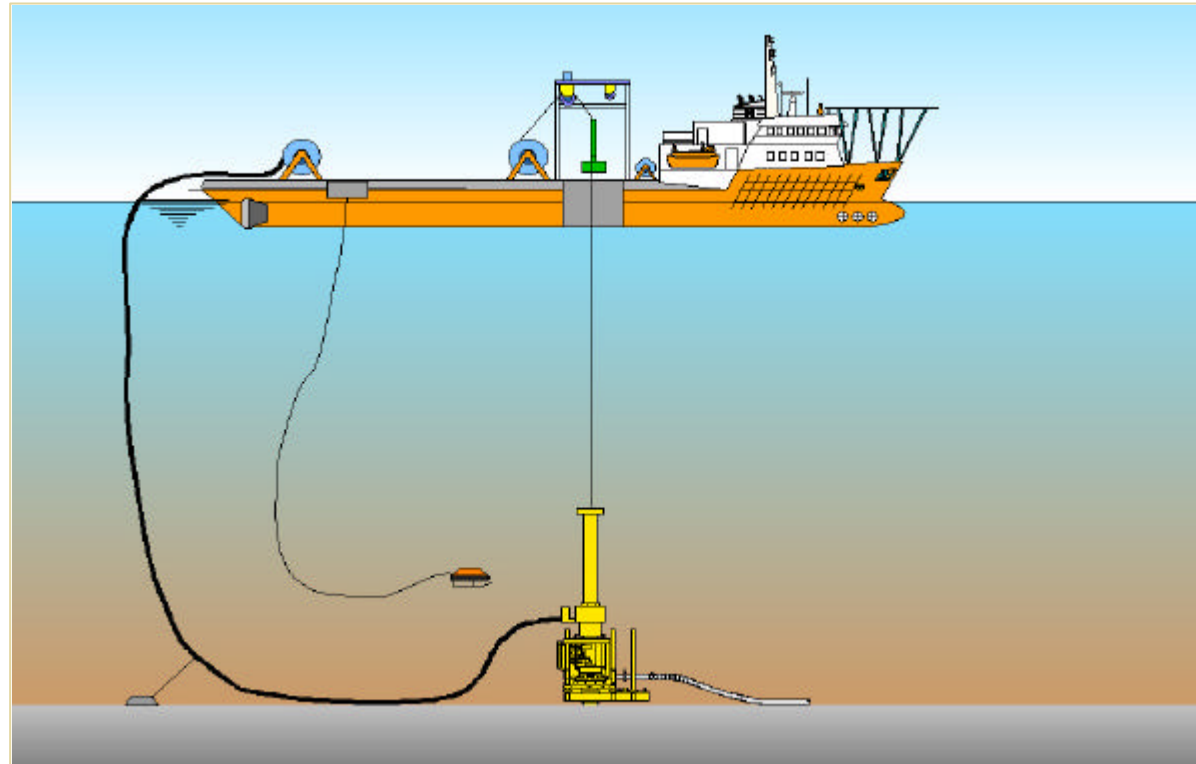


Today:
Floating production
and subsea systems

Tomorrow:
Seabed separation,
extended wellstream
transfer to onshore plant

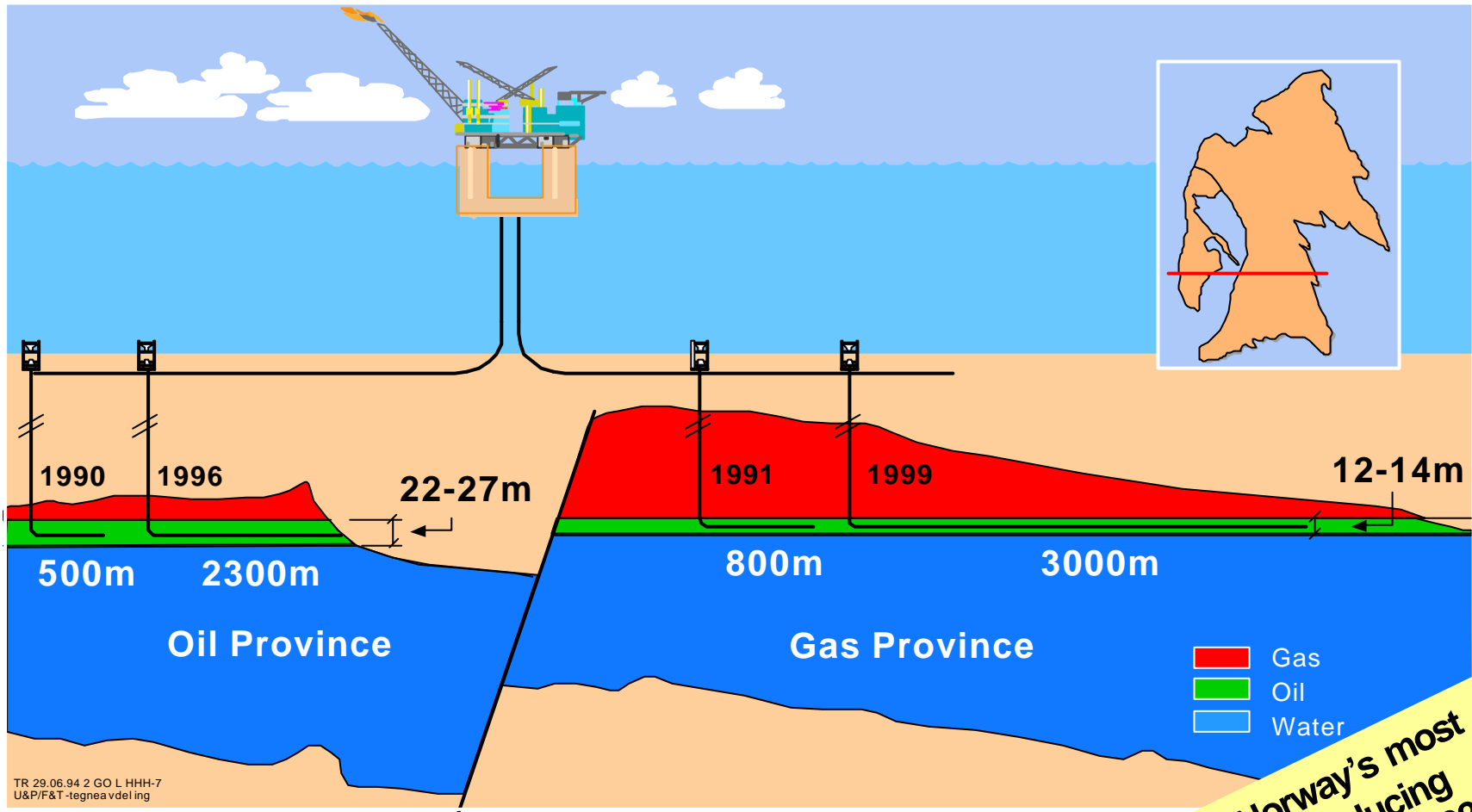


Light Well Intervention



Subsea Wells –
Increased oil recovery potential

Troll - Thin Oil Zones



Deeper Waters - Floaters



KON-KRAFT

Unlocking Value Through New Relationships



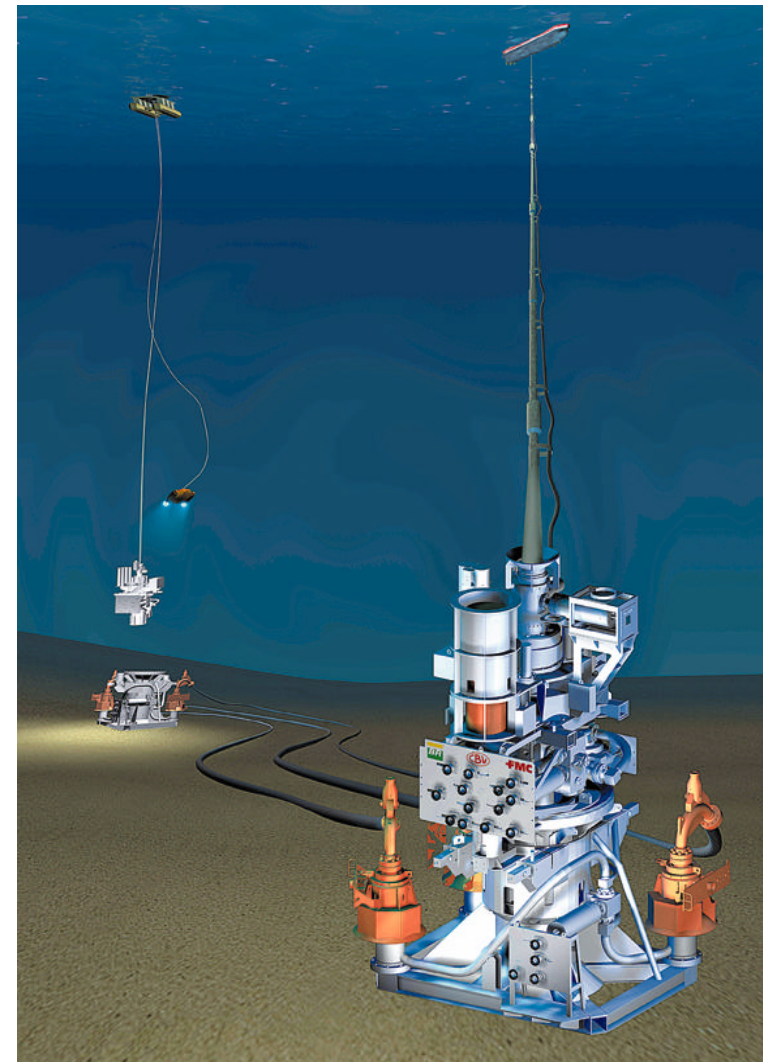
Co-operation and unity as well as competition!

Research & Development

→ The technology challenge

Technology is the single most important factor for the Norwegian oil and gas industry in order to:

- reduce costs
- strengthening international competitiveness, and
- facing future challenges!



OG21 - National Technology Strategy



5 Focus Areas

- Deep Water
- Environment
- Increased Recovery
- Small Fields
- Gas Value Chain

Vision

- World class competence
- A leading global industry
- The most innovative offshore province in the world

OG21 - National Technology Strategy



9 Technology Targets

- | | |
|--|-----------------|
| 1. Zero harmful discharge to sea | CONOCO/PHILLIPS |
| 2. 30% red. emissions to the atmosphere | SHELL |
| 3. Stimulated recovery | STATOIL |
| 4. Cost effective drilling | EXXONMOBIL |
| 5. Real time reservoir management | BP |
| 6. Deep water floating technology | NORSK HYDRO |
| 7. Long range transport of well stream | STATOIL |
| 8. Seabed and down hole processing | TOTALFINAELF |
| 9. Competitive gas production and off take | SHELL |

Conclusion

- 1. Maintaining the NCS as an attractive petroleum province for international players through stable, but flexible framework conditions**
- 2. Strong focus on R&D**

Internettadresse – Internet address

- www.oed.dep.no
- www.mpe.dep.no

