## The Ormen Lange project, pre sanction maturity - a key to success Per Kjaernes (StatoilHydro)

The Ormen Lange deepwater gas field was discovered in 1997. The production from the field was started in 2007 10 years after discovery. The project was completed according to planned schedule and budget. The PDO was approved in April 2004. The project execution period was only 3,5 years which is relatively short time for a large complex scope including a deep water subsea development in a challenging slide area, a large onshore processing plant, a 1200km export pipeline system and a challenging predrilling program including large bore deep water wells in a harsh environment.

This presentation will focus on the experience from the project definition phase and concept selection. Maturation of critical design aspects like the soil conditions and topography in the Storegga slide area, metocean conditions and environmental conditions in parallel with the reservoir conditions will be illustrated. Internal project organization, cooperation with partners, industry and other stakeholders will be discusses. The Ormen Lange project was a pioneer project in many ways. However, use of new technology was limited as part of the risk process. Management systems like the selected governance process and risk management was an important part of the decision process and creation of realistic execution plans. The importance of the Ormen Lange project as a reference case for Norwegian oil industry will also be discussed.