



MONITORING THE IMPACT OF OIL AND GAS OFFSHORE ACTIVITIES: PAST, PRESENT AND FUTURE Offshore Oil and Gas industry in Denmark (OGD)

Invitation til fyraftensmøde den 18. september 2018 KL. 17 – 19, Universitetsparken 4., 3. sal.

Oil and gas production offshore Denmark began more than 45 years ago. There are currently about 55 platforms that operate about 200km from the west coast of Denmark. This presentation will give an overview of activities and potential environmental impacts associated with oil and gas extraction and production offshore Denmark.

25-year of seabed monitoring data collected around Danish offshore oil and gas platform (OGD)

Seabed monitoring has been carried out since 1989 around oil and gas platforms in Denmark. The aim of the monitoring programme is to assess impact of operational discharges on the benthic environment. A summary of the biological, chemical and physical dataset obtained from more than 700 benthic fauna sample and 300 sediment samples will be presented with focus on 4 of the 11 Marine Strategy Framework Directive descriptors: Biological diversity (D1), Non-indigenous species (D2), Sea-floor integrity (D6) and Contaminants (D8).

Presenter: **Matthieu Povidis-Delefosse**, Environmental Advisor, Total E&P Denmark, Esbjerg

Marine mammal monitoring programme (TOTAL/OGD/AU)

Relatively little is known about the distribution and diversity of marine mammals around Danish offshore oil and gas platforms. In the last decade, several monitoring programmes have been initiated by the Danish Oil and Gas operators to collect information on marine mammal presence and underwater noise level generated by oil and gas platforms. C-PODs and full bandwidth recorders were deployed for two years around the largest oil and gas platform in Denmark. Elevated noise level was measured closed to the platform and was likely audible to harbor porpoise. Nevertheless, high porpoise activity was found close to the platform during all seasons with a clear diurnal pattern. The level of porpoise activity were high and generally higher than in harbour porpoise Natura 2000 sites in the inner Danish waters. A marine mammal sighting reporting programme was initiated in 2013, and now constitute a comprehensive database of more than 200 sightings documenting the presence of marine mammal in an offshore area available to scientists and regulators. In the future, acoustic data will be used to extract information on the distribution of other species observed offshore.

Presenter: **Jonas Teilmann**, Senior Researcher, Section for Marine Mammal Research at the Department of Bioscience, Aarhus University, Roskilde.



Fotos: OGD