

24th Conference of the European Cetacean Society



Marine Mammal Populations
Challenges for Conservation in the Next Decade



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HYDROGRAPHIE

Pile driving in offshore wind farms: effects on harbour porpoises, mitigation measures and standards

Workshop at „Ozeaneum“, Stralsund, Germany,
on 21 March 2010
organised by the Federal Maritime and Hydrographic Agency (BSH)

Programme

08:30 - 09:30 **Registration / Posters**

09:30 Introduction, background and aims of the workshop
Nico Nolte, Federal Maritime and Hydrographic Agency (BSH), Germany

Topic 1

Underwater noise emissions of pile driving: licensing procedures, regulations, field results

Chair: **Lars Bie Jensen, DONG Energy Power, Denmark**

09:40 Underwater construction noise at alpha ventus
Klaus Betke, Institute for Applied and Technical Physics (itap), Germany

10:00 Pile driving and cetaceans - implementation of European Directive requirements
Mark Tasker, Joint Nature Conservation Committee (JNCC), United Kingdom

10:20 Licensing requirements and conditions in the German EEZ
Carolin Abromeit, Federal Maritime and Hydrographic Agency (BSH), Germany

10:40 Implications of pile driving noise for mitigation strategies involving acoustic monitoring
Alexander von Benda-Beckmann, Netherlands Organisation for Applied Scientific Research (TNO), The Netherlands

11:00 - 11:40 Coffee break / Poster session

Topic 2

Effects of pile driving on marine mammals

- Chair: **Thomas Merck, Federal Agency of Nature Conservation (BfN), Germany**
- 11:45 Potential effects of offshore wind farms on harbour porpoises – the auditory perspective
Klaus Lucke, Research and Technology Centre West Coast (FTZ), University of Kiel, Germany
- 12:05 Cumulative effects of underwater noise on marine mammals
Andrew Wright, National Environmental and Research Institute, (NERI) University of Aarhus, Denmark
- 12:25 Towards a precautionary approach for the regulation of noise introduction in the marine environment from pile driving
Stefanie Werner, Federal Environmental Agency (UBA), Germany
- 12:45 - 13:45 Lunch

Topic 3

Mitigation measures and alternatives

- Chair: **Andreas Wagner, Foundation Offshore Wind Energy, Germany**
- 13:45 Drilled concrete monopile
Edwin van de Brug, Ballast Nedam Offshore, The Netherlands

- 14:05 Pile driving noise reduction using new hydro sound dampers
Karl-Heinz Elmer, Germany
- 14:20 Effects of mitigation options with regard to pile driving
Ansgar Diederichs, BioConsultSH, Germany
- 14:35 Research on mitigation measures at alpha ventus
Tanja Griebmann, Institute for Structural Analysis, Leibniz University Hannover, Germany
- 15:00 Underwater noise and offshore wind farms - scientific findings and further research needs
Tobias Petrovic, Jülich Centre for Research (PtJ), Germany
- 15:20–16:00 Coffee break / Poster session
- 16:00–16:45 **Panel discussion**
- Chair: **Oliver Schall, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany**
- Andreas Wagner, Foundation Offshore Wind Energy, Germany**
Martin Ros, MENCK GmbH, Germany
Kim Cornelius Detloff, Naturschutzbund Deutschland e.V. (NABU), Germany
Nico Nolte, Federal Maritime and Hydrographic Agency (BSH), Germany
- 16:45-17:00 **Closing statements**
- 17:00 End of Workshop