

**AGENDA**  
**Underwater Noise**  
**Measurement Seminar**  
**13 October 2005, NPL**

- 10:00 – 10:30**      **Registration & Coffee**
- 10:30 – 10:50**      **Welcome & Introduction**  
*Stephen Robinson, National Physical Laboratory*
- 10:50 – 11:15**      **Mitigation Measures for Acoustic Effects on Marine Life**  
*Geraint West, Head of UK Ocean Research Services, National Oceanography Centre, Southampton*
- 11:15 – 11:40**      **Impact of Noise on the Marine environment in Applications from Oil and Gas to Offshore Wind Farm Industries**  
*Inger Soderstrom, Environmental Manager, ERDU, DTI*
- 11:40 – 12:05**      **Measurement and Assessment of Airborne Noise and the Analogies with Underwater Noise**  
*Andrew Bullmore, Hoare Lea Consultants*
- 12:05 – 12:30**      **Estimation of Underwater Noise – a Simplified Method**  
*Dr Richard Hazelwood, R&V Hazelwood Associates LLP*
- 12:30 – 13:25**      **Lunch**
- 13:25 – 13:50**      **Torpedoes and AUVs – Impact of radiated Noise in the context of Background Noise – to Measure or to Model ... that is the Question**  
*Dr Stephen Jones, Dr Sam Healy and Roland Rogers, QinetiQ Ltd*
- 13:50 – 14:15**      **The dBht: a Metric for Estimating the Behavioural Effects of Noise on Marine Species**  
*Dr Jeremy Nedwell, Subacoustech Ltd*
- 14:15 – 14:40**      **Hydroacoustics Measurements of Piling Operations in the North Sea and PAMGUARD: Passive Acoustic Monitoring Guardianship Open-Source Software**  
*Dr Ron McHugh, Heriot Watt University*
- 14:40 – 15:00**      **Coffee break**
- 15:00 – 15:25**      **Anthropogenic Noise Measurements and impacts for Assessments of the Marine Environment**  
*Dr Paul Lepper, Loughborough University*
- 15:25 – 15:50**      **Limits for Underwater Noise Exposure of Human Divers and Swimmers**  
*Steven Parvin, Subacoustech Ltd*
- 15:50 – 16:15**      **Acoustic Measurements Performed at Advanced Subsea Oil and Gas Installations**  
*Jens Abrahamsen, managing Director of Naxys AS*
- 16:15**              **Close**