Underwater Acoustics: 2020 DOSITS Webinar Series Regulatory Approaches to Underwater Noise – An International Comparison November 19, 2020, at 12pm ET Klaus Lucke, JASCO Applied Sciences

Underwater noise is recognised as a pollutant and potential threat to marine fauna. Our understanding of noise-induced effects is still incomplete, but it is also evolving constantly. This process, along with legislative and cultural differences between countries, lead to a variety of existing and developing regulations for underwater noise.

This presentation provides an overview of the most prominent national and international noise regulations. Focussing entirely on marine mammals, parallels and differences in approaches taken by countries, regional agreements, and multinational organisations will be presented.

Looking beyond merely comparing noise thresholds, some key aspects are discussed and new concepts presented.

Webinar Outline:

- 1. Terminology clarifying some ambiguous terms, identifying problematic ones
- 2. General Aspects of Noise Regulations including mitigation and frequency weighting
- 3. Country Specific Regulation highlighting the most prominent and relevant ones
- 4. Parallels and Differences
- 5. Harmonisation and Diversity, Uncertainty
- 6. Ecological Consequences and Regulatory Frameworks
- 7. Summary

DOSITS Links:

- Science of Sound > Advanced Topics > Sound Pressure Levels and Sound Exposure Levels <u>https://dosits.org/science/advanced-topics/sound-pressure-levels-and-sound-exposurelevels</u>
- Science of Sound > Advanced Topics > Introduction to Signal Levels <u>https://dosits.org/science/advanced-topics/introduction-to-signal-levels/</u>
- Science of Sound > What sounds can people hear? <u>https://dosits.org/science/measurement/what-sounds-can-we-hear/</u>
- Science of Sound > What sounds can animals hear? <u>https://dosits.org/science/measurement/what-sounds-can-animals-hear/</u>
- Animals and Sound > Potential Effects > How do you determine if a sound affects a marine animal? <u>https://dosits.org/animals/effects-of-sound/determine-if-a-sound-affects-a-marine-animal/</u>
- Animals and Sound > How do you measure a marine mammal's reaction to sound? <u>https://dosits.org/animals/effects-of-sound/measure-marine-mammals-reaction-to-sound/</u>
- Animals and Sound > Potential effects of sound on marine mammals
 <u>https://dosits.org/animals/effects-of-sound/potential-effects-of-sound-on-marinemammals/</u>
- Animals and Sound > Potential effects of sound on marine fishes <u>https://dosits.org/animals/effects-of-sound/potential-effects-of-sound-on-marine-fishes/</u>
- Animals and Sound > Anthropogenic Sound Sources https://dosits.org/animals/effects-of-sound/anthropogenic-sources/
- Animals and Sound > How can we moderate or eliminate the effects of human activities? <u>https://dosits.org/animals/effects-of-sound/moderate-or-eliminate-the-effects-of-humanactivities/</u>
- DOSITS Hot Topic > Guidance on Determining Potential Effects to Marine Mammal Hearing <u>https://dosits.org/guidance-on-determining/</u>