

Chapter S4.0. Risk to Marine Animals from Underwater Noise Generated by Marine Renewable Energy Devices

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Definitions regarding additional acoustic terminologies used in Chapter 4 can be found in Table S4.1 below.

Table S4.1. Supplementary glossary related to acoustic terminologies used in Chapter 4.

Terminology	Description	Chapter Context
Ambient noise	All sound, natural and anthropogenic, except for the signal being measured.	All sound, natural and anthropogenic, except for sound generated by marine renewable energy (MRE) devices or MRE activities.
Amplitude	The magnitude of sound pressure.	Used to describe the magnitude of sound produced by various sources.
Audiogram	A marine animal's hearing sensitivity as a function of frequency (i.e., ability to detect sound at a given frequency).	To contextualize sound generated by MRE devices, it is important to consider the frequencies of these sounds and the sensitivity of marine animal hearing at these frequencies.
Broadband sound	Sound distributed across a range of frequencies.	A broadband sound is distributed over a range of frequencies, as opposed to a "tone" that occurs at a single frequency.
Frequency	The periodicity of sound. The shorter the period, the higher the frequency. This is perceived in hearing as "pitch".	Used to describe the frequency of sound produced by various sources.
Hydrophone	A pressure-sensitive transducer used to measure sound underwater (analogous to a microphone in air).	Used in most field studies to characterize underwater sound.
Radiated noise	Sound measured at an arbitrary range from a source.	Radiated noise generally refers to measurements of the sound generated by MRE devices.
Tonal sound	Sound occurring at a single frequency.	

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