



SOST ITF-ONML Partnership 2018 Need Topic

The Subcommittee on Ocean Science and Technology (SOST) Interagency Task Force on Ocean Noise and Marine Life (ITF-ONML) issued a call for pre-proposals via the LMR program pertaining to the need topic detailed below.

SOLICITATION OPEN PERIOD: 13 July – 31 August 2018

SOLICITATION ADVERTISEMENT:

- BAA Solicitation N39430-18-S-2067 posted at www.neco.navy.mil and www.fbo.gov on 13 July 2018.
- Posted on LMR Program website at <http://navysustainability.dodlive.mil/lmr/> on 16 July 2018.
- Posted to MARMAM and bioacoustics-I listservs on 17 July 2018.

NEED TOPIC: DEVELOPMENT OF AUDIOGRAMS FOR MYSTICETES

Research to improve our understanding and measurement of auditory capabilities and sensitivities of low-frequency cetaceans (mysticetes) to anthropogenic sound. Research under this topic to generate a mysticete audiogram may include:

- a. Additional development, refinement, and/or validation of finite element modeling (FEM) methods, including but not limited to:
 - i. Integration of inner ear and whole head FEM models
 - ii. Comparison of FEM models with audiograms of other captive cetacean species
 - iii. Confirmation of bone conduction as a pathway for mysticete hearing
- b. Development and testing of in-situ AEP measurement of mid- (1-10 kHz) and high-frequency (10-100 kHz) hearing sensitivities in stranded mysticetes
- c. Development of tools needed to advance AEP measurements below 1 kHz
- d. Use of behavioral response methods
- e. Other appropriate approaches or methods