Joint industry Programme on E&P Sound and Marine Life – Pre-proposal

All pre-proposals must be submitted to John Campbell at info@soundandmarinelife.com. Pre-proposals must not exceed 3 pages in the provided template. Pre-proposals exceeding the page limit will not be evaluated. . Submissions in Word or PDF formats will be accepted. This template header may be removed from your submission

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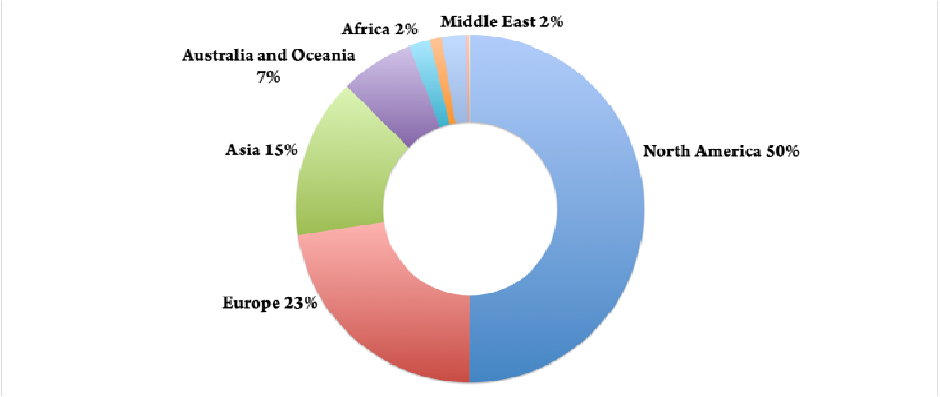
PRE-PROPOSAL DETAILS

Title:	Development of Regulator Content for Discovery of Sound in the Sea http://www.dosits.org
Technical Approach • Clearly state the project objectives; • Provide an overview of the approach needed to accomplish the objectives	The **Discovery of the Sound in the Sea** (DOSITS) project includes production of an interactive, educational website; a 16-page booklet for stakeholders; and a tri-fold brochure developed by the University of Rhode Island's Graduate School of Oceanography (URI/GSO) and Marine Acoustics, Inc. (MAI). The objective of the proposed work is to develop scientific resources to assist international regulators, including a series of webinars and instructional videos on key topics, which have been identified as high need by the international regulator community. The webinar series and videos will be archived for asynchronous viewing on the DOSITS website. These two new resources will add scientific content to this popular website. The existing system employed for DOSITS content development will be used for this proposed work. Dr. Kathleen Vigness-Raposa from MAI will provide the technical guidance for URI/GSO team to produce the regulator resources. The DOSITS scientific advisory panel will review all content materials and additional experts will be engaged in specific section reviews, as needed. The core advisory panel currently includes Dr. Peter Worcester (Scripps Institution of Oceanography), Dr. James H. Miller (URI), Dr. Darlene Ketten (Harvard Medical School and Woods Hole Oceanographic Institution), Dr. Arthur N. Popper (University of Maryland), Dr. Danielle Cholewiak (NOAA Northeast Fisheries Science Center), and Dr. Peter Scheifele (University of Cincinnati). In addition to DOSITS core advisors, the DOSITS scientific content has been reviewed by over 40 scientific experts (see http://www.dosits.org/about/ for a complete list). Advisory panel members are added as appropriate to review specific scientific content as it relates to their expertise. The proposed DOSITS resources to be developed for regulators include a webinar series and instructional videos as described below.

	1. Webinar Series for Regulators Webinars are an effective way to educate a dispersed targeted audience. A webinar consists of an expert presenting a slide presentation that is concluded with an interactive, real-time question and answer session with the participants. The webinar is archived and becomes a valuable, permanent resource. In year one, we propose to conduct three to four webinars on topics of primary interest to the regulator community. The first webinar will focus on the basic science of underwater sound, including topics such as an introduction to sound propagation, signal levels, how a decibel is defined, how sound levels in air differ from sound levels in water, common underwater sounds, and ocean noise variability. It is likely that Dr. James H. Miller (URI) would be the keynote speaker. Based on a regulator needs assessment survey conducted by the DOSITS team in summer 2014, other possible topics and speakers for the additional webinars include (1) how do marine mammals hear (speaker: Dr. Darlene Ketten), (2) how do fishes and invertebrates hear (speaker: Dr. Arthur N. Popper), and (3) How do we measure marine mammals reaction to sound (speaker: Dr. Brandon Southall). 2. Instructional Videos for Regulators The DOSITS team has identified a need for short (3-5 minute) instructional video resources that can be easily accessed on hand held and tablet devices and that can be downloaded from the website, as well as YouTube. In year two of this proposed work, the DOSITS team will produce a series of four short instructional videos for regulators and public affairs officers on acoustics related issues that are frequently raised by stakeholders and the popular media. Issues, such as the effects of sound on marine mammals, are often misreported and misunderstood. These videos will be based on DOSITS peer reviewed content, the previous year's webinar series, and DOSITS frequently asked questions. In today's online environment of instant access, the public and stakeholders, such as regulators, expect to find resources related to current issues at the swipe of a finger. The DOSITS team is agile and flexible and is able to be responsive as issues emerge. Topics for the instructional videos will be prioritized with the input of the advisory panel members, who will review the video content before it is released.
Rationale: • What is the current state of the field in the area you are proposing work? • How is the proposed effort innovative?	There is currently no centralized location for regulators to access peer-reviewed, up-to-date information on the latest developments in bioacoustics. The DOSITS team conducted a needs assessment of the international regulator community to determine the resources they currently use and those that would be most beneficial to be developed. The survey respondents were evenly split among those directly involved in developing regulations, supporting regulators, and industry representatives. Most of the respondents were from North America (64%) and Europe (22%), with government employees and consultants constituting the majority (a combined 69%). The highest rated topics chosen for resource development were in the animals and sound category, with effects of sound on marine animals rated highest.

Industry impact: • Describe the expected results in terms of the identified business drivers	The DOSITS website addresses two business drivers: business relevance and the performance gap of misinformation. The DOSITS website was launched in November 2002; since then, it has been funded by the U.S. Office of Naval Research, the U.S. National Science Foundation, and NOAA Fisheries. Over the years, it has received more than 63 million hits. In March 2010, a completely revamped site was launched that incorporated significant design changes. The new design, along with an international promotional push, saw the site traffic grow significantly. In 2012, DOSITS recorded more than 10 million hits, approximately 660,000 page views, and served 180 GB of data. In 2013, this traffic level increased by close to 30%. Visitors to the DOSITS website come from across the globe. Half the visitors during 2013 are from North America and close to a quarter of the visitors are from Europe (see Figure One below). The proposed expansion of the content to include resources for the international regulatory community has this successful foundation upon which to build. Figure 1: Countries Represented by DOSITS Visitors  Besides being outstanding, this level of traffic exemplifies the public and academic need for the information on the DOSITS site, which addresses the performance gap business driver. In 2013, the DOSITS team was approached by an international group of regulators who expressed a critical need for content related to underwater sound. It is clear that the regulator community needs quick, easy to understand resources, based on sound scientific research, that are consistently available as a reference, such as the DOSITS website.