

## OPEN LETTER

Minister Chang Wanquan  
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Taiwan (R.O.C.)

Zurich, 13th May 2015

Honorable Minister Wanquan

We write to draw your attention to the potential impact of anthropogenic underwater noise generated by military activities, including the use of low or mid-frequency active sonar system and detonations, in the Mediterranean Sea.

The Mediterranean Sea is habitat to various cetacean species, many listed as vulnerable or endangered in the Appendices of the CMS. These include deep diving species such as the Cuvier's beaked whale (*Ziphius cavirostris*) which is listed on CMS Appendix I and acknowledged through this listing to be highly sensitive to loud, impulsive marine noise.

While it is not within OceanCare's mandate to address geopolitical decisions for progressing these military activities, we are concerned that they appear to be counter to existing intergovernmental agreements on conservation measures to protect endangered and vulnerable species and/or the wider marine habitat of the Mediterranean Sea.

In recent years there have been a number of atypical mass strandings of beaked whales that have correlated in time and space with similar military activities. We refer you to the enclosed map for reference of these. The scientific and marine species conservation communities have expressed their concerns about these atypical strandings and urged decision makers, through various international processes, to halt any proposed activities in areas of critical importance to particularly vulnerable species. Governments have agreed that noise generating military activities should undergo through Environmental Impact Assessments to ensure that the timing and placement of the activities will not unnecessarily cause harm.

The enclosed document 'Intergovernmental Decisions and Academic Bibliography Relating to Marine Species and Anthropogenic Underwater Noise' details the significant intergovernmental decisions that articulate the emerging agreed regulation standards for effective impact assessment and mitigation. Most recently this has been discussed by the Convention on Biological Diversity (CBD) where governments have agreed that standard practice should be to conduct Environmental Impact Assessment activities that may have significant adverse impacts on noise-sensitive species, and to mitigate and manage anthropogenic underwater noise through the use of spatio-temporal management of activities, relying on sufficiently detailed temporal and spatial knowledge of species or population distribution patterns combined with the ability to avoid generating noise in the area at those times.

The chronology of intergovernmental decisions is:

CBD Decision XII/23 – *Marine and coastal biodiversity: Impacts on marine and coastal biodiversity of anthropogenic underwater noise*

CBD Decision XI/18 – *Marine and coastal biodiversity: Impacts of anthropogenic underwater noise on marine and coastal biodiversity*

CMS Resolution 10.24 – *Further steps to abate underwater noise pollution for the protection of cetaceans and other migratory species*

CMS Resolution 9.19 – *Adverse Anthropogenic Marine/Ocean Noise Impacts on Cetaceans and Other Biota*

ACCOBAMS Resolution 5.15 – *Addressing the Impact of Anthropogenic Noise*

ACCOBAMS Resolution 5.13 – *Conservation of Cuvier's beaked whales in the Mediterranean*

ACCOBAMS Resolution 4.17 – *Guidelines to address the impact of anthropogenic noise on cetaceans in the ACCOBAMS area*

ASCOBANS Resolution 5.4 – *Adverse Effects of Sound, Vessels and other Forms of Disturbance on Small Cetaceans*

Of particular importance is the North Atlantic Treaty Organization (NATO) Centre for Maritime Research and Experimentation (CMRE) also developed in 2009 the NATO Undersea Research Centre (NURC) *Marine Mammal Risk Mitigation Rules and Procedures* (NURC-Mammal Rules) specifically to limit the risk of mass strandings and other impacts on Cuvier's beaked whales related to CMRE activities in the Mediterranean. The NURC-Mammal Rules state, *inter alia*, that "CMRE's precautionary policy is therefore to reduce the temporal and spatial interactions of sounds and beaked whales" and that "the risk mitigation of CMRE focuses on avoiding the habitat of beaked whales"

We feel it is important to highlight that intergovernmental Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) that overlaps the military activity area has adopted comprehensive *Guidelines to Address the Impact of Anthropogenic Noise on Cetaceans in the ACCOBAMS Area* (ACCOBAMS Noise Guidelines), through Res 4.17 in 2010, that calls for:

- modelling the generated sound field in relation with oceanographic features (depth/temperature profile, sound channels, water depth, seafloor characteristics) to assess the area possibly affected by relevant impacts;
- determination of safe/harmful exposure levels for various species, age classes, contexts, etc.; and
- mitigation that includes monitoring and reporting protocols to provide information on the implemented procedures, on their effectiveness, and to provide datasets to be used for improving existing cetacean databases.

For military sonar operations the ACCOBAMS Noise Guidelines also call for:

- sonar surveys to be planned and designed to avoid key cetacean habitat and areas of cetacean density and limit impacts;
- continuous visual and passive acoustic monitoring (PAM) with a specialized team of cetaceans observers and bio-acousticians to ensure that cetaceans are not in the 'exclusion zone' before turning on the acoustic sources and while sources are active;
- extra mitigation measures should be applied in deep water areas if beaked whales have been seen diving on the vessel trackline or if habitats suitable for beaked whales are approached: in such cases, the watch should be prolonged to 120 minutes to increase the probability that deep-diving species are detected (e.g. Cuvier's beaked whales); and that
- ideally, sonar exercises should not be done in areas that beaked whales are known to inhabit.

ACCOBAMS Res 5.13, adopted in 2013, more specifically states that:

- the production of intense underwater noise [including military sonar] in areas identified as Cuvier's beaked whale habitat carries environmental implications and responsibilities;
- the locations of mass strandings ( $\geq 2$ ) of Cuvier's beaked whales in the Mediterranean are important additional indicators of areas of enhanced risk for such species; and
- beaked whales should not be exposed to noise where received levels exceed a certain level and that a precautionary buffer around the preferred habitats mentioned should be applied to ensure that the noise threshold is not exceeded.

Res 5.13 calls on the ACCOBAMS Parties to:

- a) fully comply with Resolution 4.17 and report on its application to the Secretariat;
- b) inform the Secretariat and Scientific Committee of any atypical stranding events and to which degree the measures included in Resolution 4.17 were adhered to;
- c) include in mitigation requirements dedicated surveys and monitoring efforts of all potential beaked whale habitats with buffer zones around planned noise activities; and
- d) consider effective mitigation requirements in national regulations (as outlined in paragraphs 5 and 6 of Resolution 5.15);

This weight of political discussion and decisions dating back for more than a decade has been with the intent of preventing mass stranding events from occurring again.

We are therefore deeply concerned about military exercises being conducted in the Mediterranean Sea and in the immediate term strongly urge that adequate Environmental Impact Assessments are completed ahead of all military exercises, and that all monitoring and mitigation activities described in the ACCOBAMS Noise Guidelines for military sonar operations are applied.

We urge you to take the appropriate steps to engage in multilateral negotiations on a set of measures that all parties engaging in military manoeuvres can agree to and that you avoid certain areas of critical importance to Mediterranean species.

We look forward to your response

Sincerely

Attached:

1. Intergovernmental Decisions and Academic Bibliography relating to Marine Species and Anthropogenic Underwater Noise
2. Map of atypical strandings and association with noise generating activities
3. Drowning in Sound

Cc: CMS, ACCOBAMS, European Commission and European Presidency