



## Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature  
Conservation

STATE & CONSERVATION  
11-2019

Riga, Latvia, 21-25 October 2019

---

<b>Document title</b>	Concerns with regards to NATO mine clearance exercise in Fehmarn Belt
<b>Code</b>	3N-17
<b>Category</b>	CMT
<b>Agenda Item</b>	3N – Development and implementation of Recommendations
<b>Submission date</b>	Secretariat to fill in
<b>Submitted by</b>	Coalition Clean Baltic and Birdlife International
<b>Reference</b>	

---

*Note that this document was submitted after the established deadline. It will be decided by the Meeting whether the document can be discussed or is postponed to the next meeting.*

### Background

The German Navy reported on their web page [www.marine.de](http://www.marine.de) the recent detonation of 42 British WWII ground mines by the Standing NATO Mine Countermeasures Group 1 (SNMCMG1) in the waters Northwest of Fehmarn. Following an agreement between the German Lübeck Waterways and Shipping Authority and the German Navy, the NATO SNMCMG 1 detonated 42 British base mines from the Second World War northwest of Fehmarn at the end of August 2019. The operation was continued in early September in the frame of the exercise “Northern Coasts 2019”.

In such detonations, explosive charges of around 500 kg TNT are blasted remotely using an additional demining charge with a TNT equivalent of up to 100 or 200 kg which is placed next to the mine using a remotely operated underwater vehicle.

It was brought to our attention that nature conservation authorities were not involved in the decisions. Some of the mines were blasted in or close to the marine protected area “Fehmarnbelt” in the German EEZ which is designated for harbour porpoises with the conservation objective to protect the calving and nursing ground of this species. Calving takes place in the Western Baltic Sea between June and August (Börjesson & Read 2003; Lockyer & Kinze 2003; Hasselmeier et al. 2004; ASCOBANS 2016).

Depending on the size of the charge, marine mammals, fish and seabirds are subject to significant impact such as blast trauma and hearing impairment up to several kilometers away. The blasting also introduces toxic and carcinogenic substances such as mercury and trinitrotoluene into the water which are accumulated e. g., in mussels and fish (e. g., Strehse et al. 2017; Appel et al. 2018).

Coalition Clean Baltic and Birdlife International would like to draw the attention of HELCOM Parties to this matter, and ask EG MAMA to discuss how this matter can be addressed to NATO by HELCOM. Questions to be addressed are:

- How many mines have been detonated within the two exercises *Historic Ordnance Disposal* and *Northern Coasts 2019*, e.g. number of charges and TNT equivalents including demining charges?
- Has an environmental impact assessment been carried out? Have environmental agencies been involved into decisions?
- Which mitigation measures are used by NATO partners to minimize the impact on marine mammals, fish, seabirds and marine protected areas? Are there differences between Navies being part of the Countermeasure Group? What is the scientific basis for using scare charges or underwater telephone for scaring marine mammals which have been mentioned as mitigation? What are the reasons for not having used a bubble curtain in German waters which is a standard requirement if mines are blasted by EOD companies e.g., in offshore windfarm areas. For what reason the mines had to be

blasted in the nursing period of harbour porpoises in a known high-density area and reproduction site?

CCB and Birdlife International urges parties to be aware of the threat posed to marine mammals, fish and seabirds by munitions demolition, and to develop mitigation methods based on scientific evidence and to include nature conservation agencies into decisions about munitions clearance and to consider alternatives to detonations.

CCB and Birdlife International further asks CPs which are also NATO member countries to encourage NATO to share information on detonations with national and regional conservation bodies and to develop international guidelines for removal of munitions involving all relevant stakeholders and organizations which take nature conservation into account. Such guidelines should be based on a precautionary approach, take into account wider environmental effects and consider methods of removal other than detonations and alternative technologies such as the use of underwater robotics. An integral part of such guidelines should be mitigation techniques based on scientific evidence which are to be employed when no alternatives to detonation are feasible, including techniques to reduce the shock wave, dedicated observation techniques and the additional use of acoustic deterrents.

### Action requested

The Meeting is invited to:

- consider presented information;
- discuss how the issue can be addressed to NATO

### References

- Appel, D., Strehse, J. S., Martin, H.-J. & Maser, E. (2018). Bioaccumulation of 2,4,6-trinitrotoluene (TNT) and its metabolites leaking from corroded munition in transplanted blue mussels (*M. edulis*). *Marine Pollution Bulletin* 135 1072–1078.
- ASCOBANS (2016): Resolution No. 3: Revision of the Recovery Plan for Baltic Harbour Porpoises (Jastarnia Plan). 8th Meeting of the Parties to ASCOBANS Helsinki, Finland, 30 August - 1 September 2016.: 94 S.
- Börjesson, P. & Read, A. J. (2003): Variation in timing of conception between populations of the harbor porpoise. *Journal of Mammalogy* 84(3): 948–955.
- Hasselmeier, I., Abt, K. F., Adelung, D. & Siebert, U. (2004): Stranding patterns of harbour porpoises (*Phocoena phocoena*) in the German North and Baltic Seas, when does the birth period occur? *Journal of Cetacean Research and Management* 6 (3): 259–263.
- Lockyer, C. & Kinze, C. C. (2003): Status, ecology and life history of harbor porpoises (*Phocoena phocoena*) in Danish waters. *NAMMCO Scientific Publications* 5: 143–176.
- Strehse, J. S., Appel, D., Geist, C., Martin, H.-J. & Maser, E. (2017). Biomonitoring of 2,4,6-trinitrotoluene and degradation products in the marine environment with transplanted blue mussels (*M. edulis*). *Toxicology* 390: 117–123.