

ICES Special Request Advice on
EU request on emergency measures to
prevent bycatch of Baltic Proper harbour
porpoise (*Phocoena phocoena*)

ASCOBANS Jastarnia Group 16

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What is an emergency measure?

Common Fisheries Policy (EU Reg 1380/2013) Article 12: **Commission measures in case of a serious threat to marine biological resources**

1. “On duly justified imperative grounds of urgency relating to a serious threat to the conservation of marine biological resources or to the marine ecosystem based on evidence, the Commission, at the reasoned request of a Member State or on its own initiative, may, in order to alleviate that threat, adopt immediately applicable implementing acts applicable for a maximum period of six months”
2. If initiated by a MS, other MS may submit comments within 7 working days, and the EC shall take a decision within 15 working days.
3. Can be extended for another maximum six months before the expiry of the initial period.

Overview of process

27 NGOs

- **9 July 2019: Letter to EC with request to**
- Apply emergency measures to mitigate bycatches of common dolphins in the Bay of Biscay and Baltic Proper harbour porpoises

EC

- **Special Request to ICES to**
- Review current status and threats; Evaluate whether NGO measures are necessary and appropriate
- If inappropriate, advice alternative measures

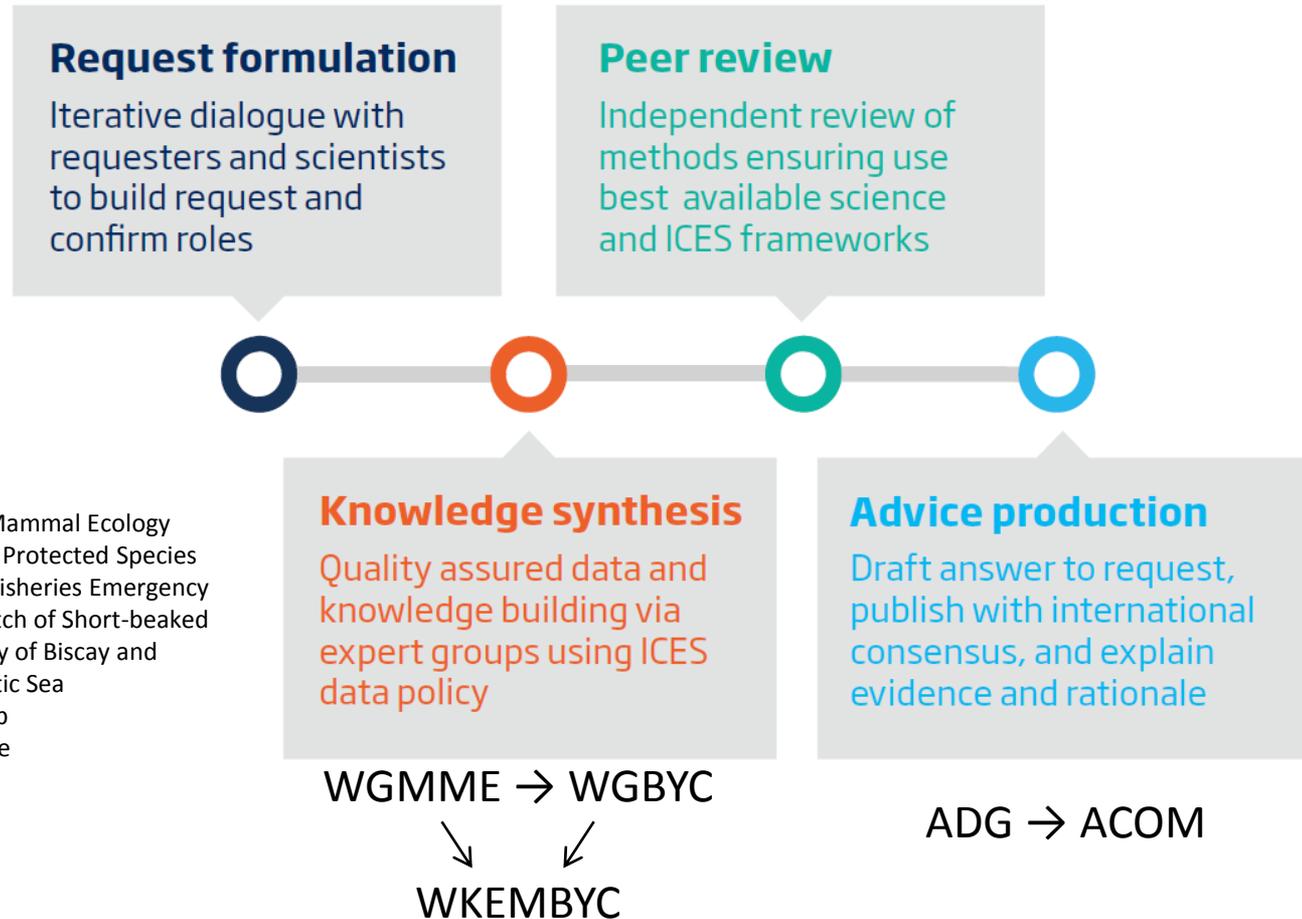
ICES

- **26 May 2020: ICES Special Request Advice to EC on**
- Emergency measures to prevent bycatch of common dolphin in the Northeast Atlantic and Baltic Proper harbour porpoise

EC



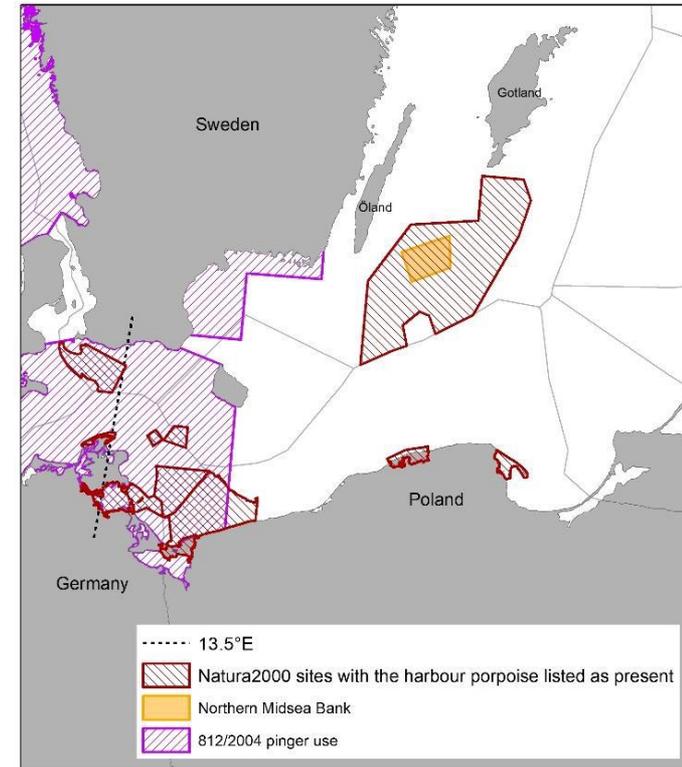
Framework of ICES advisory process



- WGMME = WG on Marine Mammal Ecology
- WGBYC = WG on Bycatch of Protected Species
- WKEMBYC = Workshop on Fisheries Emergency Measures to Minimize Bycatch of Short-beaked Common Dolphins in the Bay of Biscay and Harbour Porpoise in the Baltic Sea
- ADG = Advise Drafting Group
- ACOM = Advisory Committee

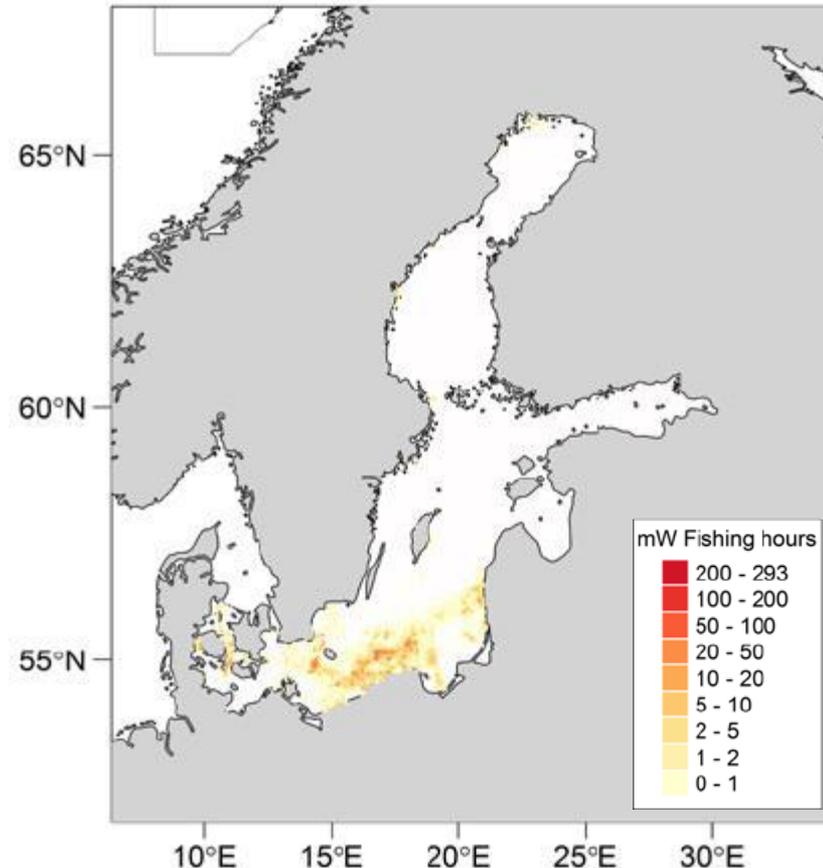
NGO proposal: bycatch reduction

- Close the Northern Midsea Bank for all fisheries
- Between 13.5°E and 60°N:
 - Close all Natura2000 sites with HP listed as present for gillnet fisheries
 - Mandatory pinger use on all gillnets outside Natura2000 sites



NGO proposal: monitoring

- Accurate recording of fishing effort and gear type used
- Dedicated electronic monitoring of all gillnet vessels in the region
- Monitoring and adaptive management/mitigation measures of gillnet fisheries



DGMARE Special Request to ICES *re* HP

Concerning harbour porpoise in the Baltic Sea, ICES is requested, on the basis of material provided in Annex 2 and any other available relevant information, to:

- Step 1:
 - **review the current conservation status and threats to the population**, including the threat due to commercial fisheries by-catches, taking account of any further relevant information, including the new material provided in Annex 2.
 - **evaluate whether the measures described in Annex 2 are necessary and appropriate**, in the context of EU law, in particular CPF (EU Reg 1380/2013), Technical measures (EU Reg 1241/2019) and HD (Council Directive 92/43/EEC).
- Step 2: **if evaluated measures are deemed inappropriate, to advise on any alternative measure that could be used to ensure a satisfactory conservation status of this stock**, in the context of EU law as above.

ICES WGMME ToR E

Address the special request from EU on emergency measures bycatch Northeast Atlantic by:

- i. Evaluating current conservation population status and pressures and threats to harbour porpoises in the Baltic Sea and common dolphins in the Bay of Biscay.
- ii. Evaluating whether the described conservation measures within the request are appropriate.

Documentation available in the the WKEMBYC (2020) report

WGMME: AU, distribution, status

- Separate management unit
- Propose other seasonal borders than NGOs:
 - South-west, May-Oct: Carlén et al. (2018) border; Nov-Apr: 13°E
 - North, year round: Line from 60.5°N on SE coast to 61°N on FI coast
- Northern Midsea Bank of outmost importance for the population
- IUCN and HELCOM: Critically Endangered (CR), ASCOBANS: 'of particular concern', HD status: U2 (unfavourable-bad)
- Population estimate 497 (95% CI 80-1,091)

WGMME: threats and pressures

High threats - evidence or strong likelihood of negative population effects mediated through effects on individual mortality, health and/or reproduction:

- Bycatches
- Contaminants
- Seismic surveys, military sonar, explosions

Bycatches and bycatch limit:

- $\geq 97\%$ of bycatches occur in static nets
- Strandings from PL and SE indicate min 5-10 bycatches/year = 1-2% of pop estimate
- IMR-NAMMCO PBR mortality limit 0.7 animals/year

ICES WGMME (2019) Threat matrix

Baltic Sea		HARBOUR PORPOISE
Contaminants		H
Nutrient enrichment		L
Microplastics		Risk of conta
Habitat loss		L
Habitat degradation		M
Litter (including plastics and discarded fishing gear)		L
Underwater noise	Military Sonar	H
	Seismic surveys	H
	Pile-driving	M
	Explosions	H
	Shipping	M
Barrier to species movement (offshore windfarm, wave or tidal device arrays)		L
Death or injury by collision	Death or injury by collision (with ships)	L
	Death or injury by collision (with tidal devices)	Ti
Introduction of microbial pathogens		L
Removal of target and non-target species (prey depletion)		M
Removal of non-target species (marine mammal bycatch)		H
Disturbance (e.g. wildlife watching)		L
Deliberate killing + hunting		Does not take place within the region

WGMME: conclusions

- To reach PBR mortality limit, bycatches must be reduced to <1 animal/year
- Pinger reduce but do not eliminate bycatches
- To reach the PBR limit, all fisheries with static nets within the seasonal distribution ranges of the Baltic Proper HP must be closed



KKaminska

WGMME: further recommendations

Details omitted here but presented for final ICES Advice

- Baltic-wide optimized national acoustic monitoring
- Repeated large-scale population surveys
- Collection, necropsy and sampling of stranded and bycaught animals for studies of health, reproductive parameters, environmental pollutants, and spatio-temporal distribution pattern (genetic analyses)



ICES WGBYC ToRs

Similarly as WGMME:

- Evaluating pressures and threats due to commercial fisheries by-catches to harbor porpoises in the Baltic Sea and common dolphins in the Bay of Biscay.
- Evaluating whether the described conservation measures within the request are appropriate.

Documentation available in the the WKEMBYC (2020) report

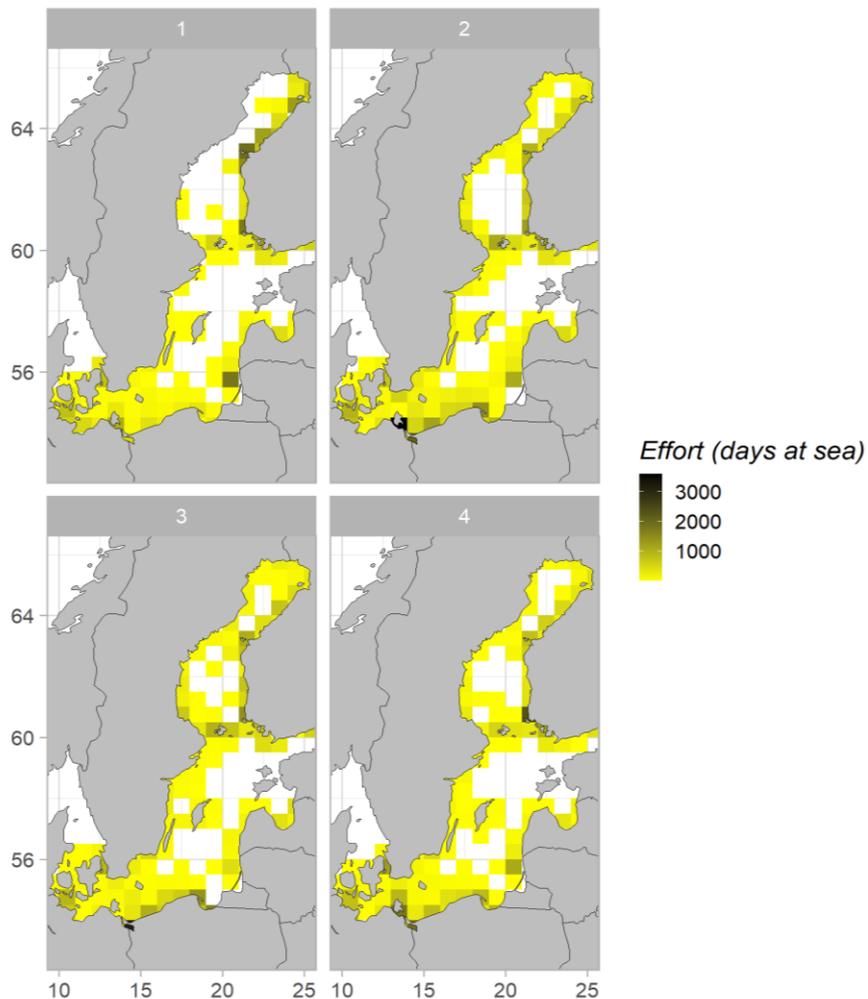


Baltic Sea harbour porpoise – evaluation of bycatch - fishing effort – RDB data

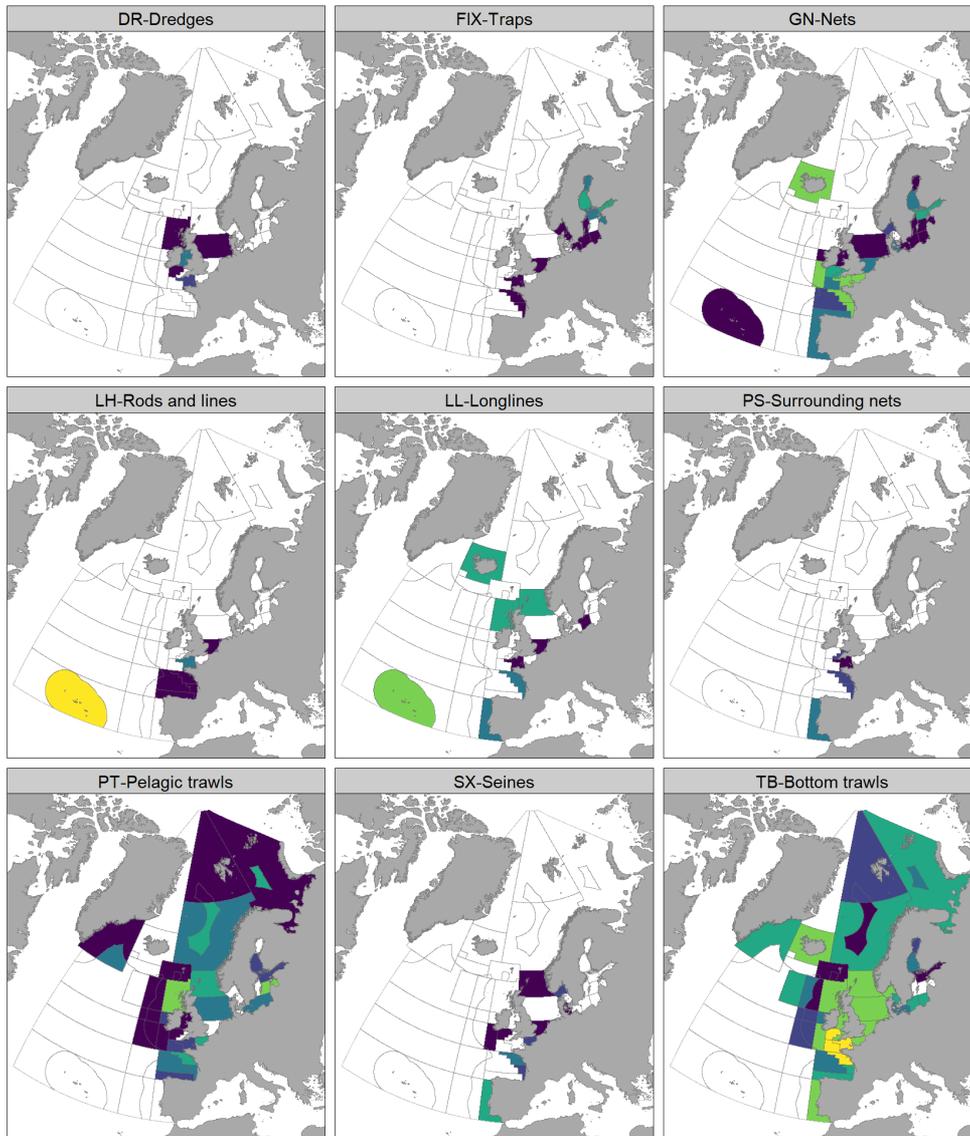
RDB – ICES Regional Database - is a regionally coordinated database platform for fisheries assessments.

- In the Baltic Sea (ICES Areas 24 – 32), fishing effort is dominated by GNS. In 2017, up to 75% of fishing effort (in DaS) from the ICES RDB was GNS;
- Analyses of WGBYC monitoring data for the North Sea (ICES division 3a, 4, 7e and d), the highest bycatch rates for harbour porpoise occurred in gillnet or trammel net fisheries (GNS or GTR) in all regions since 2005;
- Harbour porpoises are also caught in bottom and midwater otter trawls (OTB, OTT and OTM) as well as in midwater pair trawls (PTM);
- Gillnet fishing effort is mainly concentrated in the southern Baltic, and around the German and Polish coasts. Overall, in the Baltic, gillnet fishing effort has decreased by 44% over the past 10 years.

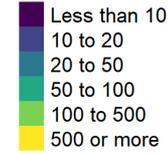
Distribution of fishing effort GNS, GTR in the Baltic Sea 2018 and total observed effort 2006-2018 (division 24)



Gear	Métier Level4	Total DaS 2006 – 2018
Stationary uncovered pound nets	FPN	30
Pots and traps	FPO	121
Fyke nets	FYK	34
Set gillnet	GNS	1126
Trammel net	GTR	10
Drifting longlines	LLD	255
Set longlines	LLS	7
Bottom otter trawl	OTB	1031
Midwater otter trawl	OTM	4569
Multi-rig otter trawl	OTT	3
Bottom pair trawl	PTB	10
Midwater pair trawl	PTM	55
Anchored seine	SDN	6
Fly shooting seine	SSC	1
	Total	7258



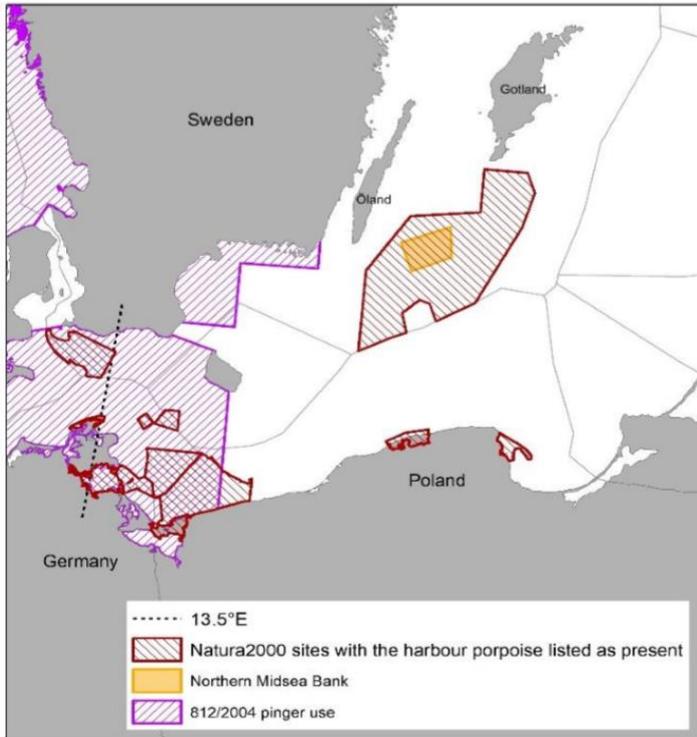
Observer effort
(days at sea)



Observer effort in Days at Sea

Dedicated and non-dedicated
bycatch monitoring by the
observers (in 2018 - RDB data)

Evaluation of measures



General conclusions:

- The proposed emergency measures aiming at a reduction of bycatch numbers **are not sufficient** for the protection and recovery of the Baltic Proper harbour porpoise population;
- Emergency measures **are limited in time**. Thus, immediately following emergency measures, long-term conservation measures will be needed to improve the status of the population.

Further conclusions

1. The most important Natura 2000 sites for harbour porpoise : *Hoburgs Bank och midsjöbankarna; Pommersche Bucht-Rönnebank; Wolin i Uznam and Ostoja na Zatoce Pomorskiej and Zatoka Pucka i Półwysep Helski;*
2. Closure of fisheries in these areas would reduce bycatch risk but it may not contribute to a significant improvement of the population status due to low fishing effort in most of these sites;
3. Other high porpoise density areas, out with Natura2000 sites that coincide with higher gillnet fishing effort were identified (SAMBAH);
4. Pingers have been shown to reduce bycatch rates in gillnets by 50-80% but not eliminate it;
5. Interconnected of small Natura 2000 areas in German waters with an area in between (not designated for harbour porpoise) would form a rather large area within which measures could be taken that will likely have a positive effect on the population.

WKEMBYC ToRs

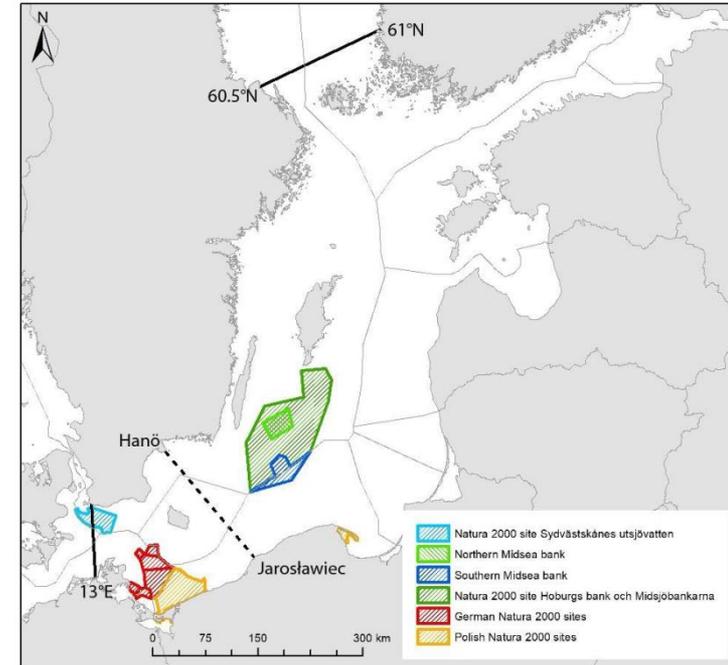
- **Assess, and if applicable, propose alternative appropriate emergency measures** that could be used to ensure a satisfactory conservation status of harbour porpoises in the Baltic Sea and common dolphins in the Bay of Biscay;
- **Suggest emergency measures** that are necessary to ensure a satisfactory conservation status of harbour porpoises in the Baltic Sea and common dolphins in the Bay of Biscay.

WGMME and WGBYC reports including knowledge synthesis, were used during the discussions.

WKEMBYC: proposed appropriate emergency measures

Major changes to NGO proposal:

- Adopted the seasonal ranges proposed by WGMME (for both pingers and closures)
- Opened for use of pots, traps etc at Northern Midsea Bank
- Added closure of Southern Midsea Bank
- Added closure of German N2000 site under Birds Directive to form a big cluster
- No closure of one small coastal Polish N2000 site (Ostoja Słowińska, PLH220023)
- Opened for pinger use in inner part of Puck Bay N2000 site
- Added several monitoring recommendations



Additional information complied by WKEMBYC for Baltic Proper HP – report annexes

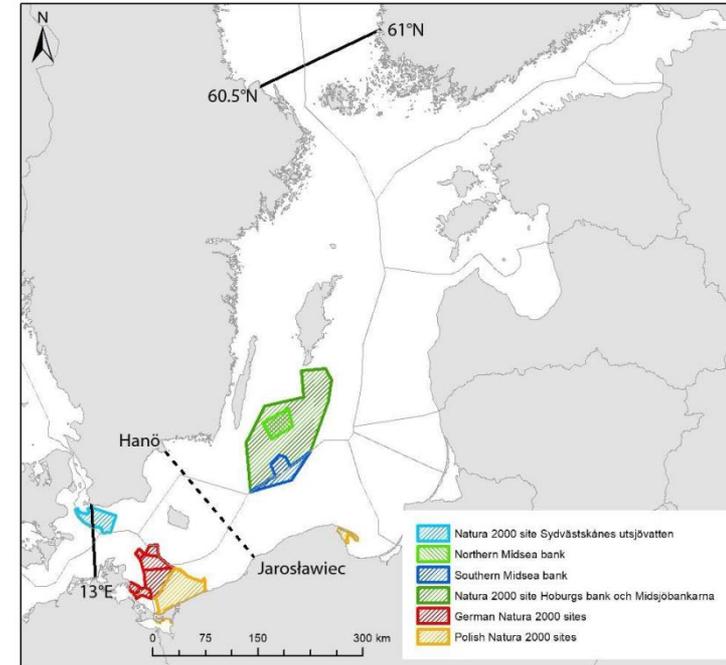
- Annex 3: Table of pros and cons of bycatch measures
- Annex 4: Bycatch risk maps (Swedish waters)
- Annex 5: Information on acoustics (Puck Bay, Poland)
- Annex 8: Rationale for closing a cluster of German and Polish Natura 2000 sites for static nets fisheries during November-April to reduce bycatches of Baltic Proper harbour porpoises
- Annex 10: Overview of pressures, historic population size and range, current status of implementation of the Jastarnia Plan

ICES Special Request Advice

- Emergency measures (CFP Art 12) can only be applied for 6 + 6 months, *however*
- Positive effects on small cetaceans can only be achieved if applied continuously for a long time ⇒ the ICES Advice considers the long-term perspective.
- Same conclusions on status and threats as WGMME, WGBYC, WKEMBYC
- Provide a case-by-case evaluation of NGO proposed measures
- Propose a set of five measures, with rationales, for immediate reduction of bycatches, *however*
- To meet a management objective of achieving bycatches below the PBR mortality limit (<0.7 animals/year), all fisheries of concern should be closed (static nets and trawls)

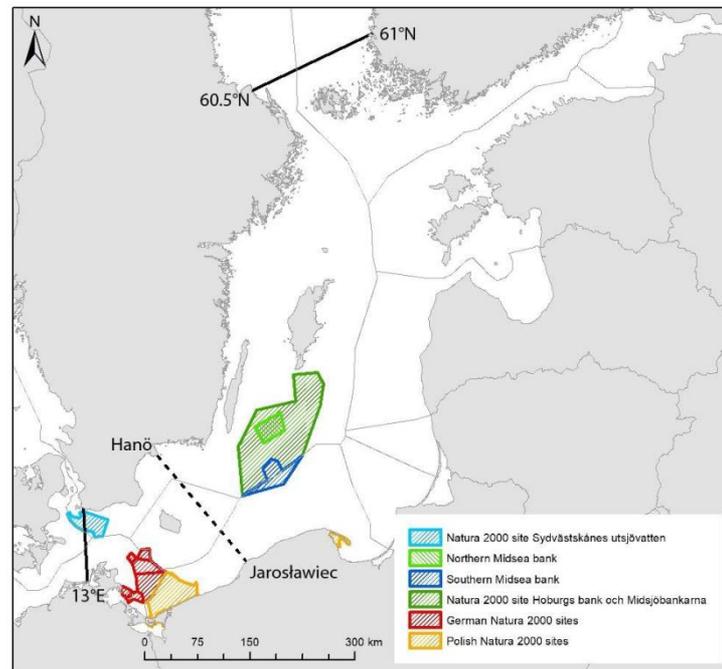
Advised bycatch measure 1

- 1. Closure of the Northern Midsea Bank to all fisheries, with the exception of passive gears proven not to bycatch harbour porpoise (this includes pots, traps, and longlines, but excludes static nets equipped with pingers or other acoustic devices).**



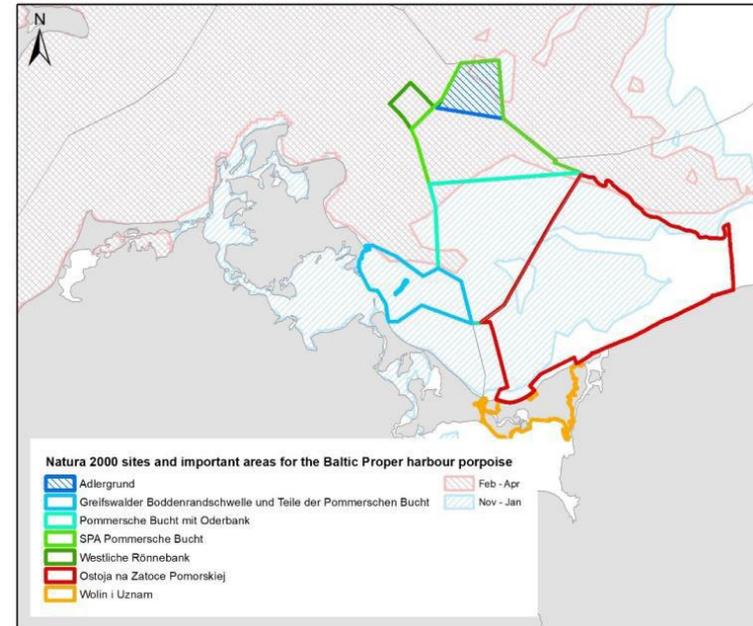
Advised bycatch measure 2

- 2a. **Closure** of the Natura 2000 site “Hoburgs bank och Midsjöbankarna” (SE0330308) **for fishing with static nets.**
- 2b. **Closure** of the Southern Midsea Bank **for fishing with static nets.**



Advised bycatch measure 3

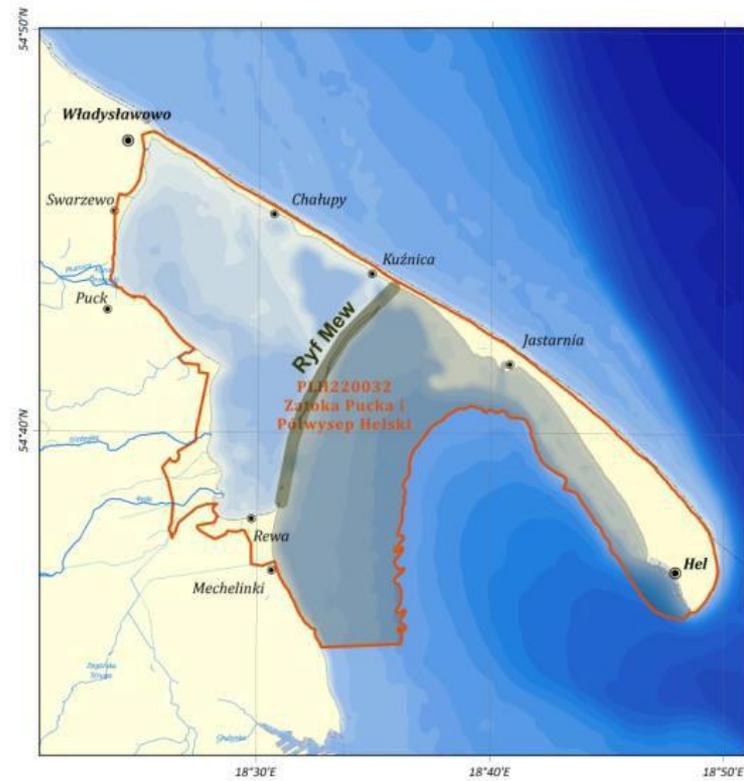
3. **Closure** of the Natura 2000 sites Adlergrund (DE1251301), Westliche Rönnebank (DE1249301), Pommersche Bucht mit Oderbank (DE1652301), Greifswalder Boddenrandschwelle und Teile der Pommerschen Bucht (DE1749302), Ostoja na Zatoce Pomorskiej (PLH990002), Wolin i Uznam (PLH320019), and the SPA site Pommersche Bucht (DE1552401) **for fishing with static nets during November–January.**



Advised bycatch measure 4

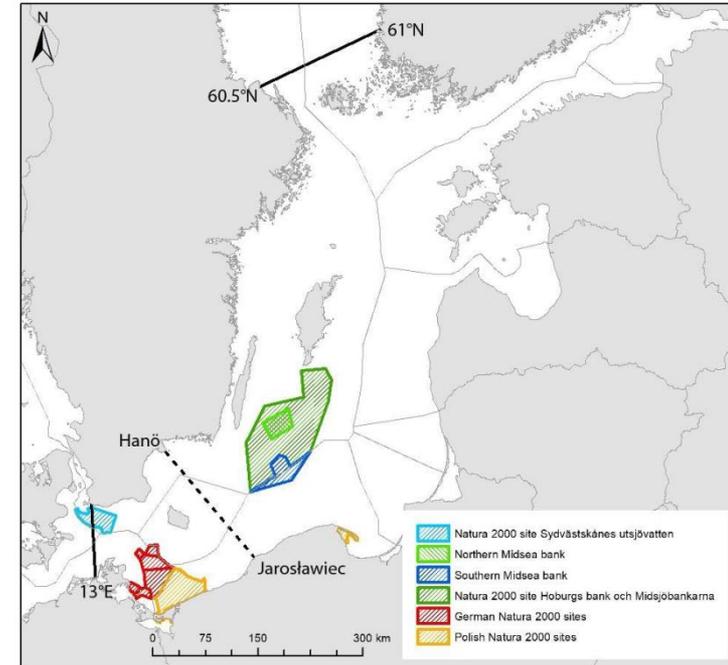
- Obligatory use of pingers*** on static nets in the area west of the sandbank Ryf Mew within the Zatoka Pucka i Półwysep Helski Natura 2000 site (PLH220032), with the **concurrent closure of static net fisheries** in the area east of the sandbank Ryf Mew within the Zatoka Pucka i Półwysep Helski Natura 2000 site.

*Only pingers which have been thoroughly tested and demonstrated to unambiguously reduce bycatch rates of harbour porpoise should be used



Advised bycatch measure 5

5. **Prohibit the use of static nets without the simultaneous use of pingers** during May–October in EU waters between the southwestern management border, proposed by Carlén et al. (2018) (a line drawn between the island of Hanö, Sweden, and Jarosławiec near Słupsk, Poland) and a line drawn between 60.5°N at the Swedish coast and 61°N at the Finnish coast; and during November–April in EU waters between a line drawn along east of longitude 13°E between the Swedish and German coasts, and a line drawn between 60.5°N at the Swedish coast and 61°N at the Finnish coast, with the exception of Natura 2000 sites and other areas, where static net fisheries have been closed.



Monitoring recommendations 1

To be implemented in parallel with bycatch reduction measures:

1. Accurate spatio-temporal recording of fishing effort (in appropriate metrics on métiers used by all vessels) – for evaluation of bycatch risk and effectiveness of implemented measures
2. Increased dedicated monitoring of bycatch of PETS
3. Monitoring of harbour porpoise occurrence – to provide data on response to pinger use in key areas
4. Compliance control of mitigation measures (pinger use) – use and functionality

Monitoring recommendations 2

Of the Baltic Proper HP:

- 1. Long-term acoustic monitoring in key areas** for the Baltic Proper harbour porpoise population. Indicative of changes in abundance and/or distribution on the population level.
- 2. Repeated large-scale acoustic surveys** of harbour porpoise. At least every 12 years, for estimating trends in population abundance and distribution.
- 3. Sample and necropsy of stranded and bycaught** harbour porpoises. Indicative of population status, improve the scientific basis for robust estimates of anthropogenic mortality limits (east of 13°E), and genetic sampling improve knowledge on the spatio-temporal distribution range (east/south of the Darss and Limhamn ridges).

ICES also notes that development and implementation of fishing gears that have a low bycatch risk for harbour porpoises deserves a high priority.

WKEMBYC report and ICES Advice

<https://www.ices.dk/publications/library/Pages/default.aspx#k=wkembyc>

