

# **Annual report on implementing the Council Regulation (EC) 812/2004<sup>1</sup> - 2018**

Member State: **Poland**

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<sup>1</sup> Council Regulation (EC) No 812/2004 of 26 April 2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98.

## **Abstract**

In 2018, 300 pingers, so-called BANANA pingers, were purchased by the WWF Poland Foundation and handed on by the Hel Marine Station of the Institute of Oceanography at the University of Gdańsk to ship-owners of fishing vessels under 12 m and fishing in the region of the western coast of Poland (Pomeranian Bay).

On 1<sup>st</sup> of January 2019, the structure of the Sea Fisheries Inspectorates was also modified. The General Sea Fisheries Inspectorate, located in Słupsk, was established, so were two branch centres in Szczecin and Gdynia (until the end of 2018, three District Sea Fishery Inspectorates in Szczecin, Słupsk and Gdynia were under operation). During a 2018 inspection of fishing vessels, carried out by sea fisheries inspectors supervising commercial fisheries in the Polish part of the ICES subarea 24 (where the use of pingers is required), no lack of pingers was found.

In 2018, the Polish sea fisheries administration did not also receive any information from abroad about violations of the provisions of the Regulation 812/2004 by Polish fishing vessels.

In 2018, the Cetacean Bycatch Monitoring Programme was continued. Since 2015, it has been a part of the National Fishery Data Collection Programme (NPCFD). The observations oriented towards any potential bycatch of cetaceans were conducted based only on cutters fishing by means of towed gear. In 2018, when compared to 2017, the number of commercial trips of cutters using GNS gears was significantly reduced. In total, in 2018, the observations were conducted on board of 18 vessels over 15 m and operating from 5 ports. As a part of implementing the Programme, the observers were at sea for 65 days, including 60 days on board of vessels fishing by means of pelagic trawls (OTM) and 5 days on board of a vessel fishing by means of a bottom otter trawl (OTB). It was not possible to make any observations on board of fishing vessels covered by the Regulation and fishing by means of bottom-set gillnets (GNS).

During each of those trips, the objective of observations were potential cases of cetaceans, other marine mammals, sea birds and protected fish species, such as twait shad (*Alosa fallax*) or Atlantic sturgeon (*Acipenser oxyrinchus*) having been caught or entangled in nets.

During the observations conducted in 2018, no case of bycatch of any marine mammal or bird was found and also no bycatch of protected fish species was observed.

## **Acoustic Deterrent Devices**

1. General information.

Pursuant to the Council Regulation (EC) 812/2004, Poland is obliged to use cetacean deterrent devices, on board of vessels equal to or exceeding 12 m, with the use of bottom-set gillnets or entangling nets, within the boundaries of the ICES subarea 24.

In 2008, the Ministry of Agriculture and Rural Development purchased 500 AQUATEC AQUAmark 100 pingers and handed them on to the ship-owners of fishing vessels. However, those pingers are already worn out and are not included into this report.

Also, in 2018, the WWF Poland Foundation, as part of the project “Protection of marine mammals and birds and their habitats”, co-financed by the European Union from the Cohesion Fund resources under the “Infrastructure and Environment” Operational Programme, purchased 300 pingers (so-called BANANA pingers made by Fishtec Marine, with a replaceable battery) for Polish fishing vessels, under 12 m, for the additional protection of porpoises from being bycaught. The Hel Marine Station of the Institute of Oceanography at the University of Gdańsk, in cooperation with WWF, as part of that task, offered the free provision of pingers to fishermen. So far, the Marine Station has provided 160 pingers to fishermen from 18 coastal vessels from the harbours located west of Kołobrzeg. Pingers are to be tested by fishermen in terms of their operation and should be used to avoid bycatches of porpoises. The project was addressed, in particular, to fishermen fishing by means of GNS gear in the area of the Woliński National Park (western coast of Poland).

### 1.1. Description of the fleet equipped with pingers.

No data for 2018.

## 2. Acoustic deterrent devices Articles 2 and 3 of the Council Regulation (EC) 812/2004.

### 2.1 Protective measures

No data for 2018. No other protective measures are applied.

## 3. Monitoring and assessment.

### 3.1. Monitoring and assessment of effects of using pingers.

Due to the very low population of cetaceans in areas used for fishing by Polish vessels on the Baltic Sea, it was not possible to make appropriate comparisons, thus, such an assessment was not feasible .

### 3.2. Report on the specification of control activities at the time of using pingers by fishermen (Article 2.4.)

The use of pingers by vessels equal to or over 12 m and holding a permit to use bottom-set gillnets, was controlled by the Regional Sea Fisheries Inspectorate in Szczecin, as well as by foreign control services, during fishing in the ICES subarea 24, where, pursuant to Annex I to the Regulation 812/2004, the use of pingers on bottom-set gillnets and entangling nets is mandatory. Pingers owned by Polish vessels fishing in the ICES subarea 24 are used by these vessels in the ICES subareas 25 and 26 in the case of using the same fishing gear as in the ICES subarea 24.

Observations on the use of cetacean deterrent devices take place during the inspection of sea fisheries inspectors concerning catches in ICES 24 subarea. They are carried out visually by checking the presence of pingers on the nets, upon the retrieval of the nets, or during the control of the nets already onboard the vessel. In addition, when inspecting in ports the fishing vessels which are required to use pingers during a trip, inspectors verify if the deterrent devices are on ship's side (as a rule they are already disconnected from the fishing nets).

It needs to be stressed that due to the reduced number of commercial trips of fishing vessels equal to or over 12 m and fishing by means of GNS gear, in 2018, when compared to 2017, the level of fishing effort, to which the obligation of using pingers applies, was also significantly reduced.

### 3.3. Derogation

It does not apply to Poland.

### 3.4 Holistic assessment.

In the case of the South Baltic area, where, based on the results of the SAMBAH project<sup>2</sup> and of the “Pilot monitoring of sea species and habitats” which was implemented in the Polish Sea Areas in the years 2015-2018, the relatively low population of porpoises was found, it is exceptionally difficult to assess the effectiveness of using pingers.

Fishing vessel owners are asking about the possibility of purchasing pingers, and the Ministry of Maritime Economy and Inland Navigation expressed its willingness to act as an intermediary and to assist in their purchase.

Undoubtedly, important support for the fishing vessels' ship-owners in the individual purchase of pingers should be a possibility of applying for financing the purchase of these devices from the EU funds, as part of the European Maritime and Fisheries Fund for 2014-2020 and for covering this operation with financing under the future programming period. In Poland, it is possible to finance the purchase of cetacean deterring devices from the Polish Operational Programme, in the amount from 50% to 100% of the price of devices.

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<sup>2</sup> Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise

## Observers' Scheme

4. General information about the implementation of Articles 4 and 5 of the Council Regulation (EC) 812/2004.

The Cetacean Bycatch Monitoring Programme was conducted, just like in previous years, by the National Marine Fisheries Research Institute in Gdynia. Since 2015, the programme has been conducted as part of the National Fishery Data Collection Programme.

In general, in 2018 the observations were conducted on board of 18 vessels over 15 m and operating from 5 ports (Table 1). As part of implementing the Scheme, the observers were at sea for 65 days, including 60 days on board of vessels fishing by means of pelagic trawls (OTM) and 5 days on board of a vessel fishing by means of bottom otter trawls. It was not possible to make any observations on fishing vessels covered by the Regulation and fishing by means of bottom-set gillnets (GNS). In 2018, when compared to 2017, the number of commercial trips of these cutters fishing by means of GNS gear was definitely reduced. For example, in the ICES subarea 26, the number of such trips was reduced by more than 50%. The lack of observations on board of cutters fishing by means of cod fishing nets (GNS) had several reasons, the most important being:

- Small number of vessels using bottom-set gillnets (GNS) – 18 cutters;
- Ship owners' disagreement for participation of the observer in a trip due to the requirements of the Safety Certificate;
- Structural modifications in vessels geared towards fishing by means of pelagic trawls;
- Temporary suspension of putting to sea in the case of vessels which chose to fish by means of nets.

During trips, the observations were conducted in terms of the presence and bycatch of cetaceans and other marine mammals. Moreover, the Cetacean Bycatch Monitoring Programme included the observation of bycatching sea birds and endangered fish species, such as twait shad (*Alosa fallax*) or fish originating from reintroduction programmes, such as Atlantic sturgeon (*Acipenser oxyrinchus*).

On any of 60 monitored days of fishing by means of pelagic trawls and 5 days of monitoring fishing by means of bottom otter trawls, **no presence of cetaceans, other marine mammals or birds in nets was found**. Also, no protected fish species such as twait shad (*Alosa fallax*) or Atlantic sturgeon (*Acipenser oxyrinchus*) were found.

The complete report on the Cetacean Bycatch Monitoring Programme in 2018 is enclosed.

## 5. Monitoring.

### 5.1. Description of fishing effort and the presence of observers during fishing by means of towed gear.

Table 3 Description of fishing effort and observer in towed gear

Fleet segment (refer to code in Table 1)	ICES subarea	Total fishing effort					Total observer effort achieved					Coverage % days at sea
		No of vessels	No of trips	Days at sea	No of hauls	Average towing time (hours/day)	No of vessels	No of trips	Days at sea	No of hauls	Average towing time (hours/day)	
OTM	24	19	268	665			3	3	9			1.35%
OTM	25	72	1521	3667			12	13	32			0.87%
OTM	26	65	3347	4086			16	16	19			0.47%
OTM	27	1	1	3			0	0	0			0.00%
OTM	28	3	62	113			0	0	0			0.00%
OTM	29	2	2	11			0	0	0			0.00%
OTM	31	0	0	0								

### 5.2 Description of fishing effort and the presence of observers during fishing by means of static gear.

Table 4 Description of fishing effort and observer in static gear

Fleet segment (refer to code in Table 1)	ICES subarea	Total fishing effort					Total observer effort achieved					Coverage % days at sea
		No of vessels	No of trips	Days at sea	Total length of nets (km)	Average soak time (hours/day)	No of vessels	No of trips	Days at sea	Total length of nets (km)	Average soak time (hours/day)	
GNS	24	2	3	13			0	0	0			0.00%
GNS	25	8	97	212			0	0	0			0.00%
GNS	26	6	41	78			0	0	0			0.00%

## 6. Estimation of bycatches.

### 6.1. Share of bycatches by fleet segment and target species caught

Table 5 Bycatch by species and fleet segment

Fleet segment (refer to code in Table 1)	ICES Subarea	Main target species	Pinger in use? (yes/no)	Cetacean species bycaught	Number of incidens	Number of specimens
GNS	25	Cod	no	no	0	0
GNS	26	Cod	no	no	0	0
OTM	24	Herring, sprat	no	no	0	0
OTM	25	Herring, sprat	no	no	0	0
OTM	26	Herring, sprat	no	no	0	0

### 6.2. Observed bycatch of cetaceans by fishing gear

Tab. 6 Bycatch rate by fleet segment and target species

Fleet segment or other stratum	Cetacean species (scientific name)	Bycatch expressed per unit of fishing effort *	Total bycatch estimate	CV percent
GNS (ICES 25-26)	no	0	0	
OTM (ICES 24-26)	no	0	0	

### Recording of Bycatches

Since the beginning of the Cetacean Bycatch Monitoring Programme, i.e. since 2006, no bycatch of a cetacean during the observers' programme has been recorded. On the other hand, bycatch of protected fish species (*Alosa sp.*), birds and seals has been recorded.

#### 7. and 8. Discussion and conclusions.

In the situation of Poland, when no cetaceans bycatch was observed during conducting the pilot programme in the years 2006-2009 and continuing the monitoring programme in the years 2010-2018, it was not possible to obtain a coefficient of variation not exceeding 0.3 and resulting from Annex III to the Regulation EC 812/2004 as it would require monitoring of about 80% of fishing effort.

However, taking into account the reform of the system of fisheries data collection (Data Collection Framework) and its adaptation to the requirements of the Common Fisheries Policy, as well as taking into account the provisions of the new Act on Maritime Fisheries of 19 December 2014 (consolidated text Journal of Laws 2018.514), in 2015 the Cetacean Bycatch Monitoring Programme was included in the National Fishery Data Collection Programme.

In addition, pursuant to the above-mentioned Act on Maritime Fisheries, bycatches of marine mammals must also be recorded in logbooks, while the regulation on dimensions and protected seasons of 2016 (Journal of Laws 2016.1494) also requires the bycatch of seabirds to be recorded in the logbook. This obligation was maintained after Regulation was amended in 2017 (Journal of Laws 2017.1361) and in 2018 (Journal of Laws 2018, item 674).

Also, on 12 July 2016, the European Commission issued the Commission Implementing Decision (EU) 2016/1251 of 12 July 2016 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019. The above-mentioned Decision obliges the Member States to collect „*data to assess the impact of Union fisheries on the marine ecosystem in Union waters and outside Union waters*”. The Commission Decision was complemented by the Regulation 2017/1004<sup>3</sup>. It should involve the development of a new methodology and scope of monitoring of bycatches of both cetaceans and other protected species of sea organisms and

<sup>3</sup> Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008.

sea birds in the EU countries, specific to the individual sea regions, also for the purposes of end users of data, including marine conventions (such as HELCOM or OSPAR) and the Marine Strategy Framework Directive<sup>4</sup>.

## 9. Annex

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<sup>4</sup> Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)



# Report on the implementation of the Cetacean Bycatch Monitoring Programme in 2018

(subject: NP-18/MOR)

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Gdynia, February 2019



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## **1.Introduction**

Monitoring bycatches of cetaceans results from implementing the provisions of the Council Regulation (EC) No 812/2004 of 26 April 2004 (hereinafter referred to as the Regulation 812/2004) laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98 (OJ EU L of 30.04.2004, p. 12 as amended), according to which Poland has been obliged to implement the Observers' Scheme as from 1 January 2006.

The work under the Programme is planned and settled annually, pursuant to Article 6 of the Regulation 812/2004 and provided to the Commission by 1 June of the following year.

In 2018, the observations of bycatches of cetaceans were conducted as part of the Multiannual National Fishery Data Collection Programme from April to December 2018. In accordance with the objectives of the Regulation 812/2004, the observations of bycatches of cetaceans should be conducted on board of cutters over 15 m and fishing by means of bottom-set gillnets (GNS) and pelagic trawls (OTM). In 2018, it was possible to make observations based on cutters fishing by means of pelagic trawls. In 2018, when compared to 2018, the number of commercial trips of these cutters fishing by means of GNS gear was definitely reduced. For example, in the ICES subarea 26, the number of such trips was reduced by more than 50%. The lack of observations on board of cutters fishing by means of cod fishing nets (GNS) had several reasons, the most important being:

- Small number of vessels using bottom-set gillnets (GNS) – 18 cutters;
- Ship owners' disagreement for participation of the observer in a trip due to the requirements of the Safety Certificate;
- Modifications of vessels towards fishing by means of towed gear;
- Resignation from fishing by means of nets.

## **2. Material and methods**

The observations on board of fishing cutters were conducted by the National Marine Fisheries Research Institute staff who had been trained and familiarised with the research methodology in terms of monitoring bycatches of cetaceans (Annex 1). Most observers, listed

in Annex, participated in trips in previous years under the Cetacean Bycatch Monitoring Programme.

In general, in 2018, the observations were conducted on board of 18 vessels over 15 m and operating from 5 ports (Table 1). As part of implementing the Programme, the observers were at sea for 65 days, including 60 days on board of vessels fishing by means of pelagic trawls (OTM) and 5 days on board of a vessel fishing by means of bottom otter trawls (OTB). It was not possible to make any observations on board of fishing vessels covered by the Regulation and fishing by means of bottom-set gillnets (GNS).

Just like in the years 2012-2017, the number of days at sea was significantly different from the number of days on which the observations were conducted. This was related to the time of reaching a fishing ground by the vessel, the time of starting and finishing fishing and the time of return to the port. Therefore, the actual time of catch operations, in relation to the number of days at sea, was, respectively: for pelagic trawls – 73.3%, for bottom otter trawls 80% (Table 2). As the “days at sea” formula is used in Annex II, it has also been adopted for the duration of the observers' stay at sea. During each of those trips, the observations were conducted on any potential cases of cetaceans or other marine mammals either caught or entangled in nets.

Based on the trip reports presented by the observers, an analysis of observed fishing effort in relation to the fishing activity of the fleet meeting the criteria of the Regulation 812/2004 has been carried out. The data on the fishing fleet’s activity was presented based on the information received from the Fisheries Monitoring Centre (CMR) of 21 January 2019.

**Table 1. Number of monitored fishing days by vessels and type of fishing gear (and length of the vessel)**

Vessel/ICES subarea	OTM				OTB	
	24	25	26	Total	26	Total
DAR-10					3	3
DZI-85		7		7		
HEL-102			1	1		
HEL-112			3	3		
HEL-125		3	2	5		
HEL-150			4	4		
KOŁ-180		4		4		
KOŁ-206	2			2		
KOŁ-6	2			2		

KOŁ-8	2	1		3		
WłA-108		3		3		
WłA-11			1	1		
WłA-207			1	1		
WłA-250			1	1		
WłA-295			1	1		
WłA-311		2		2		
WłA-51			3	3		
WłA-71			1	1	1	1
<b>Total</b>	<b>6</b>	<b>20</b>	<b>18</b>	<b>44</b>	<b>4</b>	<b>4</b>

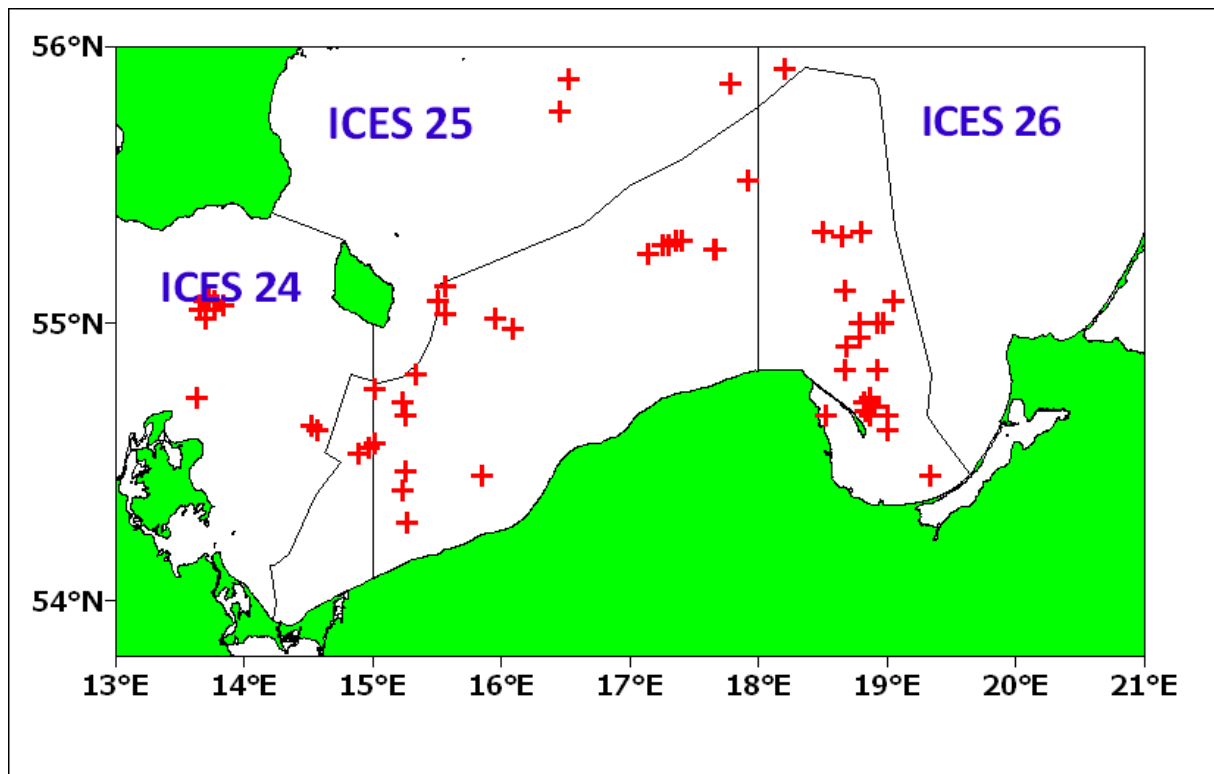
**Table 2. Percentage of fishing days in the number of trip days**

Type of fishing gear	Number of days at sea	Number of days with catches	Share of fishing days in the number of trip days
Pelagic trawls (OTM)	60	44	73.3%
Bottom otter trawl (OTB)	5	4	80.0%
<b>Total</b>	<b>65</b>	<b>48</b>	<b>73.8%</b>

### 3. Results

#### 3.1. Monitoring of fishing by means of pelagic trawls

Pursuant to Annex II to the Regulation 812/2004, monitoring of fishing by means of pelagic trawls should be carried out in the area of the Baltic Sea, south of 59°N, throughout the year, and north of 59°N only between 1 June and 30 September. In the ICES subareas 24-32, in 2018, Polish cutters of 15 m and more were fishing by means of pelagic trawls by 8.545 days (data on 21 January 2019). Fishing was carried out mainly in the subareas 25 and 26 where it lasted for 7.753 days (90.7%).



**Fig. 1. Observation sites of fishing by means of pelagic trawls in the ICES subareas 24-26 in 2018**

The observations were conducted in the ICES subareas 24-26. The total number of days, on which the observations were conducted, was 60 which accounted for 0.71% of the total number of days at sea in those subareas for all cutters of this type (Annex II).

Fishing sites (release position), during which the observations were conducted, were presented in Fig. 1, and the list of fishing operations is in Annex II.

**No bycatch of cetaceans or other marine mammals was observed on any of 60 days of monitoring of fishing by means of pelagic trawls.**

### 3.3. Monitoring of fishing by means of bottom otter trawls (OTB)

The observations of fishing using bottom otter trawls are not required pursuant to the Regulation 812/2004 while they were included in the Multiannual National Fishery Data Collection Programme. The time spent by the observers at sea during fishing by means of bottom otter trawls was 5 days, in which 4 days were dedicated to observing fishing (Fig. 2).

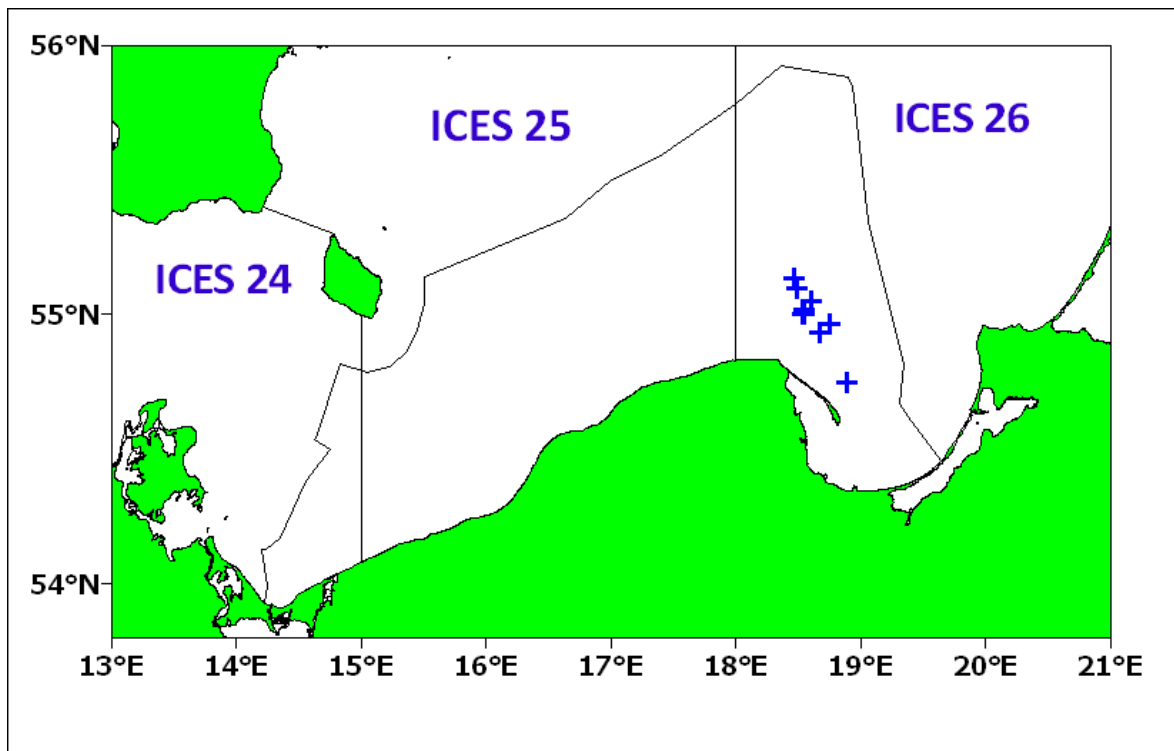


Fig. 3. Observation sites for fishing by means of bottom otter trawls (OTB) in 2018

**No bycatch of cetaceans or other marine mammals was observed on any of 5 days of monitoring of fishing by means of bottom otter trawls.**

#### 4. Conclusions

- During monitoring by the National Marine Fisheries Research Institute in 2018 (March-November) in relation to fishing by means of pelagic trawls and bottom otter trawls in the Baltic Sea, no case of a cetacean bycaught or entangled in nets has been found.
- During the Programme implementation, the observers also did not find the presence of protected fish in catches. Also, no marked fish were found.
- Since 2006, i.e. since the beginning of the implementation of the Cetacean Bycatch Monitoring Programme by the National Marine Fisheries Research Institute, regardless of the time, place and type of fishing gear, no bycatch of any cetacean has been found.

## Annex I

List of observers participating in the Cetacean Bycatch Monitoring Programme in 2018.

<b>Observer</b>	<b>Position</b>
Krzysztof Koszarowski	Specialist
Łukasz Giedroń	Specialist
Marcin Sułkowski	Specialist
Michał Zimak	Specialist
Paweł Rosa	Specialist
Władysław Gaweł	Specialist
Grzegorz Modrzejewski	Technical employee
Ireneusz Wybierała	Technical employee
Marcin Nowakowski	Technical employee
Stanisław Trella	Technical employee
Wojciech Deluga	Technical employee



## Annex II

The content consistent with point 4 of the recommendation of the International Council for the Exploration of the Sea – ICES “ACOM supplied format for National Reports for 812/2004”.

### 4. At sea observer scheme

#### Observer effort

**Table 3a.** Description of fishing effort and observer in static gear

Fleet segment (refer to code in Table 1)	ICES subarea	Total fishing effort					Total observer effort achieved					Coverage % days at sea
		No of vessels	No of trips	Days at sea	Total length of nets (km)	Average soak time (hours/day)	No of vessels	No of trips	Days at sea	Total length of nets (km)	Average soak time (hours/day)	
GNS	24	2	3	13			0	0	0			0.00%
GNS	25	8	97	212			0	0	0			0.00%
GNS	26	6	41	78			0	0	0			0.00%

**Table 3b.** Description of fishing effort and observer in towed gear

Fleet segment (refer to code in Table 1)	ICES subarea	Total fishing effort					Total observer effort achieved					Coverage % days at sea
		No of vessels	No of trips	Days at sea	No of hauls	Average towing time (hours/day)	No of vessels	No of trips	Days at sea	No of hauls	Average towing time (hours/day)	
OTM	24	19	268	665			3	3	9			1.35%
OTM	25	72	1521	3667			12	13	32			0.87%
OTM	26	65	3347	4086			16	16	19			0.47%
OTM	27	1	1	3			0	0	0			0.00%
OTM	28	3	62	113			0	0	0			0.00%
OTM	29	2	2	11			0	0	0			0.00%
OTM	31	0	0	0								

#### Recording of bycatch

During the observations conducted, no case of cetaceans entangled in fishing nets was found.

#### Results of the observer schemes

**Table 4.** Bycatch by species and fleet segment

Fleet segment (refer to code in Table 1)	ICES Subarea	Main target species	Pinger in use? (yes/no)	Cetacean species bycaught	Number of incidens	Number of specimens
GNS	25	Cod	no	no	0	0
GNS	26	Cod	no	no	0	0
OTM	24	Herring, sprat	no	no	0	0
OTM	25	Herring, sprat	no	no	0	0
OTM	26	Herring, sprat	no	no	0	0

**Table 5.** Bycatch rate by fleet segment and target species

Fleet segment or other stratum	Cetacean species (scientific name)	Bycatch expressed per unit of fishing effort *	Total bycatch estimate	CV percent
GNS (ICES 25-26)	no	0	0	
OTM (ICES 24-26)	no	0	0	

### Annex III

List of fishing operations subjected to the observations as part of implementing the Programme for Bycatches of Cetaceans (equipment release position). OTM – pelagic trawls, OTB – bottom otter trawls.

No	Ship	Net code	Date	Latitude (N)	Longitude (E)	Haul duration	Main catch	Bycatch of cetaceans
1	WŁA-71	OTB	05.04.2018	54.58	18.45	300	Cod	no
2	WŁA-71	OTB	05.04.2018	55.03	18.36	360	Cod	no
3	DAR-10	OTB	07.04.2018	54.56	18.40	360	Cod	no
4	DAR-10	OTB	07.04.2018	54.45	18.53	360	Cod	no
5	DAR-10	OTB	07.04.2018	55.00	18.32	360	Cod	no
6	DAR-10	OTB	08.04.2018	55.01	18.33	360	Cod	no
7	DAR-10	OTB	08.04.2018	55.06	18.29	360	Cod	no
8	DAR-10	OTB	08.04.2018	55.00	18.33	300	Cod	no
9	DAR-10	OTB	09.04.2018	55.08	18.28	300	Cod	no
10	HEL-150	OTM	10.04.2018	54.44	18.52	195	Herring, sprat	no
11	HEL-150	OTM	10.04.2018	54.42	18.54	240	Herring, sprat	no
12	KOŁ-6	OTM	08.05.2018	55.03	13.46	480	Herring, sprat	no
13	KOŁ-6	OTM	08.05.2018	55.01	13.42	450	Herring, sprat	no
14	KOŁ-6	OTM	08.05.2018	54.44	13.38	480	Herring, sprat	no
15	KOŁ-6	OTM	09.05.2018	55.06	13.43	360	Herring, sprat	no
16	KOŁ-6	OTM	09.05.2018	55.05	13.41	300	Herring, sprat	no
17	HEL-150	OTM	09.01.2018	54.60	18.58	450	Herring, sprat	no
18	HEL-150	OTM	11.01.2018	54.60	18.55	340	Herring, sprat	no
19	HEL-150	OTM	11.01.2018	54.60	18.47	240	Herring, sprat	no
20	WŁA-71	OTM	03.02.2018	54.37	19.00	300	Herring, sprat	no
21	WŁA-51	OTM	13.02.2018	54.57	18.47	105	Herring, sprat	no
22	WŁA-51	OTM	13.02.2018	55.19	18.39	265	Herring, sprat	no
23	WŁA-51	OTM	13.02.2018	55.20	18.48	150	Herring, sprat	no
24	WŁA-51	OTM	14.02.2018	54.65	19.03	390	Herring, sprat	no
25	HEL-150	OTM	06.03.2018	54.40	19.00	425	Herring, sprat	no
26	WŁA-207	OTM	19.03.2018	54.55	18.41	405	Herring, sprat	no
27	HEL-125	OTM	18.03.2018	54.40	18.52	360	Herring, sprat	no
28	HEL-125	OTM	19.03.2018	54.40	18.31	660	Herring, sprat	no
29	WŁA-250	OTM	19.03.2018	54.41	18.50	360	Herring, sprat	no
30	HEL-112	OTM	22.03.2018	54.50	18.55	360	Herring, sprat	no
31	HEL-112	OTM	27.03.2018	54.43	18.49	240	Herring, sprat	no
32	HEL-102	OTM	27.03.2018	54.44	18.52	210	Herring, sprat	no
33	HEL-112	OTM	10.04.2018	54.43	18.52	210	Herring, sprat	no
34	DZI-85	OTM	14.04.2018	54.40	15.15	717	Herring, sprat	no
35	DZI-85	OTM	15.04.2018	55.05	15.30	555	Herring, sprat	no
36	DZI-85	OTM	16.04.2018	55.08	15.34	720	Herring, sprat	no
37	DZI-85	OTM	17.04.2018	55.05	15.30	560	Herring, sprat	no
38	DZI-85	OTM	18.04.2018	55.02	15.34	510	Herring, sprat	no

No	Ship	Net code	Date	Latitude (N)	Longitude (E)	Haul duration	Main catch	Bycatch of cetaceans
39	DZI-85	OTM	19.04.2018	54.49	15.20	470	Herring, sprat	no
40	DZI-85	OTM	19.04.2018	54.43	15.14	230	Herring, sprat	no
41	KOŁ-206	OTM	11.05.2018	55.04	13.50	420	Herring, sprat	no
42	KOŁ-206	OTM	11.05.2018	55.03	13.39	405	Herring, sprat	no
43	KOŁ-206	OTM	12.05.2018	55.05	13.46	380	Herring, sprat	no
44	KOŁ-206	OTM	12.05.2018	55.03	13.39	460	Herring, sprat	no
45	HEL-125	OTM	23.05.2018	55.17	17.15	720	Herring, sprat	no
46	HEL-125	OTM	24.05.2018	55.17	17.18	540	Herring, sprat	no
47	WŁA-108	OTM	23.05.2018	55.16	17.40	440	Herring, sprat	no
48	WŁA-108	OTM	23.05.2018	55.15	17.08	300	Herring, sprat	no
49	WŁA-108	OTM	24.05.2018	55.18	17.24	670	Herring, sprat	no
50	HEL-125	OTM	28.05.2018	55.16	17.39	540	Herring, sprat	no
51	WŁA-108	OTM	28.05.2018	55.18	17.21	680	Herring, sprat	no
52	KOŁ-180	OTM	18.09.2018	54.28	15.15	360	Herring, sprat	no
53	KOŁ-180	OTM	18.09.2018	54.24	15.14	120	Herring, sprat	no
54	KOŁ-180	OTM	18.09.2018	54.46	15.01	480	Herring, sprat	no
55	KOŁ-180	OTM	19.09.2018	55.53	16.31	420	Herring, sprat	no
56	KOŁ-180	OTM	19.09.2018	55.46	16.27	360	Herring, sprat	no
57	KOŁ-180	OTM	20.09.2018	54.59	16.05	540	Herring, sprat	no
58	KOŁ-180	OTM	20.09.2018	55.01	15.57	240	Herring, sprat	no
59	KOŁ-180	OTM	21.09.2018	54.27	15.51	180	Herring, sprat	no
60	WŁA-51	OTM	26.10.2018	54.50	18.40	240	Herring, sprat	no
61	WŁA-11	OTM	07.11.2018	54.27	19.20	420	Herring, sprat	no
62	WŁA-311	OTM	07.11.2018	55.31	17.55	660	Herring, sprat	no
63	WŁA-311	OTM	08.11.2018	55.52	17.47	600	Herring, sprat	no
64	WŁA-311	OTM	08.11.2018	55.55	18.12	660	Herring, sprat	no
65	KOŁ-8	OTM	13.12.2018	54.17	15.16	480	Herring, sprat	no
66	KOŁ-8	OTM	14.12.2018	54.32	14.53	420	Herring, sprat	no
67	KOŁ-8	OTM	14.12.2018	54.37	14.34	480	Herring, sprat	no
68	KOŁ-8	OTM	15.12.2018	54.38	14.31	420	Herring, sprat	no
69	KOŁ-8	OTM	15.12.2018	54.33	14.58	300	Herring, sprat	no
70	KOŁ-8	OTM	15.12.2018	54.34	15.01	360	Herring, sprat	no
71	WŁA-295	OTM	14.12.2018	55.07	18.40	420	Herring, sprat	no
72	WŁA-295	OTM	14.12.2018	55.20	18.30	480	Herring, sprat	no