Annual report on the implementation of Council Regulation (EC) $812/2004^1$ - 2012

Member State: Poland
Reference period: 2012
Date: June 2013
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¹ 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.

Summary

The use of pingers was continued in 2012. Pingers are whale acoustic deterrent devices that are placed in the bottom-set gillnets and entangling nets utilised within the ICES 24 zone by vessels with a total length amounting to 12 m or more. 38% of the ships that had a total length amounting to 12 m or more and fished within the ICES 24 zone using set nets were equipped with pingers. Pinger use controls were carried out using pinger detectors when the nets were in the water, or they were verified visually when the nets were on board.

The implementation of pilot programmes to assess the efficiency of use of pingers (Article 2(4) of Council regulation (EC) 812/2004) was not possible because of extremely low porpoise population in the Central Baltic Sea.

In addition, the Incidental Catches of Cetaceans Monitoring Programme was continued in 2012. In total, observations on ten vessels operating from seven ports were conducted. As part of the Programme, the observers stayed at sea for 129 days, including 70 days on the vessels that conducted fishing using pelagic trawl and 59 days in trips when fishing was conducted using gillnets. During each of such trips, the goal of the observations was to detect the incidental catches of cetaceans or other marine mammals.

Monitoring of fishing operations for set nets was also continued for fishing vessels with size ranging from 5 to 8 m, which operated within the crucial zone of the Puck Bay, which is considered the place of the most frequent porpoise occurrence² and "should be given priority" as defined in paragraph 6 of the introduction to Regulation 812/2004.

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² Kuklik I., K. Skóra. O morświnie. "Źródło: Stacja Morska IO UG w Helu (www.morswin.pl)".

Acoustic Deterrent Devices

1. General information:

Pursuant to Council Regulation (EC) 812/2004, Poland is obliged to use acoustic deterrent devices on vessels measuring 12 m or more in length when using bottom-set gillnets or entangling nets within marine waters in the ICES 24 zone.

In 2008, Polish flag fishing vessels received 500 pieces of AQUATEC AQUAMARK 100 pingers, which are intended in particular for acoustic deterrence of harbour porpoises (*Phocoena phocoena*), the only cetacean species that permanently occurs in the Baltic Sea. In 2012, 16 Polish fishing vessels were equipped with pingers and used them. Not all vessels equipped with pingers fished in 2012 in the ICES 24 subdivision.

The Sea Fisheries Regional Inspectorate in Szczecin ordered special devices from Denmark in 2010 – pinger detectors – and received them in September 2010. Those devices make it possible to control the use of pingers during fishing operations on a regular basis.

1.1. Description of the fleet equipped with pingers

			Total fishing effort								
Metier	Fishing Area	No. of vessels	% of vessels using pingers	No. of trips	Days at sea	Months of operations	Total length of nets* (km)	Total soak time (h)			
Demersal fish	27.III.d.24	21	38%	151	436	May-December	6528	4646			

2. Acoustic deterrent devices, Article 2 and 3 of Council Regulation (EC) 812/2004

Fleet segment	Fishing Area	% of vessels using pingers	Pinger characteristics	Other mitigation measures
GNS	27.III.d.24	38%	Aquatec AQUAmark 100	No other measures

3. Monitoring and evaluation

3.1. Monitoring and evaluation of the pinger use effects

Because of very low cetacean population within the zones used for fishing by the Polish flag vessels within the Baltic Sea, such an evaluation could not be carried out. Nonetheless, it is a fact that since the beginning of the pinger use by the Polish fishing vessels, i.e. since 2008, the Sea Fisheries Regional Inspectorate in Szczecin – whose jurisdiction covers the area where the use of pingers is obligatory under Annex I of Council Regulation (EC) 812/2004 – has not received any reports of accidental cetacean catches.

3.2. Report on the specifications of control actions during pinger use by fishermen (Article 2(4))

The use of pingers by vessels that measure 12 m or more in length and have been granted a permit to use set nets is controlled by the Sea Fisheries Regional Inspectorate in Szczecin and foreign control services during fishing operations within the ICES 24 subdivision, where the use of pingers is obligatory in bottom-set gillnets and entangling nets, as defined in the above-mentioned Annex of Council Regulation (EC) 812/2004. Pingers in possession of the Polish fishing vessels within the ICES 24 subdivision are not used by such vessels within the ICES 25 and 26 subdivisions.

The observations of pinger use are conducted during each control by fishery inspectors of the catches within the ICES 24 subdivisions. They are carried out by means of pinger detectors during controls when nets are in the water or visually through verification of the presence of pingers in the nets when pulling the nets out of the water or during controls of nets that are already on board. Furthermore, during port controls of fishing vessels that are obliged to use pingers, the inspectors verify whether the acoustic deterrent devices are present on board (as a rule, they are already disconnected from the fishing nets). The fishermen use only the Aquatec AQUAmark 100 pingers, which meet the technical requirements specified in Annex II of Council Regulation (EC) 812/2004.

The Polish vessels sporadically fish within the Polish part of the ICES 24 zone because of absence of efficient fishing sites. Fishing with the use of set nets within this region is usually conducted within the German or Danish part of the ICES 24 zone, within the Adlergrund bank.

3.3. Derogation

Not applicable to Poland

3.4. Holistic evaluation

In the case of the area of the central Baltic Sea, where very low populations of harbour porpoises has been detected, it is very hard to evaluate the efficiency of pinger use. However, in our opinion, the use of pingers on fishing vessels measuring above 12 m using bottom-set gillnets and entangling nets should be continued within the ICES 24 zone.

Further, we should continue the observations of accidental cetacean catches in the Baltic Sea while taking into account the catch area, the fishing gear and the fleet segment, so that the data on accidental catches can be used as basis for further actions aimed at effective protection of the Baltic populations of harbour porpoises in the future, e.g. by implementing an obligation to use pingers during fishing also by smaller fishing vessels measuring above 10 m and below 12 m or by implementing an obligation to use pingers for all vessels that fish using set nets within the Natura 2000 areas designated because of protection of small cetaceans. Besides, essential information on the distribution of cetaceans in the Baltic Sea, and hence indication of the places where pingers should be used obligatorily, should be provided by the results of the SAMBAH project³.

It may be disturbing that on the basis of information obtained from Sea Fisheries Regional Inspectorates, owners of fishing vessels do not buy cetacean deterrent devices on their own, but more and more frequently ask about such an opportunity, and the Department of Fisheries in the Ministry of Agriculture and Rural Development expressed its willingness to act as intermediary and to provide assistance in the purchase thereof. Beyond the shadow of doubt, an opportunity to apply for financing of the purchase of such devices by EU funds under the European Maritime and Fisheries Fund for 2014-2020 should be a significant support to shipowners in the individual purchase of pingers.

It is also helpful that the Council Regulation (EC) 812/2004 was adjusted to the Lisbon Treaty requirements, and hence the procedure for extending Annex II of Council Regulation (EC) by adding the parameters of new cetacean deterrent devices was simplified. It should contribute not only to reduction of the cost of such devices and increase in the availability thereof, but also to an increase in their effectiveness and improvement of the comfort and efficiency of their use.

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³ Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise

Observer Programme

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

The Incidental Catches of Cetaceans Monitoring Programme has been carried out in 2012, just like in the previous years, by the National Marine Fisheries Research Institute in Gdynia (NMFRI). The programme was being implemented in 2012 solely for the needs of Articles 4 and 5 of Council Regulation (EC) 812/2004.

In total, observations on ten vessels operating from seven ports were conducted in 2012. As part of the Programme, the observers stayed at sea for 129 days, including 70 days on the vessels that conducted fishing operations using pelagic trawl and 59 days in trips when fishing was conducted using set nets. During each of such trips, the goal of the observations was to detect the cases of fishing or entangling cetaceans or other marine mammals.

In addition, the second year, monitoring of incidental catches of cetaceans in set nets was conducted on vessels smaller than 15 m. Throughout the 59 days of observations during fishing trips, 9 days took place on smaller vessels. Besides, within the ten vessels covered by the cetacean incidental catch monitoring programme, five vessels fell within the size range from 5 to 8 m while the other measured over 15 m.

During the monitored 70 days of fishing with pelagic trawls and 59 days of fishing with set gillnets, no catches of cetaceans or other marine mammals were reported.

Furthermore, the Incidental Catches of Cetaceans Monitoring Programme included the observations of incidental catches of seabirds and threatened fish species such as Twaite shad (*Alosa fallax*) or the fish from the reintroduction programmes such as Atlantic sturgeon (*Acipenser oxyrhynchus*).

A full report on the Incidental Catches of Cetaceans Monitoring Programme in 2012 can be found in the Annex.

5. Monitoring

5.1. Description of the fishing effort and the presence of observers during fishing operations with pelagic trawl

Fleet			T	otal fishi	ng effort			Total	observei	effort achie	ved	
segment (refer to code in Table 1	ICES subarea	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)	Coverage % days at sea
OTM	23	0	0	0								
OTM	24	22	339	627			1	6	9	17		1.44%
OTM	25	57	1277	2693			2	6	38	76		1.41%
OTM	26	68	2800	3123			1	9	23	28		0.74%
OTM	27	1	3	4								
OTM	28	14	32	74								
OTM	29	7	17	28								

5.2 Description of the fishing effort and the presence of observers during fishing operations with gillnets

Fleet		Total fishing effort				Total observer effort achieved						
segment (refer to code in Table 1	ICES subarea	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)	Coverage % days at sea
GNS	24	15	84	290			2	3	19	293.8		6.55%
GNS	25	25	687	1737			2	4	21	325.7		1.21%
GNS	26	6	41	61			1	2	10	126.1		16.39%
boats	26						6	9	9	21.5		

6. Estimation of incidental catches

6.1. Share of incidental catches divided into fleet segment and target species

Fleet segment (refer to code in	ICES Subarea	Main target species	Pinger in use? (yes/no)	Cetacean species	Number of incidents	Number of specimens
Table 1)		~F	() - 2/ /	bycaught		F
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

Observed cetacean by-catch divided into fishing gear type

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

Verified cases of incidental catches

Since 2006, i.e. since the Incidental Catches of Cetaceans Monitoring Programme was launched, no cases of incidental catches of cetaceans were reported.

7. and 8. Discussion and conclusions

In the situation of Poland, when no presence of cetaceans was detected during the pilot programme in 2006-2009 and during the continued monitoring programme in 2010-2012, it is not possible to achieve a coefficient of variation not exceeding 0.3, as defined in Annex III of Council Regulation (EC) 812/2004, since it would require monitoring of approximately 80% of the fishing effort.

Therefore, taking into account the observations and experience, as well as data from literature⁴, which present the risk of incidental catches of small cetaceans in the Baltic Sea posed by individual types of fishing gear, we suggest that during the subsequent years of the implementation of the Incidental Catches of Cetaceans Monitoring Programme the observers should be on board of fishing vessels during at least 6% of fishing operations (in terms of days at sea) of the Polish fleet in the Baltic Sea with the use of set gillnets (in subareas 25 and 26), and during 1% of fishing operations (in terms of days at sea) with the use of pelagic trawls. Furthermore, we also plan to continue pilot observations of incidental catches of cetaceans on vessels less than 15 m in overall length in subsequent years under the Programme, in particular in the areas which were the source of the largest number of reports on possible incidental catches of porpoise.

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⁴ Kuklik, I. and Skóra, K.E. 2003. Bycatch as a potential threat for harbour porpoise (*Phocoena phocoena*) in Polish Baltic waters. NAMMCO Sci. Publ. 5: xx-xx.

9. Annex

Full report on the Incidental Catches of Cetaceans Monitoring Programme in 2012



National Marine Fisheries Research Institute

REPORT ON THE INCIDENTAL CATCHES OF CETACEANS MONITORING PROGRAMME IN 2012

Report ordered by the Ministry of Agriculture and Rural Development

developed by: dr inż. Kordian Trella

Gdynia, April 2013

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1. Introduction

Cetacean incidental catch monitoring arises from the implementation of the provisions of Council Regulation (EC) No 812/2004 of 26 April 2004 (hereinafter referred to as Regulation 812/2004) laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98 (OJ L 150 of 30.4.2004, p.12, as amended), according to which Poland is obliged to implement the observer programme from 1 January 2006.

The works in the programme are planned and accounted for in an annual cycle pursuant to Article 6 of Regulation 812/2004 and submitted to the Commission by 1 June of the next year. The fishing zones covered by observations during the implementation of the Programme were chosen according to the forecasts based on the analysis of fishing activities in 2011 and modified in the course of the year with the data coming from the observers and the Polish Fishing Monitoring Centre (FMC).

Sampling strategy to obtain the coefficient of variation not exceeding 0.3 cannot be implemented under the Polish fishing conditions in the Southern Baltic Sea. From 2006 to 2011, under the Incidental Catches of Cetaceans Monitoring Programme, the National Marine Fisheries Research Institute collected and presented the results of 1,130 fishing days with the use of various gear, during which no presence of any porpoises was detected (which is the most numerous cetacean species within the monitored fishing zones). Hence, in accordance with the provisions (Paragraph 1 of Annex III of Regulation 812/2004), the sampling strategy was developed on the basis of other existing information about the variation of the previous catch observations.

With regard to all of the foregoing and the reduced observation period in 2012, the NMFRI assumed the presence of observers on fishing boats during 5% of fishing operations, expressed as the number of days at sea for fishing with set nets – gillnets (within the ICES 25 and 26 subdivisions) and up to 2% of fishing operations expressed as the number of days at sea for fishing with pelagic trawl. The Programme implementation method was accepted by the Ministry of Agriculture and Rural Development.

The objective of the Programme was to monitor fishing by cutters with an overall length of 15 m or more, using set gillnets with mesh size opening larger than 80 mm and pelagic trawls, in terms of incidental catches of cetaceans in the Polish marine areas.

Nine observations within the 26 subdivision were carried out on the basis of smaller vessels, which however operated within a quite crucial area of the water of the Gdańsk Bay and Puck Bay and the Baltic water located along the Hel Peninsula, where most information about the possibility of incidental catches of porpoises was obtained. The planned number of 20 observation days was reduced by half as the boats used gillnets and semi-driftnets with mesh size below 80 mm. Although such a measure complies with Article 4(2) of Regulation 812/2004, which obligates Member States to "take the necessary steps to collect scientific data on incidental catches of cetaceans for vessels with an overall length less than 15 m", at least the mesh size parameter in the nets has to be in compliance with the requirements set in the EC Regulation 812/2004. The need for catch observations for incidental catches of cetaceans on the vessels below 15 m was also indicated in the report entitled: "ICES Report of the Workshop to Evaluate Aspects of EC Regulation 812/2004, 28-30, Copenhagen, September 2010 (ICES CM 2010/ACOM:66)".

2. Materials and methods

The observations on board of fishing boats were conducted by the staff of the National Marine Fisheries Research Institute, who were trained in and acquainted with the research methodology in terms of cetacean incidental catch monitoring (Annex 1). Most of the observers listed in the Annex participated in the previous years in the fishing trips under the Incidental Catches of Cetaceans Monitoring Programme.

In total, observations on ten vessels operating from seven ports were conducted in 2012 (Table 1). As part of the Programme, the observers stayed at sea for 129 days, including 70 days on the vessels that conducted fishing using pelagic trawl and 59 days in trips (including nine days on vessels smaller than 15 m) when fishing was conducted using set nets (Annex II). It should be pointed out that in 2012 the number of days at sea differed considerably from the number of days at sea when fishing operations were carried out. It resulted from the movement of vessels during one fishing trip within various marine areas. The actual fishing operations' duration in relation to the number of days at sea amounted to: for set net gear (gillnets) – 77.4% and for pelagic trawls – 74.3% (Table 2) respectively. As the "days at sea" formula is used in Annex II, hence the same was adopted also for the duration of the presence of observers at sea. During each of such trips, observations were carried out to detect the cases of fishing or entangling cetaceans or other marine mammals.

Table 1. Number of monitored fishing divided into vessel and fishing gear type (and the vessel's length)

		Fishing	g gear type		ICES subdivision
Fishing vessel	Length	Gillnets (GNS)	Pelagic trawl (OTM)	Port	covered by observations
DAR-119	above 15 m	22		Darłowo	24-26
HEL-150	above 15 m		23	Hel	26
JAS-81	7 m	2		Jastarnia	26
KOŁ-180	above 15 m		11	Kołobrzeg	25
KOŁ-5	above 15 m		36	Kołobrzeg	24-25
KUŹ-88	6 m	2		Kuźnica	26
KUŹ-92	6 m	2		Kuźnica	26
REW-18	8 m	1		Rewa	26
REW-6	8 m	2		Rewa	26
UST-31	above 15 m	28		Ustka	24-25
Total		59	70		

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

Fishing gear type	Days at sea	Number of fishing days	Percentage of fishing days in the number of fishing trip days
Gillnets (GNS)	50	41	82.00%
Pelagic trawls (OTM)	70	52	74.29%
Boats up to 15 m	9	9	100.00%
Total	129	99	76.70%

On the basis of the fishing trip reports submitted by the observers, an analysis of the observed fishing effort with gillnets and pelagic trawls as compared to the fishing activities of the fleet that meets the criteria of Regulation 812/2004 was conducted. The data on the fishing activities of the fishing fleet in 2012 were presented on the basis of the information obtained from the FMC.

3. Results

3.1. Monitoring of pelagic trawl fishing

Pursuant to Annex III of Regulation 812/2004, the monitoring of fishing operations with pelagic trawl should be carried out within the Baltic Sea area south of 59°N during the entire year and to the north of 59°N only from 1 June to 30 September. Within the ICES 24-29 subdivisions, Polish vessels with length of 15 metres or longer fished using pelagic trawl for 6549 days in 2012. The fishing was conducted mainly within the 25 and 26 subdivisions, where the fishing lasted for 5816 days (88.8%).

The total number of days when observations were carried out amounted to 70 (64 were planned), which represented 1.1% of the total days at sea. Within the 24 subdivision, the observations covered 9 days, which represented 1.4% of the total number of days at sea; within the 25 subdivision -38 days (1.4%), and within the 26 subdivision -23 days -0.7% (Annex II). The fishing zones (issue position) where observations were conducted are presented in Figure 1, and the list of fishing operations in Annex III.

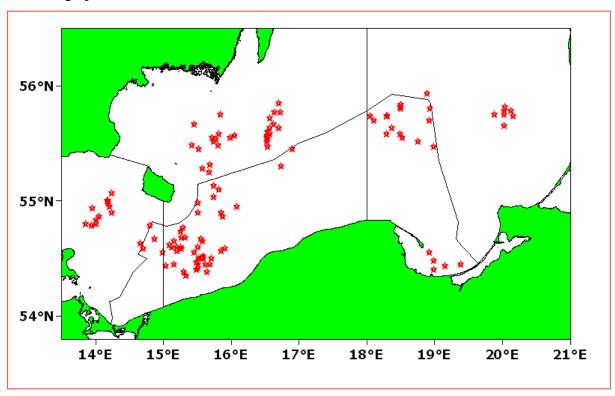


Fig. 1. Pelagic trawl fishing observation places within the 24-26 ICES subdivisions in 2012

During the 70 days of observation of pelagic trawl fishing, fishing vessels carried out 121 draughts (hauls). The total trawling time amounted to 712.3 hours, and the average time of a single haul lasted approximately 5.9 hours.

No cetaceans or other marine mammals have been detected on any of the 70 monitored days of fishing with pelagic trawl.

3.2. Monitoring of gillnets

In 2012, Polish fishing vessels measuring 15 or more in length fished with set nets (within the regions indicated in Annex III to Regulation 812/2004) for a total of 2088 days (ICES 24-26 subdivisions). The largest fishing effort was determined within the ICES 25 subdivision, where gillnets fishing was conducted for 1737 days (approximately 83.1%). In 2012, out of 46 observation days, 50 were conducted, which represented 2.4% of the total number of days at sea. The percentage of observations in individual subdivisions differed to a great extent and oscillated from 1.2% within the 25 subdivision to 16.4% within the 26 subdivision. This disparity resulted from the changes by the fishing vessels in the fishing zones where the observations were conducted, in particular from subdivision 25 to subdivision 24, and from resignation from cod fishing within the 26 subdivision. Table 3 presents a list of aggregated data about the quantity of gear, the time of exposure within individual subdivisions and the total length of gillnets covered by monitoring divided into individual subdivisions.

It was also planned to conduct 20 days of observations on fishing boats in the Gdańsk Bay region. Such a decision was taken because the region where monitoring was planned (Puck Bay) is considered a place of the most numerous occurrence of the porpoise (Kuklik I., K. Skóra. O morświnie. "Source: Hel Marine Station IO UG (www.morswin.pl)" and "should be given priority" as defined in paragraph 6 of the introduction to Regulation 812/2004. However, during the research it turned out that the mesh size of the fishing gears used on most vessels was not in accordance with the provisions of Regulation 812/2004, and hence the monitoring was reduced to 9 days.

Table 3 presents a list of aggregated data about the quantity of gear, the time of its deployment within individual subdivisions and the total length of gillness covered by monitoring divided into individual subdivisions.

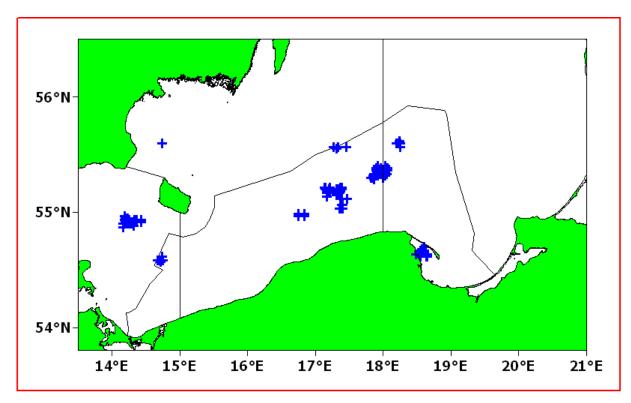


Fig. 2. Gillnets fishing observation places within the 24-26 ICES subdivisions in 2012

Table 3. Number of gillnets, exposure time and total length in the observed catches in 2012

ICES subdivision	Number of gillnets in the observed catches	Total gillnets exposure time (hours)	Total length of gillnets in the observed catches (m)
24*)	4 896	1 931.1	293 760
25 ^{*)}	5 429	2 808.6	325 740
26*)	1 742	604.0	104 520
Boats up to 15 m**)	359	388.0	21 540
Total	12 426	5 731.7	745 560

^{*)} fishing vessels with length above 15 m

No cetaceans or other marine mammals have been detected or by-caught on any of the 59 monitored days of fishing with gillnets.

^{**)} observations within the Puck Bay area

3.2. Observations of birds found in fishing nets

During the gillnets fishing, the presence of 7 birds was detected, including: 6 dead ones (2 guillemots, 1 herring gull and 3 unidentified specimens – most likely torn apart by seagulls) and 1 alive guillemot, which was released from the net. The places for observation of birds in the gillnets are presented in Figure 3, and the pictures of two birds with descriptions can be found in Annex IV.

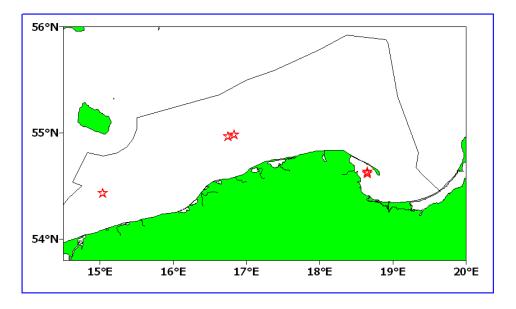


Fig. 3. Places where the presence of birds in fishing nets (gillnets) was confirmed

4. Conclusions:

- No incidental fishing or entangling of cetaceans or other marine mammals in the nets have been detected during the NMFRI monitoring of pelagic trawl and set net fishing in the Baltic Sea in 2012 (April-November).
- The observations did not confirm any porpoise in the catches with gillnets within the Puck Bay waters (the internal part of the Gdańsk Bay). According to some authors, it is an area where harbour porpoises are recorded most frequently.
- No presence of the protected fish species was confirmed in the monitored catches.
- Seven birds were found in the fishing conducted with set nets (gillnets), including one alive bird, which was released, and six dead ones.
- Since 2006, that is the launch date of the implementation of the Incidental Catches of Cetaceans Monitoring Programme by the NMFRI, irrespective of the duration, place and fishing gear type, no incidental catches of cetaceans or other marine mammals (except for one seal) have been confirmed.

Annex I List of observers who took part in the Incidental Catches of Cetaceans Monitoring Programme in 2012

Observer's name and surname	Position
Radosław Zaporowski	Senior specialist
Grzegorz Modrzejewski	Senior technical staff
Ireneusz Wybierała	Technical staff
Marcin Nowakowski	Technical staff
Stanisław Trella	Technical staff
Tomasz Jarek	Technical staff
Wojciech Deluga	Technical staff

Annex II

Contents in line 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		Total fishing effort						Total	observei	effort achie	ved	
segment (refer to code in Table 1	ICES subarea	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)	Coverage % days at sea
GNS	24	15	84	290			2	3	19	293,8		6,55%
GNS	25	25	687	1737			2	4	21	325,7		1,21%
GNS	26	6	41	61			1	2	10	126,1		16,39%
boats	26						6	9	9	21,5		

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

Fleet			T	otal fishi	ng effort			Total	observei	effort achie	ved	
segment (refer to code in Table 1	ICES subarea	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)	Coverage % days at sea
OTM	23	0	0	0								
OTM	24	22	339	627			1	6	9	17		1,44%
OTM	25	57	1277	2693			2	6	38	76		1,41%
OTM	26	68	2800	3123			1	9	23	28		0,74%
OTM	27	1	3	4								
OTM	28	14	32	74								
OTM	29	7	17	28								

Recording of bycatch

No cases of cetacean entangling in fishing nets have been detected during the conducted observations.

Results of the observer schemes

Table 4. Bycatch by species and fleet segment

Tubie it Bjeater	r of species and r					
Fleet segment	ICES Subarea	Main target	Pinger in use?	Cetacean	Number of	Number of
(refer to code in		species	(yes/no)	species	incidents	specimens
Table 1)				bycaught		
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	Cetacean species	Bycatch expressed per	Total bycatch estimate	CV percent
stratum	(scientific name)	unit of fishing effort *		
GNS (ICES 25-26)	no	0	0	
OTM (ICES 24-26)	no	0	0	

Annex III List of fishing operations covered by observations carried out under the Incidental Catches of Cetaceans Monitoring Programme (equipment issue position) OTM – pelagic trawl; GNS – bottom-set

gillnet	gillnets (gillnets)										
No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans			
1	KOŁ-5	OTM	2012-04-21	55°15	15°40	360	herring, sprat	no			
2	KOŁ-5	OTM	2012-04-21	55°19	15°41	420	herring, sprat	no			
3	KOŁ-5	OTM	2012-04-21	55°29	15°25	120	herring, sprat	no			
4	KOŁ-5	OTM	2012-04-22	55°08	15°44	360	herring, sprat	no			
5	KOŁ-5	OTM	2012-04-22	54°59	15°30	360	herring, sprat	no			
6	KOŁ-5	OTM	2012-04-22	54°54	15°30	360	herring, sprat	no			
7	KOŁ-5	OTM	2012-04-23	55°02	15°44	300	herring, sprat	no			
8	KOŁ-5	OTM	2012-04-23	54°52	15°52	540	herring, sprat	no			
9	KOŁ-5	OTM	2012-04-24	55°27	15°31	360	herring, sprat	no			
10	KOŁ-5	OTM	2012-04-25	55°17	15°34	270	herring, sprat	no			
11	KOŁ-5	OTM	2012-04-25	55°29	15°48	390	herring, sprat	no			
12	KOŁ-5	OTM	2012-04-25	55°31	15°44	300	herring, sprat	no			
13	KOŁ-5	OTM	2012-04-26	55°34	16°03	300	herring, sprat	no			
14	KOŁ-5	OTM	2012-04-26	55°33	15°59	390	herring, sprat	no			
15	KOŁ-5	OTM	2012-04-26	55°33	15°43	420	herring, sprat	no			
16	KOŁ-5	OTM	2012-04-27	55°32	15°46	360	herring, sprat	no			
17	KOŁ-5	OTM	2012-04-27	55°35	15°49	390	herring, sprat	no			
18	UST-31	GNS	2012-05-14	55°34	17°27	4800	cod	no			
19	UST-31	GNS	2012-05-14	55°33	17°19	4980	cod	no			
20	UST-31	GNS	2012-05-15	55°22	17°54	1780	cod	no			
21	UST-31	GNS	2012-05-15	55°20	17°56	1980	cod	no			
22	UST-31	GNS	2012-05-15	55°18	17°49	2235	cod	no			
23	UST-31	GNS	2012-05-16	55°19	17°51	770	cod	no			
24	UST-31	GNS	2012-05-16	55°24	17°55	3180	cod	no			
25	UST-31	GNS	2012-05-16	55°20	17°54	1400	cod	no			
26	UST-31	GNS	2012-05-16	55°23	17°54	1440	cod	no			
27	UST-31	GNS	2012-05-16	55°18	17°50	570	cod	no			
28	KOŁ-180	OTM	2012-05-18	54°36	15°07	360	herring, sprat	no			
29	KOŁ-180	OTM	2012-05-18	54°36	15°12	360	herring, sprat	no			
30	KOŁ-180	OTM	2012-05-19	55°40	15°27	420	herring, sprat	no			
31	KOŁ-180	OTM	2012-05-19	55°45	15°50	360	herring, sprat	no			
32	KOŁ-180	OTM	2012-05-20	55°34	16°31	420	herring, sprat	no			
33	KOŁ-180	OTM	2012-05-20	55°31	16°31	420	herring, sprat	no			
34	KOŁ-180	OTM	2012-05-21	54°57	16°05	420	herring, sprat	no			
35	KOŁ-180	OTM	2012-05-21	54°54	15°51	360	herring, sprat	no			
36	HEL-150	OTM	2012-05-15	55°35	18°17	390	herring, sprat	no			
37	HEL-150	OTM	2012-05-15	55°35	18°29	390	herring, sprat	no			
38	HEL-150	OTM	2012-05-16	55°44	18°17	390	herring, sprat	no			
39	HEL-150	OTM	2012-05-16	55°44	18°18	390	herring, sprat	no			
40	HEL-150	OTM	2012-05-18	55°33	18°31	420	herring, sprat	no			

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
41	HEL-150	OTM	2012-05-18	55°38	18°22	390	herring, sprat	no
42	HEL-150	OTM	2012-05-19	55°48	18°30	390	herring, sprat	no
43	HEL-150	OTM	2012-05-19	55°49	18°29	390	herring, sprat	no
44	HEL-150	OTM	2012-05-20	55°50	18°30	150	herring, sprat	no
45	HEL-150	OTM	2012-05-20	55°56	18°53	210	herring, sprat	no
46	HEL-150	OTM	2012-05-20	55°48	18°56	360	herring, sprat	no
47	HEL-150	OTM	2012-05-22	55°28	18°59	420	herring, sprat	no
48	HEL-150	OTM	2012-05-22	55°31	18°45	360	herring, sprat	no
49	HEL-150	OTM	2012-05-25	54°66	15°49	360	herring, sprat	no
50	HEL-150	OTM	2012-05-25	54°46	15°17	420	herring, sprat	no
51	HEL-150	OTM	2012-05-26	55°28	16°32	360	herring, sprat	no
52	HEL-150	OTM	2012-05-26	55°31	16°31	420	herring, sprat	no
53	HEL-150	OTM	2012-05-26	55°32	16°32	360	herring, sprat	no
54	HEL-150	OTM	2012-05-27	55°33	16°31	420	herring, sprat	no
55	HEL-150	OTM	2012-05-27	55°18	16°44	180	herring, sprat	no
56	HEL-150	OTM	2012-05-28	55°42	18°55	750	herring, sprat	no
57	HEL-150	OTM	2012-05-29	54°24	18°59	360	herring, sprat	no
58	HEL-150	OTM	2012-05-29	54°27	19°23	180	herring, sprat	no
59	HEL-150	OTM	2012-05-31	54°29	18°59	300	herring, sprat	no
60	HEL-150	OTM	2012-05-31	54°33	18°55	300	herring, sprat	no
61	HEL-150	OTM	2012-06-01	54°26	19°09	480	herring, sprat	no
62	UST-31	GNS	2012-05-25	55°13	17°22	3840	cod	no
63	UST-31	GNS	2012-05-25	55°34	17°16	4005	cod	no
64	UST-31	GNS	2012-05-25	55°34	17°20	4185	cod	no
65	UST-31	GNS	2012-05-26	55°10	17°21	1750	cod	no
66	UST-31	GNS	2012-05-26	55°12	17°19	1790	cod	no
67	UST-31	GNS	2012-05-26	55°12	17°23	1910	cod	no
68	UST-31	GNS	2012-05-26	55°13	17°23	1965	cod	no
69	UST-31	GNS	2012-05-26	55°12	17°20	2325	cod	no
70	UST-31	GNS	2012-05-27	55°12	17°20	3135	cod	no
71	UST-31	GNS	2012-05-27	55°13	17°23	1465	cod	no
72	UST-31	GNS	2012-05-27	55°12	17°22	960	cod	no
73	UST-31	GNS	2012-05-27	55°12	17°19	1380	cod	no
74	UST-31	GNS	2012-05-27	55°12	17°21	1620	cod	no
75	UST-31	GNS	2012-05-27	55°11	17°21	1230	cod	no
76	UST-31	GNS	2012-05-28	55°07	17°23	595	cod	no
77	UST-31	GNS	2012-05-28	55°07	17°28	685	cod	no
78	UST-31	GNS	2012-05-28	55°13	17°23	1710	cod	no
79	UST-31	GNS	2012-05-28	55°12	17°23	1665	cod	no
80	UST-31	GNS	2012-05-28	55°10	17°20	1055	cod	no
81	UST-31	GNS	2012-05-28	55°07	17°22	1410	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
82	UST-31	GNS	2012-05-29	55°09	17°19	860	cod	no
83	UST-31	GNS	2012-05-30	55°12	17°21	855	cod	no
84	UST-31	GNS	2012-05-30	55°11	17°22	2535	cod	no
85	UST-31	GNS	2012-05-30	55°12	17°23	2495	cod	no
86	UST-31	GNS	2012-05-30	55°11	17°22	2745	cod	no
87	UST-31	GNS	2012-05-30	54°58	16°45	6620	cod	no
88	UST-31	GNS	2012-05-30	54°59	16°50	6920	cod	no
89	UST-31	GNS	2012-05-30	54°59	16°45	7005	cod	no
90	UST-31	GNS	2012-05-30	54°58	16°50	7050	cod	no
91	DAR-119	GNS	2012-06-15	55°36	18°15	2880	cod	no
92	DAR-119	GNS	2012-06-15	55°34	18°15	2880	cod	no
93	DAR-119	GNS	2012-06-15	55°36	18°13	2880	cod	no
94	DAR-119	GNS	2012-06-15	55°36	18°12	2880	cod	no
95	DAR-119	GNS	2012-06-16	55°36	18°15	1440	cod	no
96	DAR-119	GNS	2012-06-16	55°34	18°15	1440	cod	no
97	DAR-119	GNS	2012-06-16	55°36	18°13	1440	cod	no
98	DAR-119	GNS	2012-06-16	55°37	18°14	1440	cod	no
99	KOŁ-5	OTM	2012-06-15	54°30	15°31	300	herring, sprat	no
100	KOŁ-5	OTM	2012-06-15	54°36	15°30	300	herring, sprat	no
101	KOŁ-5	OTM	2012-06-15	54°39	15°34	270	herring, sprat	no
102	KOŁ-5	OTM	2012-06-16	54°33	14°59	240	herring, sprat	no
103	KOŁ-5	OTM	2012-06-16	54°27	15°09	300	herring, sprat	no
104	KOŁ-5	OTM	2012-06-16	54°26	15°02	360	herring, sprat	no
105	KOŁ-5	OTM	2012-06-16	54°28	15°29	360	herring, sprat	no
106	KOŁ-5	OTM	2012-06-17	54°24	15°29	270	herring, sprat	no
107	KOŁ-5	OTM	2012-06-17	54°21	15°20	300	herring, sprat	no
108	KOŁ-5	OTM	2012-06-17	54°23	15°18	240	herring, sprat	no
109	KOŁ-5	OTM	2012-06-20	54°27	15°41	360	herring, sprat	no
110	KOŁ-5	OTM	2012-06-20	54°57	14°12	360	herring, sprat	no
111	KOŁ-5	OTM	2012-06-21	54°59	14°11	260	herring, sprat	no
112	KOŁ-5	OTM	2012-06-21	55°00	14°10	300	herring, sprat	no
113	KOŁ-5	OTM	2012-06-21	55°04	14°14	360	herring, sprat	no
114	KOŁ-5	OTM	2012-06-21	55°00	14°11	480	herring, sprat	no
115	KOŁ-5	OTM	2012-06-22	54°48	13°51	210	herring, sprat	no
116	KOŁ-5	OTM	2012-06-22	54°48	14°00	420	herring, sprat	no
117	KOŁ-5	OTM	2012-06-22	54°38	14°39	420	herring, sprat	no
118	KOŁ-5	OTM	2012-06-23	54°35	14°42	300	herring, sprat	no
119	UST-31	GNS	2012-06-20	55°02	17°21	2260	cod	no
120	UST-31	GNS	2012-06-20	55°04	17°23	2475	cod	no
121	UST-31	GNS	2012-06-20	55°04	17°24	2525	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
122	UST-31	GNS	2012-06-20	55°02	17°24	2540	cod	no
123	UST-31	GNS	2012-06-20	55°02	17°21	2655	cod	no
124	UST-31	GNS	2012-06-21	55°02	17°22	2685	cod	no
125	UST-31	GNS	2012-06-21	55°12	17°13	900	cod	no
126	UST-31	GNS	2012-06-21	55°12	17°13	1000	cod	no
127	UST-31	GNS	2012-06-22	55°13	17°09	2295	cod	no
128	UST-31	GNS	2012-06-22	55°12	17°09	2355	cod	no
129	UST-31	GNS	2012-06-22	55°13	17°08	2395	cod	no
130	UST-31	GNS	2012-06-22	55°11	17°11	1550	cod	no
131	UST-31	GNS	2012-06-22	55°13	17°13	2860	cod	no
132	UST-31	GNS	2012-06-22	55°13	17°13	1980	cod	no
133	UST-31	GNS	2012-06-23	55°11	17°13	1030	cod	no
134	UST-31	GNS	2012-06-23	55°12	17°13	760	cod	no
135	UST-31	GNS	2012-06-23	55°11	17°12	1180	cod	no
136	UST-31	GNS	2012-06-24	55°11	17°10	2145	cod	no
137	UST-31	GNS	2012-06-24	55°12	17°12	2280	cod	no
138	UST-31	GNS	2012-06-24	55°10	17°10	995	cod	no
139	UST-31	GNS	2012-06-24	55°10	17°13	1095	cod	no
140	UST-31	GNS	2012-06-24	55°08	17°10	1215	cod	no
141	KOŁ-5	OTM	2012-06-28	54°30	15°33	300	herring, sprat	no
142	KOŁ-5	OTM	2012-06-28	54°35	15°16	240	herring, sprat	no
143	KOŁ-5	OTM	2012-06-28	54°36	15°15	300	herring, sprat	no
144	KOŁ-5	OTM	2012-06-28	54°37	15°05	300	herring, sprat	no
145	KOŁ-5	OTM	2012-06-29	54°50	14°00	300	herring, sprat	no
146	KOŁ-5	OTM	2012-06-29	54°47	13°56	390	herring, sprat	no
147	KOŁ-5	OTM	2012-06-29	54°56	13°57	300	herring, sprat	no
148	KOŁ-5	OTM	2012-06-30	54°54	14°14	300	herring, sprat	no
149	KOŁ-5	OTM	2012-06-30	54°52	14°03	240	herring, sprat	no
150	DAR-119	GNS	2012-05-29	55°17	17°52	2760	cod	no
151	DAR-119	GNS	2012-05-29	55°17	17°52	2760	cod	no
152	DAR-119	GNS	2012-05-29	55°17	17°52	2880	cod	no
153	DAR-119	GNS	2012-05-29	55°23	18°04	2880	cod	no
154	DAR-119	GNS	2012-05-30	55°20	18°03	1380	cod	no
155	DAR-119	GNS	2012-05-30	55°22	18°04	1320	cod	no
156	DAR-119	GNS	2012-05-30	55°20	17°52	1440	cod	no
157	DAR-119	GNS	2012-05-30	55°18	17°52	1440	cod	no
158	DAR-119	GNS	2012-06-04	55°19	17°53	1080	cod	no
159	DAR-119	GNS	2012-06-04	55°21	18°02	1200	cod	no
160	DAR-119	GNS	2012-06-04	55°20	17°58	1380	cod	no
161	DAR-119	GNS	2012-06-04	55°20	17°57	1440	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
162	DAR-119	GNS	2012-06-04	55°20	17°57	1560	cod	no
163	DAR-119	GNS	2012-06-04	55°20	17°53	1560	cod	no
164	DAR-119	GNS	2012-06-05	55°20	17°53	1200	cod	no
165	DAR-119	GNS	2012-06-05	55°20	17°57	1200	cod	no
166	DAR-119	GNS	2012-06-05	55°19	17°53	1140	cod	no
167	DAR-119	GNS	2012-06-05	55°21	18°02	1920	cod	no
168	DAR-119	GNS	2012-06-06	55°24	18°02	1440	cod	no
169	DAR-119	GNS	2012-06-06	55°23	17°58	1560	cod	no
170	DAR-119	GNS	2012-06-06	55°20	17°53	1800	cod	no
171	DAR-119	GNS	2012-06-06	55°20	17°52	1800	cod	no
172	DAR-119	GNS	2012-06-07	55°18	18°00	1440	cod	no
173	DAR-119	GNS	2012-06-07	55°19	18°02	1440	cod	no
174	DAR-119	GNS	2012-06-07	55°22	18°02	1500	cod	no
175	DAR-119	GNS	2012-06-07	55°22	18°02	1560	cod	no
176	DAR-119	GNS	2012-06-08	55°19	17°53	1440	cod	no
177	DAR-119	GNS	2012-06-08	55°20	17°57	1440	cod	no
178	DAR-119	GNS	2012-06-08	55°21	18°02	1440	cod	no
179	UST-31	GNS	2012-06-29	54°56	14°12	1060	cod	no
180	UST-31	GNS	2012-06-29	54°55	14°13	1000	cod	no
181	UST-31	GNS	2012-06-29	54°56	14°11	1120	cod	no
162	DAR-119	GNS	2012-06-04	55°20	17°57	1560	cod	no
163	DAR-119	GNS	2012-06-04	55°20	17°53	1560	cod	no
164	DAR-119	GNS	2012-06-05	55°20	17°53	1200	cod	no
165	DAR-119	GNS	2012-06-05	55°20	17°57	1200	cod	no
166	DAR-119	GNS	2012-06-05	55°19	17°53	1140	cod	no
167	DAR-119	GNS	2012-06-05	55°21	18°02	1920	cod	no
168	DAR-119	GNS	2012-06-06	55°24	18°02	1440	cod	no
169	DAR-119	GNS	2012-06-06	55°23	17°58	1560	cod	no
170	DAR-119	GNS	2012-06-06	55°20	17°53	1800	cod	no
171	DAR-119	GNS	2012-06-06	55°20	17°52	1800	cod	no
172	DAR-119	GNS	2012-06-07	55°18	18°00	1440	cod	no
173	DAR-119	GNS	2012-06-07	55°19	18°02	1440	cod	no
174	DAR-119	GNS	2012-06-07	55°22	18°02	1500	cod	no
175	DAR-119	GNS	2012-06-07	55°22	18°02	1560	cod	no
176	DAR-119	GNS	2012-06-08	55°19	17°53	1440	cod	no
177	DAR-119	GNS	2012-06-08	55°20	17°57	1440	cod	no
178	DAR-119	GNS	2012-06-08	55°21	18°02	1440	cod	no
179	UST-31	GNS	2012-06-29	54°56	14°12	1060	cod	no
180	UST-31	GNS	2012-06-29	54°55	14°13	1000	cod	no
181	UST-31	GNS	2012-06-29	54°56	14°11	1120	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
182	UST-31	GNS	2012-06-29	54°56	14°15	1380	cod	no
183	UST-31	GNS	2012-06-29	54°58	14°11	1525	cod	no
184	UST-31	GNS	2012-06-29	54°57	14°14	1520	cod	no
185	UST-31	GNS	2012-06-30	54°55	14°12	720	cod	no
186	UST-31	GNS	2012-06-30	54°56	14°14	1060	cod	no
187	UST-31	GNS	2012-06-30	54°56	14°13	995	cod	no
188	UST-31	GNS	2012-06-30	54°56	14°20	1330	cod	no
189	UST-31	GNS	2012-06-30	54°56	14°14	1595	cod	no
190	UST-31	GNS	2012-06-30	54°56	14°12	1655	cod	no
191	UST-31	GNS	2012-06-30	54°56	14°14	1930	cod	no
192	UST-31	GNS	2012-07-01	54°56	14°12	1460	cod	no
193	UST-31	GNS	2012-07-01	54°56	14°13	660	cod	no
194	UST-31	GNS	2012-07-01	54°54	14°14	1130	cod	no
195	UST-31	GNS	2012-07-01	54°54	14°11	1160	cod	no
196	UST-31	GNS	2012-07-01	54°54	14°11	1375	cod	no
197	UST-31	GNS	2012-07-01	54°56	14°14	1340	cod	no
198	UST-31	GNS	2012-07-01	54°56	14°12	1260	cod	no
199	UST-31	GNS	2012-07-01	54°56	14°14	1360	cod	no
200	UST-31	GNS	2012-07-01	54°57	14°12	1925	cod	no
201	UST-31	GNS	2012-07-02	54°56	14°13	1895	cod	no
202	UST-31	GNS	2012-07-02	54°54	14°16	1135	cod	no
203	UST-31	GNS	2012-07-02	54°55	14°14	870	cod	no
204	UST-31	GNS	2012-07-02	54°55	14°16	930	cod	no
205	UST-31	GNS	2012-07-02	54°54	14°13	1350	cod	no
206	UST-31	GNS	2012-07-02	54°55	14°14	1320	cod	no
207	DAR-119	GNS	2012-06-29	54°34	14°43	1440	cod	no
208	DAR-119	GNS	2012-06-29	54°35	14°43	1440	cod	no
209	DAR-119	GNS	2012-06-29	55°36	14°44	1500	cod	no
210	DAR-119	GNS	2012-06-29	54°37	14°44	1500	cod	no
211	DAR-119	GNS	2012-06-30	54°35	14°40	1200	cod	no
212	DAR-119	GNS	2012-06-30	54°35	14°42	1320	cod	no
213	DAR-119	GNS	2012-06-30	54°35	14°44	960	cod	no
214	DAR-119	GNS	2012-06-30	54°35	14°45	1080	cod	no
215	DAR-119	GNS	2012-07-01	54°54	14°15	1020	cod	no
216	DAR-119	GNS	2012-07-01	54°52	14°10	1140	cod	no
217	DAR-119	GNS	2012-07-02	54°55	14°17	1980	cod	no
218	DAR-119	GNS	2012-07-02	54°54	14°15	1320	cod	no
219	DAR-119	GNS	2012-07-02	54°52	14°10	1380	cod	no
220	DAR-119	GNS	2012-07-03	54°54	14°15	1620	cod	no
221	DAR-119	GNS	2012-07-03	54°54	14°15	1440	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
222	DAR-119	GNS	2012-07-03	54°54	14°10	1380	cod	no
223	UST-31	GNS	2012-07-04	54°54	14°11	3090	cod	no
224	UST-31	GNS	2012-07-04	54°54	14°13	2875	cod	no
225	UST-31	GNS	2012-07-04	54°55	14°14	1730	cod	no
226	UST-31	GNS	2012-07-04	54°55	14°14	1670	cod	no
227	UST-31	GNS	2012-07-04	54°55	14°18	2025	cod	no
228	UST-31	GNS	2012-07-05	54°53	14°19	1420	cod	no
229	UST-31	GNS	2012-07-05	54°54	14°18	1215	cod	no
230	UST-31	GNS	2012-07-05	54°56	14°22	1320	cod	no
231	UST-31	GNS	2012-07-05	54°56	14°26	1365	cod	no
232	UST-31	GNS	2012-07-05	54°55	14°26	1850	cod	no
233	UST-31	GNS	2012-07-06	54°56	14°14	860	cod	no
234	UST-31	GNS	2012-07-06	54°56	14°13	1365	cod	no
235	UST-31	GNS	2012-07-06	54°57	14°13	1415	cod	no
236	UST-31	GNS	2012-07-06	54°56	14°13	1465	cod	no
237	UST-31	GNS	2012-07-06	54°54	14°15	1200	cod	no
238	UST-31	GNS	2012-07-06	54°56	14°21	1510	cod	no
239	UST-31	GNS	2012-07-07	54°56	14°13	530	cod	no
240	UST-31	GNS	2012-07-07	54°55	14°12	800	cod	no
241	UST-31	GNS	2012-07-07	54°54	14°15	2750	cod	no
242	UST-31	GNS	2012-07-07	54°57	14°13	985	cod	no
243	UST-31	GNS	2012-07-07	54°56	14°13	1360	cod	no
244	UST-31	GNS	2012-07-07	54°56	14°13	1430	cod	no
245	UST-31	GNS	2012-07-07	54°57	14°13	1530	cod	no
246	UST-31	GNS	2012-07-07	54°57	14°13	1660	cod	no
247	UST-31	GNS	2012-07-08	54°57	14°12	1215	cod	no
248	UST-31	GNS	2012-07-08	54°56	14°12	1280	cod	no
249	UST-31	GNS	2012-07-08	54°56	14°14	820	cod	no
250	UST-31	GNS	2012-07-08	54°56	14°12	1610	cod	no
251	UST-31	GNS	2012-07-08	54°56	14°13	1160	cod	no
252	UST-31	GNS	2012-07-08	54°56	14°13	1280	cod	no
253	UST-31	GNS	2012-07-08	54°57	14°13	1440	cod	no
254	UST-31	GNS	2012-07-08	54°56	14°13	1555	cod	no
255	UST-31	GNS	2012-07-09	54°56	14°13	775	cod	no
256	UST-31	GNS	2012-07-09	54°56	14°12	1395	cod	no
257	UST-31	GNS	2012-07-09	54°56	14°13	930	cod	no
258	UST-31	GNS	2012-07-09	54°56	14°13	1040	cod	no
259	UST-31	GNS	2012-07-09	54°56	14°13	1160	cod	no
260	UST-31	GNS	2012-07-09	54°56	14°12	1275	cod	no
261	UST-31	GNS	2012-07-09	54°54	14°13	870	cod	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
262	UST-31	GNS	2012-07-09	54°54	14°17	2860	cod	no
263	KOŁ-5	OTM	2012-09-09	54°23	15°38	240	herring, sprat	no
264	KOŁ-5	OTM	2012-09-09	54°34	15°51	360	herring, sprat	no
265	KOŁ-5	OTM	2012-09-10	55°31	16°31	360	herring, sprat	no
266	KOŁ-5	OTM	2012-09-10	55°35	16°34	270	herring, sprat	no
267	KOŁ-5	OTM	2012-09-10	55°35	16°34	420	herring, sprat	no
268	KOŁ-5	OTM	2012-09-10	55°38	16°34	420	herring, sprat	no
269	KOŁ-5	OTM	2012-09-11	55°40	16°37	300	herring, sprat	no
270	KOŁ-5	OTM	2012-09-11	55°46	16°43	360	herring, sprat	no
271	KUŹ-92	GNS	2012-09-20	54°40	18°36	2880	salmon, trout	no
272	KOŁ-5	OTM	2012-09-25	54°36	15°12	360	herring, sprat	no
273	KOŁ-5	OTM	2012-09-25	54°39	15°09	420	herring, sprat	no
274	KOŁ-5	OTM	2012-09-26	55°36	16°32	360	herring, sprat	no
275	KOŁ-5	OTM	2012-09-26	55°38	16°42	360	herring, sprat	no
276	KOŁ-5	OTM	2012-09-26	55°46	16°38	420	herring, sprat	no
277	KOŁ-5	OTM	2012-09-27	55°51	16°42	300	herring, sprat	no
278	KOŁ-5	OTM	2012-09-27	55°43	16°34	240	herring, sprat	no
279	KOŁ-5	OTM	2012-09-27	55°27	16°54	240	herring, sprat	no
280	HEL-150	OTM	2012-10-16	55°39	20°01	240	herring, sprat	no
281	HEL-150	OTM	2012-10-16	55°45	20°01	150	herring, sprat	no
282	KUŻ-92	GNS	2012-10-12	54°41	18°34	1440	salmon, trout	no
283	KUŻ-92	GNS	2012-10-12	54°39	18°36	1440	cod	no
284	KUŹ-88	GNS	2012-10-11	54°40	18°34	1440	salmon, trout	no
285	KUŹ-88	GNS	2012-10-11	54°39	18°34	960	cod	no
286	HEL-150	OTM	2012-10-18	55°44	20°09	420	herring, sprat	no
287	HEL-150	OTM	2012-10-18	55°47	20°07	420	herring, sprat	no
288	HEL-150	OTM	2012-10-18	55°47	20°01	450	herring, sprat	no
289	HEL-150	OTM	2012-10-19	55°49	20°02	420	herring, sprat	no
290	HEL-150	OTM	2012-10-19	55°45	19°53	300	herring, sprat	no
291	KOŁ-5	OTM	2012-10-16	54°25	15°30	420	herring, sprat	no
292	KOŁ-5	OTM	2012-10-17	54°27	15°30	360	herring, sprat	no
293	KOŁ-5	OTM	2012-10-17	54°35	15°54	390	herring, sprat	no
294	KOŁ-5	OTM	2012-10-17	54°30	15°35	480	herring, sprat	no
295	KOŁ-5	OTM	2012-10-18	54°33	15°27	300	herring, sprat	no
296	KOŁ-5	OTM	2012-10-18	54°41	15°16	420	herring, sprat	no
297	KOŁ-5	OTM	2012-10-18	54°41	15°19	480	herring, sprat	no
298	KOŁ-5	OTM	2012-10-19	54°47	14°48	360	herring, sprat	no
299	KOŁ-5	OTM	2012-10-19	54°40	14°52	360	herring, sprat	no
300	KOŁ-5	OTM	2012-10-19	54°34	15°12	480	herring, sprat	no
301	JAS-81	GNS	2012-03-23	54°37	18°39	1440	salmon, trout	no

No	Ship	Net code	Date	Latitude	Longitude	Haul duration	Main catch	Bycatch of cetaceans
302	JAS-81	GNS	2012-03-23	54°37	18°38	1440	cod	no
303	JAS-81	GNS	2012-04-13	54°38	18°39	2880	salmon, trout	no
304	JAS-81	GNS	2012-04-13	54°37	18°39	2880	cod	no
305	KUŹ-88	GNS	2012-07-04	54°42	18°36	720	cod	no
306	REW-6	GNS	2012-07-10	54°38	18°32	720	cod	no
307	REW-6	GNS	2012-07-10	54°38	18°32	720	cod	no
308	REW-6	GNS	2012-10-18	54°37	18°33	1440	cod	no
309	REW-6	GNS	2012-10-18	54°38	18°29	1440	cod	no
310	REW-18	GNS	2012-10-19	54°37	18°33	720	cod	no
311	REW-18	GNS	2012-10-19	54°38	18°29	720	cod	no
312	HEL-150	OTM	2012-10-24	55°42	18°06	360	herring, sprat	no
313	HEL-150	OTM	2012-10-24	55°44	18°03	360	herring, sprat	no
314	KOŁ-5	OTM	2012-10-27	54°27	15°37	360	herring, sprat	no
315	KOŁ-5	OTM	2012-10-27	54°30	15°42	420	herring, sprat	no
316	KOŁ-5	OTM	2012-10-27	54°31	15°35	360	herring, sprat	no
317	KOŁ-5	OTM	2012-10-28	54°40	15°33	360	herring, sprat	no
318	KOŁ-5	OTM	2012-10-28	54°41	15°16	420	herring, sprat	no
319	KOŁ-5	OTM	2012-10-28	54°44	15°15	480	herring, sprat	no

Annex IV

Pictures of the birds found in fishing nets

Dead birds



Common Guillemot (*Uria aalge*)

Entity: UST-31 Date: 30.05.2012 Time: 13.20

Geographical position: 54°58N;

16°45E



Common Guillemot (Uria aalge)

Entity: UST-31 Date: 30.05.2012 Time: 16.30

Geographical position: 54°59N;

16°50E