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Annual report on the implementation of Council Regulation (EC) No 812/2004-2015

A.S. Couperus

CVO Report 16.010

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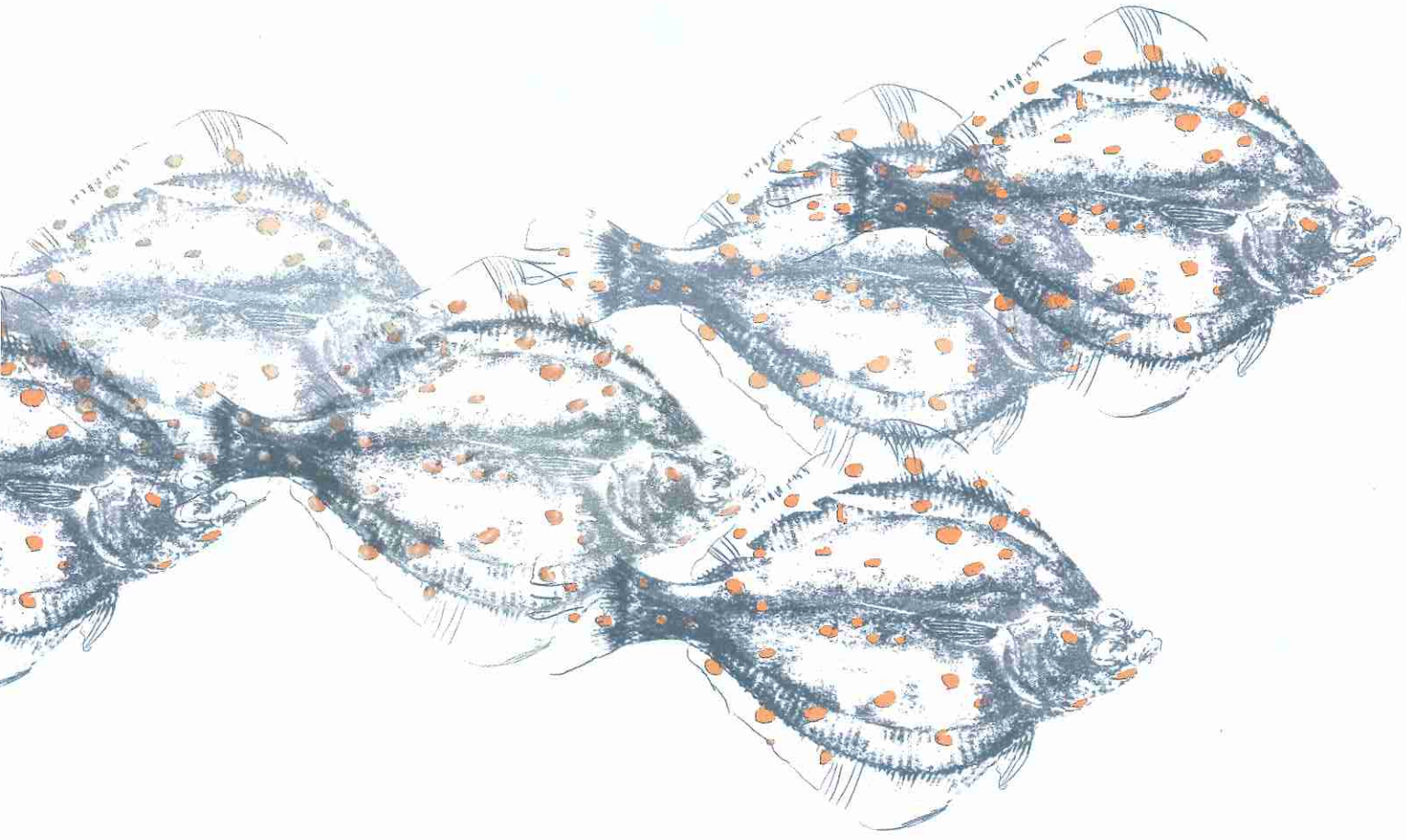

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Stichting Wageningen Research
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Annual report on the implementation of Council Regulation (EC) No 812/2004 - 2015

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[1] Council Regulation (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98.
Article 6 of the Regulation,
1. Each year, Member States shall send the Commission, by 1 June, a comprehensive annual report on the implementation of Articles 2, 3, 4 and 5 during the previous year. The first report shall cover both the remaining part of the year following the entry into force of this Regulation and the entire year that follows.

2. On the basis of the observers' reports provided according to Article 5(3) and all other appropriate data, including those on fishing effort collected in application of Council Regulation (EC) No 1543/2000 of 29 June 2000 establishing a Community framework for the collection and management of the data needed to conduct the common fisheries policy, the annual report shall include estimates of the overall incidental catches of cetaceans in each of the fisheries concerned. This report shall include an assessment of the conclusions of the observers' reports and any other appropriate information, including any research conducted within the Member States to reduce the incidental capture of cetaceans in fisheries. When reporting on the results of scientific studies or pilot projects as provided for in Articles 2(4) and 4(2), Member States shall ensure that sufficiently high quality standards are reached in their design and implementation and shall provide detailed information concerning those Standards to the Commission.

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Summary

This report contains the results of the on-going monitoring programme on the incidental bycatch of cetaceans in Dutch pelagic fisheries in 2015. EU Council Regulation 812/2004 requires observer coverage in ICES areas VI, VII and VIII in the period 1 December – 31 March (fleet segment NLD003) and outside this area in all areas year round (fleet segment NLD004). In the Dutch situation the monitoring is integrated with the collection of discards data under the EC Data Collection Regulation 199/2008 and Decision 93/2010.

In 2015, during 7 fishing trips, 29 days and 58 hauls were observed in fleet segment NLD003; 88 days and 241 hauls were observed in fleet segment NLD004. With a total number of fleet days of 381 in fleet segment NLD003 and 625 in fleet segment NLD004, the coverage was 7.6% and 14.1% respectively. Thus the target of the Pilot Monitoring Scheme of 10% for NLD003 and 5% for NLD004 has not been fulfilled. Five of twelve trips monitored by the Netherlands, were on board one German, two French and two UK flagged trawlers. The observer effort consisted of 51 days (185 hauls), covering approximately 69% of the total Dutch monitoring effort. The data collected during these trips will be made available to the ICES Working Group on Bycatch of Protected Species (WGBYC).

The observed bycatch rate of 0.00 dolphins per day in the pelagic fishery is in line with the findings in 2006 - 2014 when the bycatch rate was 0.00-0.01 dolphins per day.

In addition to cetaceans, this report includes information bycatches of other species. Six blue fin tuna (*Thunnus thynnus*) were caught in two incidents.

ACOUSTIC DETERRENT DEVICES

1 General Information

The EU regulation obliges the use of pingers in certain fleet segments. According to the criteria mentioned in the regulation, the Dutch fishery includes no fleet segments in which pingers are mandatory.

2 Acoustic Deterrent Devices

2.1 Mitigation measures

The use of pingers is obligatory in ICES sub area IV for vessels larger than 12m in the period 1 August till 31 October, using nets that do not exceed 400m length (the regulation intents to cover set nets fishery at wrecks, where relatively short net lengths are being used). The vast majority of the fleet fishes in this period for sole with much longer nets.

3 Monitoring and assessment

3.1 Monitoring and assessment of the effects of pinger use

If some vessels are required to use pingers, this is not registered or known by governmental authorities, nor are the fishermen aware that they should use pingers. Hence table 1 does not contain information. Most probably no acoustic deterrents are in use by Dutch gill net fishers. This would be against the law. However, most likely vessel larger that 12m fishing on wrecks (that is with nets that not exceed 400m) there are very few none existent.

OBSERVER SCHEMES

4 General information on implementation of Articles 4 and 5

Council Regulation No 812/2004[2] obliges Member States to monitor bycatches of cetaceans in certain fisheries, certain periods of the year and in certain European Waters and to report the results of the monitoring to the European Commission. In the Netherlands, the monitoring is commissioned by the Ministry of Economic Affairs to IMARES, the former Netherlands Institute for Fisheries Research since January 1st, 2005.

The aim of this study is to assess the incidental bycatch of cetaceans in the Dutch pelagic fisheries. Under the regulation the following fleet segments in the Netherlands should be monitored:

- Pelagic fishery in the period of 1 December till 31 March in ICES areas VI, VII and VIII; in this report referred to as fleet segment NLD003 for single pelagic vessels.

- Pelagic fishery in European waters during the year excluding the fishery in the period 1 December till 31 March in ICES areas IV, VII and VIII; in this report referred to as fleet segment NLD004 for single pelagic vessels.

The regulation does not require monitoring of fishery with set gill nets in ICES area IVc where (most of) the overall fishery activity from Dutch ports takes place.

Under the regulation, a coverage should be reached leading to a CV of the bycatch estimate of 30% or less. However, in a situation where there are very few bycatch incidents, this CV is not realistic (ICES, 2009). Therefore the target of the current monitoring programme in the Netherlands is to cover the fleet effort according to the Pilot Monitoring Scheme (PMS), in the Regulation originally set for the first two years. The required pilot coverage is 10% for the period of 1 December till 31 March in ICES area VI, VII and VIII and 5% in the remainder of the year with exclusion of fleet segment NLD003. In the Dutch situation the monitoring is integrated with the collection of discards data under the EU Data Collection Framework: CD 2010/93[3] and CR 199/2008[4]. The project under this regulation aims at an overall coverage of approximately 10% in European waters and includes pelagic trawlers under foreign flag, which land the catch in Dutch ports. Data collected under EC. Reg. 812/2004 on board of these vessels are sent to the scientists responsible for the execution of the national monitoring programs in their countries.

Earlier studies on the incidental bycatch of cetaceans have been reported by Couperus (1995, 1997a) covering the period 1992 -1996. The period 2004 – 2013 is covered by standard reports on the implementation of EC Regulation 812/2004.
Monitoring of bycatch of cetaceans is conducted by of the Centre of Fisheries Research (Centrum voor Visserijonderzoek: CVO) on behalf of the Ministry of Economic Affairs. CVO hires IMARES to carry out the observer trips and to prepare the report.

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[2] Council Regulation (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98

[3] Commission Decision 2010/93 of 18 December 2009 adopting a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013 (extended to 2016)

[4] COUNCIL REGULATION (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy

Difficulties: In the observer programme for pelagic fleet the observer effort is spread quasi random over the year. The observer trips are scheduled equally over the year and observers join the first trawler that comes in if accommodation is available. However, the choice of area and target species are often last minute decisions of the owner of the vessel and may even alter during the trip itself. Therefore it is impossible to foresee or plan the exact effort in the area that has to be monitored under EC Regulation No 812/2004.

The fact that the sampling program includes the monitoring of vessels under foreign flag which land in Dutch ports, adds to the unpredictability of the coverage of the Dutch fleet segments.

5 Monitoring

5.1 Description of fishing effort and observer effort in towed gear

In 2015 the fleet consisted of 10 freezertrawlers and one set of pair trawlers. The freezertrawlers fish from December to March in ICES sub areas VI, VII and VIII comprise fleet segment NLD003. Fleet segment NLD004 are the same freezertrawlers fishing in area's I-XIV all year round. The single set of pair trawlers did not fish in 2015 (in reports till 2007 the freezertrawlers and the pair trawlers have been treated as one fleet consisting of two fleet segments; from 2008 till 2013 they were treated as a separate fleet).

In 2015 on 7 trips an observer joined the vessel in segment NLD003-NLD004. According to the national logbook database, the number of days fished by the whole pelagic fleet (NLD003-NLD004) in 2015 was 1006 for whole Dutch pelagic fleet. With 117 observer days the overall coverage of the Dutch pelagic fleet was 11.6%. The number of sampled hauls was 299, 58 in NLD003 and 241 in NLD004. The text table provides the effort and coverage by fleet segment:

Fleet segment	Fleet days	Observer days	Coverage required according to PMS	Coverage achieved
Pelagic trawl (NLD003)	381	29	10%	7.6%
Pelagic trawl (NLD004)	625	88	5%	14.1%
Trammel nets	92	2	0%	1.4%
Gill nets	1988	3	0%	0.14%
Set Nets (unspecified)	4	..	..	..

Table 2 provides fleet effort and observer coverage by ICES subarea.
Notice that a vessel may have visited several areas on one day which means that a day on which a vessel fished in two areas is counted as two days. Thus the sum of all days at sea is not necessarily the same as the total fishing days at sea. Observer days and fleet days during which no fishing took place are not counted as effort days.

In addition to the trips on board Dutch trawlers, 5 observer trips took place on vessels under foreign flag. On board one French trawler, two trips (25 days), 62 hauls have been monitored, no bycatches were observed. On board one UK trawler, during two trips (21 days), 49 hauls have been monitored. On board of one German vessel, one trip (35 days), 74 hauls have been monitored. This is together 185 hauls, during 81 days, consisting of 69% of the total Dutch observer effort in the pelagic fishery. The data collected during these trips will be made available to WGBYC.

5.2 Description of fishing effort and observer effort in static gear

In 2015 the set gill net fishery was monitored under the DCF (see footnotes paragraph 4).
The Dutch set gill net fleet consists of 70-100 vessels. Most of them are operated by part time fishermen. Therefore, many vessels do not fish for extended periods during the year. Some do not fish at all. Most of the vessel fish with tangle nets for sole. Part of the fleet (5-10 vessels, depending on the catches and the market) switches in winter to trammel nets, targeting cod, turbot and mixed flatfish (brill, plaice, dab, flounder). A few vessels may fish at wrecks with gill nets for cod or near dams for bass. Since most vessels are very small, trip duration is normally 1 day. Approximately five vessels are larger than 12m and may stay at sea overnight.
The Dutch government aims to sample 10 trips per year without pre-stratification to net type. Due to lack of cooperation, in 2015 only 5 trips were sampled.

6 Estimation of incidental catches

6.1 Incidental catch rates by fleet segment and target species

In the Dutch pelagic fishery monitoring programme (fleet segment NLD003) and in the gill net fishery, no incidental bycatch incidents of cetaceans were reported. Incidental bycatch of non-cetacean species, consisted of 4 incidents in which 6 blue fin tuna (*Thunnus thynnus*) were caught, resulting in an estimated bycatch rate of 12 specimens per day in ICES area 7g (table 4).
Some incidental bycatch incidents were recorded during the observer trips on board foreign vessels.UK vessels: one dolphin and one blue fin tuna in one haul (August, in area 6a, herring).
German vessel: 4 basking sharks in four hauls, 4 days (May, in area 6a, greater argentine and blue whiting). These data will be added to the dataset of the involved countries for the calculation of the bycatch rate.

7 Recording of incidental catches

On pelagic trawlers, the observer was present on the bridge during shooting and hauling of each tow. Position and time were recorded at the beginning of each haul. The time was recorded again when hauling started. The rear window of the bridge gives a good view on the rear deck, so that bycatches of cetaceans can be recorded from there. Of any bycatch, length, sex and obviously species must be recorded. In the case of cetacean bycatches (if the animals are dead), and if the crew agrees, the animals are labelled and frozen for further examination at the institute.

On board gill net cutters, the hauling continues over extended periods of time. Observers take length frequency samples of the fish caught during hauling. Therefore they may miss the bycaught specimens of cetaceans that drop out of the net before the net during the process of hauling. For this reason numbers presented in this report are considered to be minimum numbers. However, given the closeness of the observer to the actual hauling process on board these very small vessels, it is believed that they do not differ much from the real numbers.

8 Discussion

With 7.6%% coverage of fleet segment NLD003 the PMS target of 10% has not been fulfilled. The target of 5% for the fleet segment NLD004 has been fulfilled (14.1% coverage). As explained above, the observer effort is combined with the DCF sampling following a quasi-random scheme. The observer

programme is combined with the collection of discards data which aims at an overall random coverage of 10%. Therefore the coverage in the fleet segments varies therefore from year to year.
The target area of a freezertrawler is often not known until it leaves port and may change during the trip itself. In addition the actual observer effort during transport towards -, from - and between fishing areas is not taken into account in this report for practical reasons - the assignment to metiers of sail- and search time would be complicating – whereas an observer needs to be paid during the whole stay on board. In fact the overall coverage of pelagic vessels operated by the Dutch exceeds 10% taken in account that 5 of 12 trips of the discards sampling program were on vessels with foreign flag.

The recorded bycatch rate of cetaceans in the pelagic fishery is 0.00 (no cetaceans in 117 observed days), which is similar to rates found in 2005 - 2012. In the Dutch fishery, bycatches of dolphins occurred in the past mainly in the fishery for horse mackerel and mackerel west of Ireland in February and March (Couperus, 1997b). The relatively low bycatch rates in 2005 – 2013 compared to the rates in the 1990ies are probably related to a shift in effort from horse mackerel towards the blue whiting fishery (Couperus, 2006).

Due to the high number of hauls without bycatches it is not possible to estimate the bycatch rate with any accuracy with the current observer effort. The total bycatch mortality of cetaceans caused by Dutch pelagic freezer trawlers in the 2005-2013 seasons is in the order of magnitude of zero to several tens. However, data from the 1990ies suggest that the bycatch rate may vary, partly induced by changes in the quotas of pelagic target species.

In the set net monitoring programme no bycatch incidents were observed in 5 day trips. The bycatch rate of harbour porpoises in set nets is poorly studied in the Netherlands. Earlier monitoring pilot resulted in zero bycatches in 34 day trips with gill nets for mullet and bass (Klinge, 2008); 1 harbour porpoise during 48 day trips with trammel- and gill nets (Couperus et al., 2009); 6 harbour porpoises in 24 REM-monitoring days and zero porpoises in in 6 REM-monitoring days for sole and 4 for bass (Helmond and Couperus, 2011). Bycatch of harbour porpoises in the Dutch fishery is currently under investigation in a Electronic Monitoring study over the period of 2012 to 2015/2016, in which 10 vessels participate.

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TABLES

Table 1. Pingers used in fleet segment set gill nets.

Metier	Fishing area	Pinger characteristics	Other mitigation measures
-	-	-	-

Table 2. Fleet effort and observer effort in towed gear

			Total fishing effort						Total observer effort achieved							
Fishery segment (ref in this report)	Metier	Fishing area	No. of vessels	No. of trips	Days at sea	Months of operation	No. of hauls	Total towing time	No. of vessels	No. of trips	Days at sea	Months of operation	No. of hauls	Total towing time (min)	Type of monitoring*	Coverage
NLD003	OTM small pelagic fish	6a	6	8	60	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD003	OTM small pelagic fish	6b	1	1	6	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD003	OTM small pelagic fish	7b	6	11	73	1,2,3 & 12	unk	unk	1	1	2	1,2,3 & 12	4	995	PMS	2.7%
NLD003	OTM small pelagic fish	7c	4	6	24	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD003	OTM small pelagic fish	7d	5	8	58	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD003	OTM small pelagic fish	7e	5	7	18	1,2,3 & 12	unk	unk	1	1	6	1,2,3 & 12	10	1185	PMS	33.3%
NLD003	OTM small pelagic fish	7h	2	2	3	1,2,3 & 12	unk	unk	1	1	2	1,2,3 & 12	2	455	PMS	66.7%
NLD003	OTM small pelagic fish	7j	6	8	69	1,2,3 & 12	unk	unk	1	1	13	1,2,3 & 12	30	8695	PMS	18.8%
NLD003	OTM small pelagic fish	7k	3	5	47	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD003	OTM small pelagic fish	8a	0	0	0	1,2,3 & 12	unk	unk	2	2	6	1,2,3 & 12	12	1970	PMS	#DIV/0!
NLD003	OTM small pelagic fish	8b	4	6	23	1,2,3 & 12	unk	unk	0	0	0	1,2,3 & 12	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	2a	6	7	72	1-12	unk	unk	1	1	18	1-12	40	12085	PMS	25.0%
NLD004	OTM small pelagic fish	2b	1	1	1	1-12	unk	unk	0	0	0	1-12	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	3a	1	1	1	1-12	unk	unk	0	0	0	1-12	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	4a	7	27	209	1-12	unk	unk	5	5	20	1-12	83	13067	PMS	9.6%
NLD004	OTM small pelagic fish	4b	6	15	65	1-12	unk	unk	3	3	10	1-12	41	5255	PMS	15.4%
NLD004	OTM small pelagic fish	4c	2	4	10	1-12	unk	unk	1	1	1	1-12	1	90	PMS	10.0%
NLD004	OTM small pelagic fish	6a	6	19	173	4-11	unk	unk	1	1	6	4-11	15	2705	PMS	3.5%
NLD004	OTM small pelagic fish	7b	3	3	6	4-11	unk	unk	1	1	2	4-11	2	960	PMS	33.3%
NLD004	OTM small pelagic fish	7c	3	3	3	4-11	unk	unk	0	0	0	4-11	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	7d	6	9	44	4-11	unk	unk	1	1	10	4-11	19	2950	PMS	22.7%
NLD004	OTM small pelagic fish	7e	3	5	19	4-11	unk	unk	2	2	11	4-11	23	2080	PMS	57.9%
NLD004	OTM small pelagic fish	7f	1	1	1	4-11	unk	unk	0	0	0	4-11	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	7g	4	4	8	4-11	unk	unk	1	1	4	4-11	9	960	PMS	50.0%
NLD004	OTM small pelagic fish	7h	1	1	3	4-11	unk	unk	1	1	2	4-11	2	455	PMS	66.7%
NLD004	OTM small pelagic fish	7j	3	3	9	4-11	unk	unk	0	0	0	4-11	0	0	PMS	0.0%
NLD004	OTM small pelagic fish	8b	1	1	1	4-11	unk	unk	2	2	4	4-11	6	405	PMS	400.0%
NLD004	OTM small pelagic fish	8d	0	0	0	4-11	unk	unk	1	1	4	4-12	5	330	PMS	#DIV/0!

*PMS = Pilot Monitoring Scheme

Table 3. Fleet effort and observer effort in static gear (fleetsegment NLD007)

		Total fishing effort						Total observer effort achieved						Type of monitoring*	Coverage
Metier	Fishing area	No. of vessels	No.of trips	Days at sea	Months of operation	Total length of	Total soak	No. of vessels	No.of trips	Days at sea	Months of	Total length of	Total soak		
Nets	4c	2	4	4	1-12	unk	unk	0	0	0		0	0	PMS	
GTR	4b	0	0	0	10-12 & 1-4	unk	unk	0	0	0	0	0	0	PMS	
GTR	4c	9	144	145	10-12 & 1-4	unk	unk	2	2	2	10-12 & 1-4			PMS	
GNS	4b	1	1	1	1-12	unk	unk	0	0	0	0	0	0	PMS	
GNS	4c	92	1987	2147	1-12	unk	unk	3	3	3	1-12			PMS	

Table 4. Bycatch rates. Incidental catch rates are expressed as in specimens/days.

						Number of		Incidental			
Fishery segment (ref in this report)	Metier	Fishing area	Main target species	Incidental caught species	Number of incidents	With pingers	Without pingers	With pingers	Without pingers	Total incidental catch estimate	CV
NLD004	OTM small pelagic fish	VIa	Herring	Thunnus thynnus	4	0	6	0	1.50	12.00	74.5%

Signature

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