

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

Reference Period: 1st January to 31st December 2015

Member State: Ireland

Date: December 2016

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Acknowledgements: Thanks to the following contributors:

- Effort data - Susan Coughlan, SFPA
- Observer data – Graham Johnson and Ciaran O’Donnell, MI

Summary

A total of 26 trips comprising 134 days at sea and 136 hauls were observed in pelagic trawl fisheries in 2015. All of this work was carried out as part of Data Collection Framework monitoring and surveys. Following a period of intensive monitoring of set net fisheries from 2011 to 2013 no further monitoring of set net fisheries occurred during 2015. Three common dolphins were reported as bycatch in a single haul of a Midwater otter trawl fishery targeting herring in the Celtic Sea in October. This was the first incidence of cetacean bycatch reported in Irish pelagic trawl fisheries since 2006 when a bycatch of 4 common dolphins was observed. A total of 7 common dolphins have been observed from a total of 1319 days at sea observed since monitoring under EC 812/2004 commenced in 2005. Of these, a total of 219 days were carried out as part of dedicated independent observer programmes from 2010 to 2012 in a range of pelagic trawl fisheries with no cetacean bycatch observed. Results to date suggest that the risk of bycatch of cetaceans and other protected species in Irish pelagic trawl fisheries is low.

ACOUSTIC DETERRENT DEVICES

1. General Information

No administrative measures were taken in relation to gillnet pingers in 2015.

2. Acoustic Deterrent Devices (Article 2 and 3)

2.1 Mitigation measures

The number of Irish vessels currently using pingers is unknown

3. Monitoring and assessment

3.1 Monitoring and assessment of the effects of pinger use (Article 2.4)

Extensive research on the practicalities and spacing of gillnet pingers has previously been carried out by BIM in Ireland and has been reported in previous reports under 812/2004 and at WGBYC. BIM have also been heavily involved in the development and testing of pelagic trawl pingers as also reported previously.

3.3. Derogation

Based on pinger spacing research carried out by Ireland and Denmark, a temporary derogation under Article 3(2) of Regulation 812/2004 allowed for an increase in maximum spacing between pingers to 500m for digital devices from 13 June 2007 for a period of two years. This derogation has not yet been renewed.

3.4 Overall assessment

ADDs can reduce harbour porpoise bycatch in set net fisheries. Numerous trials have shown that pingers of several types can reduce porpoise bycatch by around 90%. ADDs are, however, expensive, where many are required (e.g. for set net fisheries), require periodic maintenance to check and replace batteries and can interfere with net setting and hauling. There is still ambivalence towards ADDs from NGOs due to perceived habitat exclusion and environmental noise effects. The seriousness of these effects is unproven. Habituation has also been cited as a reason that ADDs don't work although again there is no evidence that this is an issue. DDD devices have good potential to work in pelagic trawl fisheries where incidental bycatch of common dolphins may occur.

OBSERVER SCHEMES

4. General information on implementation of Articles 4 and 5

Four fleets/metiers >15m in size were identified as requiring observer coverage in relation to Articles 4 and 5 of 812/2004. These metiers are defined according to Appendix IV of Commission Decision 2008/949/EC as:

Metier Code	Level 4	Level 5
1.	Set gillnets (GNS)	Demersal fish
2.	Midwater otter trawl (OTM)	Small pelagic fish
3.	Midwater pair trawl (PTM)	Small pelagic fish
4	Midwater pair trawl (PTM)	Large pelagic fish

Additional metiers consisting of set net and pelagic trawl vessels <15m in size are used for Irish data, linking in with the requirement to carry out pilot observer schemes on smaller vessels under EC 812/2004. These metiers are defined as:

Metier Code	Level 4	Level 5
5.	Set gillnets (GNS) <15	Demersal fish
6.	OTM and PTM < 15	Small Pelagic fish

- Under 15m vessels

A total of 4 days observer work was carried out on pelagic trawling vessels under 15m in 2015

Provide information on:

- Legislative or administrative measures following provisions of Art.4 or 5.
- Difficulties implementing articles 4 and 5 of 812/2004

Pelagic trawl monitoring during the observer programme in accordance with the EC regulation 812/2004 resulted in 3 common dolphins observed as bycatch. Based on this result, it is impossible to design a sampling strategy aimed at achieving a co-efficient of variation no higher

than 0.30 for the most frequently caught species. Ireland will therefore continue to implement pilot monitoring schemes in accordance with Annex III of 812/2004.

- Nature of onboard observations

Onboard observations were also carried out as part of discard and stock surveys carried out under the Data Collection Framework (DCF) by the Marine institute.

5. Monitoring

5.1 Description of fishing effort and observer effort in towed gear

Metier Number	Fishing Area	Season	Trips Ef	Days at Sea Ef	No of Hauls Ef	Trips Ob	Days at Sea Ob	No of Hauls Ob
2	IIa	All year	1	6	5			
2	IVa	All year	21	104	69			
2	IVa	Winter	1	12	2			
2	VIa	All year	6	24	14	2	15	23
2	VIa	Winter	35	131	101		1	1
2	VIb	Winter	0	0	7			
2	VIIb	All year	3	12	6		4	6
2	VIIb	Winter	42	184	196		1	1
2	VIIc	All year	2	8	7			
2	VIIc	Winter	14	76	48		2	2
2	VIIg	All year	6	16	11			
2	VIIg	Winter	2	5	4			
2	VIIh	All year	1	12	6		21	29
2	VIIIa	All year	1	12	1		2	2
2	VIIIa	Winter	1	15	3			
2	VIIj	All year	11	55	35	1	10	13
2	VIIj	Winter	9	37	26			
2	VIIk	All year	1	1	1	1	1	1
2	VIIk	Winter	1	1	1	1	1	1
3	IIa	All year	2	9	3			
3	IVa	All year	25	106	39	2	7	6
3	IVa	Winter	1	3	1			
3	VIa	All year	9	31	22	3	9	7
3	VIa	Winter	53	207	165	4	18	15
3	VIb	All year	1	2	1			
3	VIIb	All year	5	26	6	3	9	5
3	VIIb	Winter	46	177	85			
3	VIIc	All year	3	11	4			
3	VIIc	Winter	6	29	11			
3	VIIg	All year	64	158	118	2	4	3
3	VIIg	Winter	18	44	22			
3	VIIh	All year	1	10	7			
3	VIIh	Winter	2	18	14			
3	VIIIa	All year	1	9	1			
3	VIIIa	Winter	1	13	2			
3	VIIj	All year	3	16	7	2	9	4
3	VIIj	Winter	37	126	53	2	7	4
3	VIIk	Winter	1	2	1			
4	Ixb	All year	1	5	1			
4	VIa	All year	1	4	1			
4	VIa	Winter	1	4	1			
4	VIIb	Winter	1	4	1			

4	VIIe	All year	1	3	1			
4	VIIg	All year	5	13	6			
4	VIIh	All year	1	3	1			
4	VIII d	All year	1	8	1			
4	VIII e	All year	1	7	4			
4	VIIj	All year	24.5	225.5	95.5	1	9	10
4	VIIk	All year	1.5	14.5	13.5			
4	Xb	All year	1	11.5	4			
4	XIIc	All year	10	133	37			
6	VIa	All year	11	14	12			
6	VIa	Winter	2	3	2			
6	VIIa	All year	61	71	111			
6	VIIa	Winter	59	79	102	2	4	3
6	VIIg	All year	1	1	1			
6	VIIg	Winter	8	9	18			

5.2 Description of fishing effort and observer effort in static gear

Metier	Fishing Area	Season	Trips Ef	Days at Sea Ef	No of Hauls Ef	Trips Ob	Days at Sea Ob	No of Hauls Ob
1	VIa		0	0	11			
1	VIIa		3	14	22			
1	VIIb		46	157	680			
1	VIIc		2	15	27			
1	VIIg		93	509	3673			
1	VIIj		130	633	1832			
5	VIa		23	40	83			
5	VIIa		10	15	193			
5	VIIb		70	89	556			
5	VIIg		578	1039	6856			
5	VIIj		385	481	6306			

6. Estimation of incidental catches

6.1 Incidental catch rates by fleet segment and target species

Metier	Fishing		Species	No of specimens without pingers	Bycatch Mesh Size (mm)
	Area	Season			
2	VIIj	All year	<i>Delphinus delphis</i>	3	

8. Conclusions

Results to date suggest that the risk of bycatch and other protected species in Irish pelagic trawl fisheries is low. Cetacean bycatch has been sporadic in observed set net operations in recent years with seal bycatch occurring relatively frequently in large meshed set nets.

9. Annexe I

Table 9.1 Summary of Irish Fishing Effort and Observer Coverage in relation to requirements under 812/2004

Metier Code	Level 4	Level 5
1	Set gillnets (GNS) >15	Demersal fish
2	Midwater otter trawl (OTM)	Small pelagic fish
3	Midwater pair trawl (PTM)	Small pelagic fish
4	Midwater pair trawl (PTM)	Large pelagic fish
5	Set gillnets (GNS) <15	Demersal fish
6	OTM and PTM <15	Small pelagic fish

Total Effort (Days at sea)

Year	Metier					
	1	2	3	4	5	6
2005	1870	716	1100	118	845	16
2006	1537	393	995	75	1036	50
2007	1772	380	1056	103	1232	41
2008	1603	440	1014	218	1486	40
2009	1474	629	1013	350	1733	21
2010	1454	872	1257	302	1547	41
2011	1268	534	1221	237	1142	96
2012	1339	775	1518	628	1402	397
2013	1349	699	1397	321	2430	207
2014	1333	1002	1409	341	1820	298
2015	1328	709	993	434	1664	177

Observed effort (Days at sea)

Year	Metier					
	1	2	3	4	5	6
2005	63	8	12	14	16	
2006	45	40		11	6	
2007	10	24	14	7		
2008		43	17			
2009		46	31	5		2
2010		52	40	59		5
2011	71	60	157	48	10	8
2012	33	74	143	15	8	3
2013	9	65	43	19	31	5
2014	2	63	31	6	11	
2015		58	63	9		4

Annual observer coverage (%)						
Year	1	2	3	4	5	6
2005	3.37	1.12	1.09	11.91	1.89	
2006	2.93	10.18		14.77	0.58	
2007	0.56	6.32	1.33	6.80		
2008		9.77	1.68			
2009		7.31	3.06	1.43		9.52
2010		5.96	3.18	19.57		12.20
2011	5.60	11.24	12.86	20.30	0.88	8.33
2012	2.46	9.55	9.42	2.39	0.57	0.76
2013	0.67	9.30	3.08	5.93	1.28	2.42
2014	0.15	6.29	2.20	1.76	0.60	0.00
2015	0.00	8.18	6.34	2.07	0.00	2.26