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COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposal for a

Regulation of the European Parliament and of the Council laying down a prohibition on driftnet fisheries, amending Council Regulation (EC) No 850/98, (EC) No 812/2004, (EC) No 2187/2005 and (EC) No 1967/2006 and repealing Council Regulation (EC) No 894/97

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1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

1.1. Identification

Lead DG: DG MARE

Other EC Departments involved: SG, SJ, ENTR, EMPL, ENV, REGIO, RTD, DEVCO

Agenda planning/WP reference: 2013/MARE/107

1.2. Organisation and timing

This impact assessment concerns a proposal for a Regulation for the prohibition of the small-scale driftnet fisheries in EU waters and by EU fishing vessels outside those waters.

An impact assessment steering group (IASG) was created in March 2013 which, in addition to various DG MARE services included representatives from the following services and Directorates General: SG, SJ, ENTR, EMPL, ENV, REGIO, RTD, and DEVCO.

The first meeting was held on 15 March, and subsequent meetings were held on 2 July, 5 September and 4 October. The final meeting was held on 16th October 2013 to discuss the final draft report of a study in support of the review of existing EU legislation on regulating driftnet fisheries. This study provided substantive information for this Impact Assessment. The IASG worked by correspondence to finalise the draft IA report

1.3. Consultation of interested parties and expertise

1.3.1. Introduction

Consultation with stakeholders, scientific community and Member States has included the following:

- (1) An Interactive Policy Making (IPM) web-based public consultation. This was undertaken from 27 March until 15 September 2013. This consultation provided information from relevant stakeholders on the issues and proposed policy options. The results are summarised in section 1.3.2, 2.2.1 and in more detail in Annex 1A.
- (2) Two studies, one describing the small-scale driftnet fisheries in the Mediterranean¹ and the other providing a retrospective and prospective evaluation² of all EU driftnet fisheries (section 1.3.3 and Annex 2).
- (3) Specific information requested from Member States on FIFG/EFF/national funds support and on control, monitoring and surveillance of driftnets fisheries (section 1.3.4 and Annex 1B)

These information sources combined have provided an updated overview of the driftnet fishing fleets in EU waters, their likely environmental, economic and social impacts as well as an evaluation of the proposed policy options. The outcomes of all these sources have been duly and timely circulated to the IASG members.

¹ MAREA Framework Contract MARE 2009/05 Lot. 1 SI2.651082 - Specific contract 8 (SI2.646130). "Identification and characterization of the small scale driftnet fisheries in the Mediterranean (DriftMed)..

² Framework Contract No MARE/2011/01 Lot2 - Specific contract 5 (SI2.650655). "Study in support of the review of the EU regime on the small-scale driftnet fisheries".

The Regional Advisory Councils (RACs) have been formally informed of the public consultation and the two scientific studies with a view to elicit their contributions and to spread the information on the EC initiative to a wider public through their members. In order to promote the public consultation among the scientific community also the Scientific, Technical and Economic Committee for Fisheries (STECF) was duly informed.

It can therefore be considered that the obligation to consult the stakeholders and Member States is fulfilled.

1.3.2. Consultation of interested parties

On 27 March 2013, a public consultation was launched in support of the Impact assessment. This public consultation originally was due to be completed by 28 June 2013 but was prolonged until 15 September due to the limited number of replies received at the time of the first deadline.

Stakeholders were invited to provide their knowledge of the existing driftnet fisheries, to appraise possible persisting control and environmental problems and to evaluate and comment the policy options identified in the roadmap³. The questionnaire was structured accordingly into different sections:

- presentation of the contributors;
- description the existing driftnet fisheries;
- appraisal of possible persisting environmental/control problems; and
- perspective of the policy options as indicated in the roadmap.

The IPM online public consultation was widely open to all different kind of contributions from citizen acting on a personal capacity to people representing organisation/associations and national administrations.

As of the 16 September 2013, 41 answers were received from a variety of stakeholders; only 40 were considered addressing the items of the public consultation and considered in the analysis. One contribution received from a respondent acting on a personal capacity went outside the scope of the consultation (small-scale driftnet fisheries) and did not address the questions included in the questionnaire; therefore it could not be taken into account for this assessment.

Responses were received from 12 EU Member States across sea basins (Italy, Germany, Spain, Belgium, France, Greece, the Netherlands, Portugal, Finland, Ireland, Malta, the United Kingdom) and 1 non-EU country (Switzerland). However, most responses were received from the Mediterranean and in particular Italy (27.5%).

Most of the contributors (67.5%, 27 replies) indicated they had a good level of expertise in the area of driftnets.

³ [Driftnet roadmap](#)

Out of the 40 replies only 1 came from a Member States administration (NL). NGOs accounted for 57.5% (23 replies), whilst the fishing sector (either as associations or individual fishermen) were represented by 20 % (8 replies). Contributions from scientists amounted to 7 replies (17.5%). Civil society is represented by 2.5% of the replies.

The consultation confirmed the existence of a number of small-scale driftnet fisheries targeting different species (e.g. anchovy, sardine, greater amberjack, grey mullets, garfishes-needlefishes, lamprey, mackerels, sea bass, some sea-breems, salmon etc.). In general, these fisheries were reported as carried out in coastal areas, within 3 NM zone, by a limited number of vessels mostly less than 10m overall length. Due to the different geographical scope and precision of the replies, the questionnaire does not allow for obtaining an estimate of the overall number of vessels actually carrying out these fisheries.

Some of the respondents provided information on technical and control aspects relating to the gears and fisheries characteristics, issuing of fishing authorisations, limiting the gears on board to a single type of drift net (i.e. a "one net rule") or installing of vessel monitoring equipment on board. Around 60% of the respondents consider that the establishment of a compulsory fishing authorisations would play an important role in improving the control of the small scale driftnet fisheries by identifying the vessels involved, potentially reducing the risk of by-catches of strictly protected and/or non-authorised species(i.e. species listed in Annex VIII of Council Regulation (EC) 1239/98⁴).

Some 8 replies (20%) provided information on by-catch of non-authorised species (i.e. tunas and alike). In particular amongst 25 fisheries identified by the respondents the fishery for greater amberjack seems the most likely to have by-catch. 4 respondents highlighted this fishery. For each of the other fisheries the limited number of responses and their lack of convergence did not allow any conclusions to be drawn.

5 replies (12,5%) indicated possible risk of by-catches of strictly protected species (i.e. cetaceans, sea turtles, some sea birds) as an issue.

70% of the replies (28) are in favour of a ban of driftnets fisheries, of which 52,5% (21 replies) called for a total ban and 17,5 % (7 replies) for a selected ban excluding some traditional fisheries for small pelagic species in some Italian areas. The majority (14 participants) of the 21 replies in favour of a total ban come from NGOs⁵, the rest being spread as follow: 1 control body (NL), 2 fishermen associations (Spain and Italy), 4 general public and experts/scientists. The 7 replies favouring a selected ban come from NGOs⁶ and

⁴ Species listed in Annex VIII of Council Regulation (EC) 1239/98: Albacore; Bluefin tuna; Bigeye tuna; Skipjack; Atlantic Bonito; Yellowfin tuna; Blackfin tuna; Little tunny; Southern bluefin tuna; Frigate tuna; Oceanic sea breems; Marlins; Sailfishes; Swordfishes; Sauries; Dolphinfishes; Sharks: *Hexanchus griseus*; *Cetorhinus maximus*; *Alopiidae*; *Carcharhinidae*; *Sphyrnidae*; *Isuridae*; *Lamnidae*; Cephalopods: all species

⁵ International Forum for sustainable underwater activities, Finnish Association for Nature Conservation Fish4Tomorrow, MEER eV's, WWF, Oceancare, Archipelagos Institute of marine conservation, BlackFish Foundation, DeepWave, Lega Ambiente, Soc. Dolphin Conservation, Lega Antivivisezione, MEDASSET, PONG-Pesca,

⁶ Greenpeace, Seas at Risk, NatuurPunt, Ecologistas en Accion, MareVivo, PEW Environment Group

biologists. 14 out of the 28 respondents stressed the need to ban these fisheries in particular in the Mediterranean.

For 18 respondents the rationale for the ban was to address problems of controllability and implementation of the EU legislation on driftnets, for 10 respondents it was motivated by the need to address persisting environmental problems.

The 30% replies (12 respondents) not in favour of a ban came mostly from representatives of the fisheries sector (4 French, 1 Italian, 1 Irish), 3 NGOs⁷ and 3 Italian experts/scientists. More detailed information is annexed in the report summing up the results of the consultation (Annex IA)

The participation to the public consultation can be considered as acceptable in terms of representation of sectoral and environmental interests, accepting that the number of industry responses is relatively low.

Notwithstanding several reminders⁸ and contacts, no Regional Advisory Council (RAC), the main organisations that represent stakeholders, provided a formal response. They either argued that the consultations impacted on very few members (North Sea RAC) or that driftnet fisheries were not covered by their RAC (Pelagic RAC). The Baltic RAC referred to the fact that driftnets were prohibited in the Baltic from 1st January 2008. The Mediterranean RAC received two contributions from its members, namely Oceana and ACI-Pesca Alleanza Cooperative Italiane, but was not in a position to reach a common approach although these two entities separately contributed on an individual basis to the consultation.

The Long Distance, South Western Waters and North Western Waters RACs did not provide any feedback even though driftnets fisheries are known to be carried out in their area.

As Member States only the control agency of Netherlands has shared its views.

1.3.3. *External expertise*

In March 2013 the Commission commissioned two specific studies in support of the impact assessment, one covering the Mediterranean (DriftMed) and the other covering both the areas other than the Mediterranean and providing a retrospective and prospective evaluation of the current drift net fisheries⁹. The two studies were carried out in parallel and the results from the Mediterranean study have feed the retrospective and prospective evaluation. The draft final reports were submitted in October 2013 and the revised final reports were submitted in February 2014.

Information for these studies was gathered through direct consultation and interviews with fishermen, fishermen's Associations, as well as from national and EU fisheries and environment administrations, scientists and representatives of NGOs working in related fields.

⁷ Oceana, Slow Food and Birdlife International

⁸ 25 March, 14 June, 17 July

⁹ MAREA-Specific contract 8 (SI2.646130). "Identification and characterization of the small scale driftnet fisheries in the Mediterranean (DriftMed).

Specific contract 5 (SI2.650655). "Study in support of the review of the EU regime on the small-scale driftnet fisheries".

Furthermore, in order to collect first-hand data, investigations of specific logbook data and observations on board fishing vessels were carried out particularly in the Mediterranean.

The revised final reports will be published on the DG –MARE website¹⁰ for studies.

1.3.4. Dialogue with Member States

Member States were officially informed of the Commission's intention to review the current EU regulations on driftnet fisheries as well as of the abovementioned two scientific studies. The national administrations were also invited to grant assistance to the studies and to share their opinion via the online public consultation. Member States were, in particular, requested to provide information on pilot projects, studies and measures concerning driftnet fisheries that were financially supported with a view to facilitate diversification and reconversion out of large-scale driftnet fisheries phased out under current legislation as well as drift net fisheries in the Baltic. Where applicable, information on assistance to maintain or develop driftnet fisheries compatible with EU legislation was requested. Only Ireland, Spain and Sweden answered with some detail concerning the support given for permanent cessation and/or reconversion of vessels involved in driftnet fisheries; Italy made reference to the specific measures, without providing details, to encourage Italian fishermen to diversify out of the large-scale driftnets as adopted following two Council Decisions¹¹. No MS reported to have supported actions aiming to steer driftnet fishing in line with EU legislation.

In line with the cooperative approaches that we have been promoting, and which have brought to the launch of administrative inquiries on different control issues with several Member States, a parallel letter was sent to Member States requesting information on their specific control, monitoring and surveillance of driftnet fisheries. Responses were received from Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Slovenia, Spain and UK. Answers from Bulgaria, Romania, Sweden and The Netherlands were not yet received by the time of submitting the revised IA report. Only France, Ireland, Italy, Portugal, Slovenia and UK reported to have driftnet fisheries.

The responses received show that with the exception of the illegal driftnets fisheries which have attracted a quite substantial control and inspection effort in particular by Italy based on a ruling of the European Court of Justice¹², most of other driftnets fisheries are not subject to any specific system of control and scientific monitoring (ANNEX 1 B).

It can be considered that the obligation to consult Member States is fulfilled.

1.4. Impact Assessment Board review and opinion

The draft IA was submitted to the Impact Assessment Board (IAB) on 25th October 2013 and was discussed at the IAB hearing of 20 November 2013. The overall opinion of the Board on

¹⁰ http://ec.europa.eu/fisheries/documentation/studies/index_en.htm

¹¹ 97/292/EC : Council Decision of 28 April 1997 on a specific measure to encourage Italian fishermen to diversify out of certain fishing activities

1999/27/EC: Council Decision of 17 December 1998 on a specific measure to encourage diversification out of certain fishing activities and amending Decision 97/292/EC

¹² Against France (C-556/07 and C-479/07) and Italy (C-249/08) for the lack of effective control and enforcement of the EU rules on the driftnets.

the Impact assessment was positive, with some recommendations for improvement; further remarks for improvements were put forward during the subsequent inter-service consultation.

First, it should provide a clearer policy context and clarify the dimension and scale of driftnet activities in the EU. The report should then better structure the problems, and present further evidence demonstrating the existence and scale of the compliance problem as regards EU driftnet rules.

Second, the report should provide further detail on each of the policy options, including on the use of the European Maritime and Fisheries Fund (EMFF) to support the reconversion of fishing vessels. It should discuss the proportionality of an outright ban, with clear reference to the views of the operators and Member States concerned.

Third, the report should provide a more in-depth assessment of the economic and financial impacts upon operators, including upon jobs and livelihoods, as well as on local communities, and on the environment.

The first set of points and part of the third one have been addressed by restructuring some sections and providing a clearer policy context, highlighting the links with other relevant initiatives at EU and international level. The report provides a fuller description of the driftnet fishing sector, including a realistic assessment of the numbers of vessels and operators currently using driftnets. The measures have been more clearly related within the reform of the Common Fisheries Policy, and a brief overview of measures introduced at national level is reported both in a specific section and in Annex 1- 8.2.B. Information on the importance of driftnet fishing for livelihoods of fishers involved, including an estimate of the economic value of the activity, is reported in section 2.2.5 and Annexes 9 and 10. The environmental impact has been further substantiated by restructuring and expanding section 2.3 and adding Annex 4 to present the current knowledge on the likely level of interactions of driftnets with protected species.

The second set of remarks has been addressed by inserting a specific session on the EMFF and by highlighting the views of stakeholders in section 1.3.2 and Annex 1 A.

When information was available, the recommendations of the Board have been taken into account and implemented into the revised Impact Assessment report.

2. PROBLEM DEFINITION

2.1. Introduction

2.1.1. Background

Driftnets are a specific type of fishing nets that can drift and operate close to or at the water surface to target fish species that swim in the upper part of the water column. The current definition of a driftnet for EU fisheries is contained in Council Regulation (EC) No 809/2007¹³ as follow:

¹³ Council Regulation (EC) No 809/2007 of 28 June 2007 amending Regulations (EC) No 894/97, (EC) No 812/2004 and (EC) No 2187/2005 as concerns drift nets.

Drift net" means: any gillnet held on the sea surface or at a certain distance below it by floating devices, drifting with the current, either independently or with the boat to which it may be attached. It may be equipped with devices aiming to stabilise the net or to limit its drift.

A schematic view of the net is given in Figure 1.

Driftnet fisheries traditionally were carried out with nets of limited lengths and relatively small mesh size to catch different small/medium size pelagic species mostly living in or migrating through coastal areas. More substantial problems began in the late 70s-80s when the use of driftnets with much larger mesh sizes and much bigger, both in length (up to 50 km in extreme cases) and drop (up to 30-40 m), expanded rapidly in the absence of meaningful control provisions. The use of these nets resulted in significantly increased environmental impacts in terms of increased fishing effort on target species and, more important, numerous and large incidences of unwanted catch of protected species under EU and international legislation, in particular, cetaceans, sea turtles and seabirds¹⁴.



¹⁴ [Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora \(HABITATS Directive\)](#);

[Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds \(BIRDS Directive\)](#); this Directive has repealed the Directive 79/409/EEC,

[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 \(Marine Strategy Framework Directive\)](#)

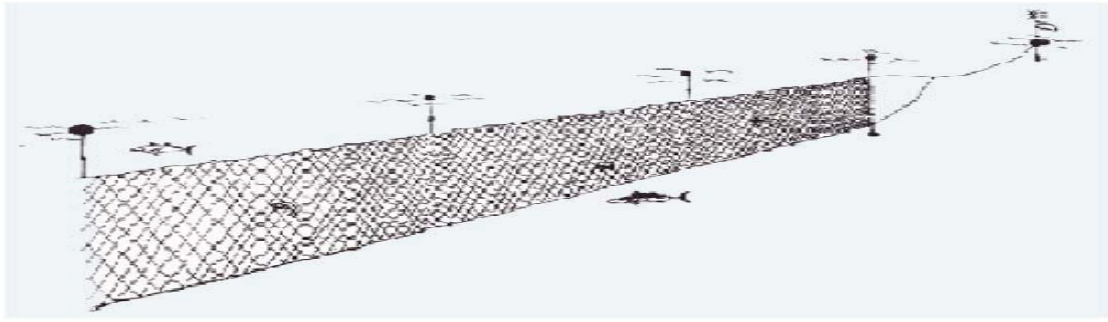


Fig. 1 Schematic view of a driftnet. Devices aiming to stabilise the net or to limit its drift are not shown.

2.1.2. EU Policy context: its development and link with the international rules

In the early 90s, following specific United Nations General Assembly (UNGA) Resolutions¹⁵, which called for a moratorium on these so-called "large-scale pelagic driftnets"¹⁶ fishing on the High Seas for highly migratory species such as tunas and swordfish, the EU introduced strict legislation for these driftnet fisheries to ensure sustainable exploitation of target resources (mainly tunas and swordfish) as well as to mitigate or annul the negative impact on protected species. In fact, since June 1992 the keeping on board or use of driftnets whose individual or total size is more than 2.5 km is prohibited in EU waters (except in the Baltic Sea, the Belts and the Sound), and for all EU vessels outside EU waters¹⁷.

However, the implementation of the 2.5 km rule presented many practical implementation and control problems (*e.g. using driftnets under the pretence of them being bottom set gillnets; high economic incentives to use long driftnet for large pelagic stocks with an associated low risk to be detected; cooperative behaviour among vessels, etc.*) and did not stop the expansion of large-scale pelagic driftnet fisheries. In fact the use of illegal driftnets and incidental catches of protected species (*e.g. cetaceans, seabirds and sea turtles*) continued to be reported in different EU regions and particularly in the Mediterranean and North East Atlantic.

Therefore, since 2002, EU has prohibited¹⁸ the use of all driftnets, regardless of their length, when intended for the capture of a certain group of highly migratory pelagic species including inter alia tunas, swordfish, billfish, sharks and cephalopods¹⁹. This Regulation was

¹⁵ United Nations General Assembly Resolutions: [44/225](#) of 22 December 1989; [45/197](#) of 21 December 1990; [46/215](#) of 20 December 1991

¹⁶ Large-scale driftnets were defined as nets over 2.5 Km in length under the Convention for the prohibition of fishing with long driftnets in the South Pacific (Wellington Convention); Wellington, 24 November 1989) which entered into force on the 17th May 1991. <http://www.mfe.govt.nz/laws/meas/wellington.html>; <http://www.jus.uio.no/english/services/library/treaties/08/8-02/large-driftnets.xml>.

¹⁷ A) Council Regulation (EEC) [No 345/92](#) of 27 January 1992 amending for the eleventh time Regulation (EEC) No 3094/86 laying down certain technical measures for the conservation of fishery resources.

B) Council Regulation (EC) [No 894/97](#) of 29 April 1997 laying down certain technical measures for the conservation of fishery resources

¹⁸ Council Regulation (EC) [No 1239/98](#) of 8 June 1998 amending Regulation (EC) [No 894/97](#) laying down certain technical measures for the conservation of fishery resources.

¹⁹ The highly migratory species listed in the Annex I to the United Nations Convention on the Law of the Sea were the reference coupled with other species (*e.g. Atlantic bonito*) or group of species (*e.g. cephalopods*)

accompanied by several Council Decisions²⁰ to encourage diversification away from large-scale pelagic driftnet fishing and to allow re-conversion of vessels engaged in driftnet fisheries activities to other fisheries as of 1 January 2002.

Additionally, recognising the serious threat driftnet fisheries for salmon posed to already depleted harbour porpoise's populations it has been prohibited, since 1 January 2008, to keep on board or use for fishing any kind of driftnets in the Baltic Sea²¹. Harbour porpoises in the Baltic are listed by the IUCN as critically endangered. The Commission reported on this ban in the Baltic, as well as on the implementation of broader measures to reduce incidental catches of cetaceans in EU fisheries, in two Communications to the European Parliament and the Council adopted on 16 July 2009²² and on 21 September 2011²³.

Currently, EU vessels are allowed to keep on board and use small-scale driftnets, except in the Baltic, provided that:

- (a) their individual or total length is equal to or smaller than 2.5 km
- (b) their use is not intended for the capture of species listed in Annex VIII of Regulation No 894/97²⁴ as amended by Regulation (EC) No 1239/98²⁵, and
- (c) species listed in Annex VIII²⁶ which have been caught in driftnets cannot be landed.

with a view to avoid circumvention of the law. All these species constitute the Annex VIII of Council Regulation (EC) No 847/97 as amended by Council Regulation (EC) No 1239/98.

²⁰ [97/292/EC](#) : Council Decision of 28 April 1997 on a specific measure to encourage Italian fishermen to diversify out of certain fishing activities and [1999/27/EC](#): Council Decision of 17 December 1998 on a specific measure to encourage diversification out of certain fishing activities and amending Decision 97/292/EC . OJ L 121, 13.5.1997,

²¹ Council Regulation (EC) [No 2187/2005](#) of 21 December 2005 for the conservation of fishery resources through technical measures in the Baltic Sea, the Belts and the Sound, amending Regulation (EC) No 1434/98 and repealing Regulation (EC) No 88/98. Provisions included in this Regulation were based on the previous 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.

²² COM/2009/0368; Communication from the Commission to the European Parliament and the Council - Cetacean incidental catches in Fisheries: report on the implementation of certain provisions of Council Regulation (EC) No 812/2004 and on a scientific assessment of the effects of using in particular gillnets, trammel nets and entangling nets on cetaceans in the Baltic Sea as requested through Council Regulation (EC) No 2187/2005; 16/07/2009.

²³ COM(2011) 578 final of 21.9.2011 Communication from the Commission to the European Parliament and the Council on the implementation of certain provisions of Council Regulation (EC) No 812/2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98

²⁴ Council Regulation (EC) [No 894/97](#) of 29 April 1997 laying down certain technical measures for the conservation of fishery resources

²⁵ Council Regulation (EC) No [1239/98](#) of 8 June 1998 amending Regulation (EC) No 894/97 laying down certain technical measures for the conservation of fishery resources

²⁶ List of species (Annex VIII): Albacore: *Thunnus alalunga*; Bluefin tuna: *Thunnus thynnus*; Bigeye tuna: *Thunnus obesus*; Skipjack: *Katsuwonus pelamis*; Atlantic Bonito: *Sarda sarda*; Yellowfin tuna: *Thunnus albacares*; Blackfin tuna: *Thunnus atlanticus*; Little tuna: *Euthynnus spp.*; Southern bluefin tuna: *Thunnus maccoyii*; Frigate tuna: *Auxis spp.*; Oceanic sea breams: *Brama rayi*; Marlines: *Tetrapturus spp.*; *Makaira spp.*; Sailfishes: *Istiophorus spp.*; Swordfishes: *Xiphias gladius*; Sauries: *Scomberesox spp.*; *Cololabis spp.*; Dolphinfishes: *Coryphaena spp.*; Sharks: *Hexanchus griseus*; *Cetorhinus maximus*; *Alopiidae*; *Carcharhinidae*; *Sphyrnidae*; *Isuridae*; *Lamnidae*; Cephalopods: all species.

Specifically in the Mediterranean with a view to closing an emerging loophole that could facilitate the use of illegal driftnets under the pretence of them being classified as bottom set gillnets, Article 8 (2) of Regulation (EC) 1967/2006²⁷ has prohibited the catching of most of the species listed in Annex VIII of Regulation (EC) No 894/97 with bottom-set nets. The list of species could not be equal to that in the Annex VIII since several species, such as cephalopods and Atlantic bonito, are regularly caught also by bottom-set nets. The same regulation has established further technical provisions for different types of bottom-set gillnets (e.g. maximum length, height and twine thickness) which, in addition to regulating bottom set gillnet fisheries, were also supposed to provide further control of small-scale driftnets still allowed to be used in the Mediterranean under EU law.

The regional fisheries management organizations (RFMOs) dealing with highly migratory pelagic species in waters adjacent to the EU, namely the GFCM- General Fisheries Commission for the Mediterranean and the ICCAT-International Commission for the Conservation of Atlantic Tunas), have adopted rules on the driftnets while prohibiting the use of driftnets to catch highly migratory pelagic species (e.g. tunas, swordfish, etc.) in the Mediterranean²⁸. The EU is Contracting Party of both these RFMOs.

It is worth also recalling that at the Third meeting of the Parties to ACCOBAMS²⁹ (Dubrovnik, October 2007) the Parties agreed on an amendment of the Agreement which includes in the text, particularly in the Annex 2, the prohibition to keep on board or use any kind driftnets in waters under their sovereignty and/or jurisdiction and outside those waters in respect of any vessel under their flag. The revised Agreement entered into force on March 22, 2008. All Mediterranean and Black Sea EU Member States as well as the Portugal are Contracting Parties of ACCOBAMS whilst the EU is not a Party.

Notwithstanding this entire regulatory framework, there has been still evidence of difficulties in applying the EU driftnets rules for highly migratory pelagic species, particularly in the Mediterranean for French (thonaille driftnet) and Italian (spadare driftnets and alike) vessels.

These issues have also assumed an accrued international dimension. Some NGOs, with a view to overcome enforcement problems of the ban of large-scale pelagic driftnets targeting highly migratory stocks, have recurrently advocated the prohibition of all driftnets fisheries. Moreover the USA has threatened commercial sanctions against the EU Member States for not complying with the UNGA and RFMOs rules (e.g. Italy).

These compliance problems for lack of control and enforcement of the EU rules on driftnets have been addressed following rulings by the European Court of Justice (ECJ) against France ([C-556/07](#) and [C-479/07](#)) and Italy ([C-249/08](#)) for the lack of effective control and enforcement of the EU rules on the driftnets in the Mediterranean.

²⁷ Council Regulation (EC) No [1967/2006](#) of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No [2847/93](#) and repealing Regulation (EC) No 1626/94

²⁸ REC.CM-GFCM/22/1997/1 Limitation of the use of driftnets in the Mediterranean; GFCM/2005/3 (A); ICCAT REC. [03-04] relating to Mediterranean swordfish

²⁹ [ACCOBAMS](#): Agreements on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area

2.1.3. *French and Italian national measures to comply with ECJ ruling*

Following the ECJ's judgements and subsequent Commission monitoring, the EU Member States concerned, namely France and Italy, have introduced modified measures nationally for the Mediterranean. The new national measures have improved the situation and set the basis for stepping-up the control and enforcement actions in addressing this problem for an improved compliance with both EU and Regional Fisheries Management Organizations rules. For example, France³⁰ authorizes the use of driftnets in the Mediterranean only with mesh size smaller than 50 mm (not adequate for tunas and alike) and within 2 nautical miles from the coast. Following intensive contacts with the Member State and verification missions conducted, the Commission has taken the view that France has complied with the Court's ruling and closed the case in 2011.

As far as Italy is concerned, they have adopted³¹ national legislation stipulating a one-net rule (i.e. longlines and driftnets cannot be taken on board at the same time) and authorising small driftnets with a maximum mesh size of 100 mm (smaller than before) and only within 3 nautical miles from the coast (closer than before). These measures combined have substantially reduced the risk of illegal drift-netting for highly migratory species. However, considering the huge problem with the illegal driftnets fishing in Italy over the last decade before and after the ruling of the ECJ, the Commission has kept the possibility of requesting a second referral to the Court against Italy, for lack of implementation of the Court's ruling despite the introduction of these national rules. In the meantime, an action plan stemming from the administrative inquiry on the Italian control system, conducted in early 2013, on the basis of Article 102 of the Control Regulation³² has been established by Italy and adopted by the Commission³³.

The text of this plan and the deadline for its implementation has been agreed between Commission services and Italian authorities during several technical meetings. There is a strong focus on measures linked to the control of driftnets and in general to the fisheries for highly migratory species such as swordfish and Bluefin tuna. Italian authorities have already started to work towards the implementation of the measures agreed. Verification missions conducted in Italy in early September 2013 did not detect activities of illegal driftnets as already observed in 2012.

However, no evidences of illegal activities, in a short period of increased controls, does not mean that the problem of illegal driftnets has been totally eradicated in Italy and that the operators will refrain of using illegal driftnets for highly migratory stocks in the near future, especially after a possible definitive closure of the Court case against Italy. Moreover, there have been signals that the illegal driftnets were being "exported" by Italian operators to

³⁰ Arrêté du 11 juillet 2011 relatif à l'interdiction de pêche à l'aide de filets maillants dérivants; JORF n° 0169 du 23 juillet 2011; texte n° 37.

³¹ Ministerial Decree 1st July 2011 and Ministerial Decree 21st September 2011

³² Council Regulation (EC) No [1224/2009](#) of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy. OJ L 343, 22.12.2009, p.1.

³³ Commission Decision No [C\(2013\)8635](#) of 6 December 2013 (restricted so far)

Mediterranean third countries. These possible developments will pose additional challenges in terms of control and enforcement.

With the exception of the illegal driftnets which have attracted a quite substantial control and inspection effort in particular by Italy following the ruling of the ECJ, all other driftnets fisheries are not subject to any specific system of control and monitoring.

However, these recently adopted national measures supplementing EU legislations could be relaxed and there is still potential in a near future of the same problems re-emerging.

2.2. Small-scale driftnet fisheries in the EU

The information reported in the following sessions provides a description of the different driftnet fisheries to set the baseline for the impact assessment. Different sources have been used to feed this impact assessment:

- the EU fleet register which is a database where all the fishing vessels flying the flag of a Member State have to be registered in accordance with Community legislation;
- literature review, interviews and questionnaires used by the two scientific studies
- field surveys carried out by the two scientific studies
- information from the public consultation

The variety of the sources and the inherent varying imprecision associated to each one may determine some discrepancies among the figures highlighting the current difficulties in establishing the exact number of vessels and fishers currently involved in small-scale driftnet fisheries; nonetheless the grasping of the overall picture is not affected.

A brief overview of the national measures regulating driftnets is reported in Annex 1 8.2.B.

2.2.1. General description

2.2.1.1. Number of vessels

The driftnets can be categorized on the basis of the target species and consequently of their dimensions:

- 1) large-scale driftnets (> 2.5 km) with large mesh size targeting highly migratory species (e.g. tunas and tuna-like species, swordfish, pelagic sharks, etc),
- 2) small-scale driftnets (≤ 2.5 km) with smaller mesh and targeting species other than highly migratory species (e.g. anchovy, sardine, sea breams, sea bass, etc.).

The taking on board or use of the large scale driftnets in category 1 is prohibited by EU law.

Both the studies and the public consultation have confirmed that a number of small scale driftnets fisheries exist in EU waters. Many of these are traditional, artisanal fisheries. However, the knowledge on these fisheries is scarce and scattered in space and time.

Table 1 provides an overview by Member State of the number of vessels recorded in the EU fleet register having driftnets recorded as their main or second gears (GND code); the fleet register has not been conceived to identify fisheries and it is completely managed by each

Member State who is responsible to manage its fishing fleet capacity within the limits established by the EU conservation policy³⁴.

However, this approach only provides a broad estimation of the actual number of vessels using this type of gear. In fact, a maximum of only two gears per vessel is recorded in the fleet register, therefore polyvalent vessels having driftnets as third or further gear in their fishing licence are not included in this statistic. For example, according to information provided by Italy in the consultation phase they have 819 vessels having the driftnets in their fishing licence though only 463 are currently reported in the fleet register.

Moreover, changes considered as minor by Member State, such as a modification of the gear type licensed, do not however trigger an update of the register; this may have effects either upwards or downwards. For example a driftnet fishery may be completely closed, either at EU (e.g. large-scale driftnets for highly migratory species in EU; driftnet fishing in the Baltic) or national level (e.g. salmon fishery in Ireland), and the information held in the fleet register may still indicate the gear code GND for years as long as the vessel remains active in the same fishing port with the same owner; this may explain the fact that some Member States such as Denmark, The Netherlands, and some Baltic State still report the GND code attached to several vessels. In the opposite case, a Member State may authorized a new gear in the fishing licence without that this is recorded in the fleet register; an example is Slovenia where 48 vessels have been licensed with driftnets in 2011 whilst only 4 GND vessels are reported in the fleet register.

The characteristics of the EU fleet register, the lack of compulsory fishing authorizations³⁵, the fact that most of the vessels are polyvalent and licensed to potentially use several fishing gears combined with the fact that several vessels operate in a transitional area moving between inland and marine waters, with the former not recorded in the fleet register, may determine a certain variability in the number of vessels reported by different sources.

On the basis of the EU fleet register statistics updated to September 2013, 1859 vessels are currently recorded having the driftnets (GND) either as main or secondary fishing gear.

Table 2 provides the relative importance of the driftnet vessels with respect to the EU fishing fleet. The driftnets vessels, including those longer than 12 m as recorded in the fleet register, are about 2% in number and 0.7% in GT with respect to the overall EU fleet. They are about 2,5% in number and 6,5 % in GT with respect to the EU vessels smaller than 12 m.

Table 3 reports the breakdown by vessel length categories (LOA length overall); around 77 % (1423 out of 1859) are smaller than 10 m and 90% (1680) smaller than 12 m; the vessels longer than 12 m still in the fleet register are most probably no longer involved in actual small-scale driftnet fishing.

³⁴ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy. OJ L 354, 28.12.2013, p.22

³⁵ fishing authorisation' means a fishing authorisation issued in respect of a Community fishing vessel in addition to its fishing licence, entitling it to carry out specific fishing activities during a specified period, in a given area or for a given fishery under specific conditions;

However, it is worth recalling that, according to the recent studies, only 840 fishing vessels have been recorded as actively drift-netting in marine waters outside the Baltic where a driftnet total ban is in place (Bulgaria 135; France 238; Italy 100; Portugal 112; Slovenia 5; UK 250). The number of active driftnets vessels in marine and adjacent waters would actually increase up to 887 if including 47 Polish vessels authorised to carry out a "semi-driftnet" fishing.

Pulling together the estimates of vessels driftnetting in marine and estuaries/delta together with those presumed to fish only in the rivers (e.g. around 250 Bulgarian and 1355 Romanian vessels), which are thus not included in the EC fleet register, a total of around 2790 vessels is estimated.

Table 4 shows the variability in the reporting of vessel statistics at European and national levels, and highlights the current difficulties in establishing the exact numbers of vessels currently involved in small-scale driftnet fisheries. Therefore, the number of active driftnet fishing vessels has the ability to change and increase or decrease over time depending on various factors.

A summary of the current driftnet fisheries as monitored by the two scientific studies is reported in the Annex 2.

Table 1: Overview by Member State of vessels recorded in the EU fleet register having the driftnets as main or 2nd gear.

Member State**	1/05/2004	1/01/2009	1/01/2010	1/01/2011	1/01/2012	September 2013
BG	NA	258	235	217	194	129
DK	514	259	247	239	231	220
EE	5	4	0	0	0	0
ES	0	0	0	0	0	0
FI	170	0	0	3	3	3
FR	212	159	150	134	118	111
FR-Overseas	108	159	162	175	185	207
GR	1	1	5	5	4	1
HR	NA	NA	NA	NA	NA	0
IE	51	418	387	348	355	357
IT	468	490	485	488	470	463
LT	15	4	2	1	1	1
LV	50	12	8	7	3	0
MT	12	0	0	0	0	0
NL	12	14	14	11	11	11
PL***	189	140	0	0	0	0

PT	110	0	141	139	140	140
RO****	NA	53	52	63	60	2
SE	118	63	48	56	57	68
SI	3	2	3	4	4	4
UK	132	137	143	143	140	142
Total	2170	2173	2082	2033	1976	1859

** Cyprus and Belgium have never had driftnets vessels and for that are not reported in the table.

*** Poland: the former semi-driftnets that had been classified as GND (= Gillnet Driftnets) have been subsequently classified in the category GNS following the ban to use driftnets in the Baltic since 1 January 2008

**** Romania around 1350 vessels using driftnet in the Danube delta (lower part of the river and river mouth) are not reported.

Table 2: Relative importance of the driftnets fishing vessels with respect to the EU fishing fleet as recorded in the fleet register

	Absolute values			% GND EU fleet		
	N°	GT	kW	N°	GT	kW
ALL DRIFTNETS	1859	12101	106377			
ALL EU vessels	87666	1677752	6630730	2,1%	0,7%	1,6%
< 12 m ALL GEARS	74050	186001	2630151	2,5%	6,5%	4,0%

Table 3 : Breakdown by vessel length (LOA) of the number of vessels recorded with driftnet (GND) in the fleet register.

Length (LOA) m	<10	< 12	LOA 12<-<15	LOA 15<-<18	LOA 18<-<24	LOA 24<-<30	LOA 30<-<36	LOA 36<-<45	total
N° of vessels	1423	1680	114	24	35	4	1	1	1859
%	76,5	90,4	6,1	1,3	1,9	0,2	0,1	0,1	100,0

Table 4 : Member States monitored by the two scientific studies. Variation in reported driftnet vessel statistics, including marine and river fisheries, from differing official sources at September 2013.

Member State	Total number of driftnet fisheries identified	Total no. of vessels identified as actively using driftnets	Marine fisheries				Estuaries/Delta and river Fisheries		
			EC Fleet register total no. vessels with GND as 1 ^o /2 ^o gear (Sept. 2013)	No. of vessels on the basis of fishing licences (source studies + official reporting)	No. of vessels actively driftnetting (source studies)	No. of vessels on the basis of fishing licences (source studies+ official reporting)	No. of vessels actively driftnetting (source studies)	No. of vessels actively driftnetting (source studies)	
Bulgaria	2	385***	129	---	135	---	---	250****	
Denmark	0	0	220	*	0	0	0	0	
France	15	411	318	241	238	70-204	173		
Ireland	0	0	357	*	0	0	0	0	
Italy	8	100	463	819	100	0	0	0	
Poland**	1	(50)	0	(47)	(47)	---	3		
Portugal	4	594	140	150	112	482	---		
Romania	1	1355***	2	---	0	1650	1355****		
Slovenia	1	5	4	48	5				
Sweden	0	0	68	*	0	0	0	0	
UK****	13	250	142	---	250	52	---		
Total	45	3150****	1843	1305 (1258)	887 (840)	2254-2388	1781		

--- No information recorded by the two studies and/or pending information from MS

* No contemporary driftnet fisheries were identified in these member states during the period of the studies and therefore license information was not gathered. Ireland has notified that driftnetting for salmon is closed since 2006 and that no authorizations for herring driftnetting have been issued since 2012. From 10 to 50 vessels were involved in the latter driftnet fishery for herring.

** Poland: the former semi-driftnets had been classified as GND (= Gillnet Driftnets), before the ban to use driftnets in the Baltic which entered into force from 1 January 2008. They have been subsequently classified in the category GNS (bottom-set gillnets) . For the sake of completeness they are reported as GND in the table above. 50 is an estimate based on

*** Romania: all the vessels are considered to operate only in the Danube river and are not included in the EC fleet register

Bulgaria: around 250 vessels are considered to operate in the Danube river and are not included in the EC fleet register

**** The number of UK licenses only includes 250 vessels driftnetting for salmon and sea trout (sales note MMO data); however around 119 vessels for the other fisheries (source:scientific survey data and interviews) could be taken into account. All vessels under 10m in length would have the right to use driftnets.

***** including both marine, estuaries/delta and river fisheries

2.2.2. Mediterranean

2.2.2.1. Brief historical overview

In the Mediterranean Italy, France, Spain, and Malta have reported using driftnets historically. Italy is the EU Mediterranean country with the biggest driftnet fisheries. For the Italian waters, in the Gulf of Trieste and Venice Lagoon (GFCM-Geographic Subarea 17 = Adriatic) the use of small scale driftnet named "menaide" targeting sardine were reported in the 70's (Scaccini (1974), AA.VV. (1985), Granzotto *et al.* (2001)) . Ferretti *et al.* (1995) reported a detailed description of the different kind of driftnets (small driftnets and the driftnets targeting large pelagic species) used along the Italian coasts which could be categorized as follow:

- driftnets with small mesh size (from 20 to 40 mm) targeting mainly sardine (*Sardina pilchardus*) and anchovies (*Engraulis encrasicolus*);
- driftnets with medium mesh size (from 50 to 100-110mm) targeting saddled sea bream (*Oblada melanura*), striped sea bream (*Lithognathus mormyrus*), mackerel (*Scomber scomber*), grey mullet (*Mugil spp.*), small greater amberjack (*Seriola dumerili*), pompano (*Trachinotus ovatus*) and frigate tuna-mackerel (*Auxis spp*)
- - driftnets with mesh size (greater than 100 mm) targeting large pelagic species (i.e. swordfish (*Xiphias gladius*) Bluefin tuna (*Thunnus thynnus*), albacore (*T. alalunga*), little tunny (*Euthynnus alleterratus*), frigate tuna-mackerel (*Auxis spp* and Atlantic bonito (*Sarda sarda*)).

Driftnets targeting large pelagic species were named "spadare" and prohibited by EU legislation since January 2002 whilst those with smaller mesh size were categorized under the collective name of "ferrettara" nets.

The use of small driftnets for anchovy (*Engraulis encrasicolus*) has been reported for a local area (Cilento) situated in the southern mainland of Italy (GFCM GSA 10 = South-Central Tyrrhenian Sea) in late spring (Colloca *et al.* 2002, 2004).

As for Malta the use of small driftnets was reported mostly from November to February when saddled sea bream (*O. melanura*) and mackerels (*Scombridae*) aggregate (De Leiva *et al.*, 1998).

Along the Spanish Mediterranean coasts, Urbistondo (2001) provided a description of two types of small driftnets: "bonitera" and "mелvera", both targeting mainly large pelagic species such *A. rochei* and *S. sarda*; the same author also reported 11 vessels using "bonitera" to catch the greater amberjack *S. dumerili*. Always in Spain, Garcia-Rodriguez *et al.* (2006) mentioned for the Alicante Gulf (GSA 6), the use of small driftnets to catch seasonally greater amberjack , dolphinfish (*Coryphaena hippurus*), squid (*Loligo vulgaris*) and different *Scombridae* species. De La Serna *et al.* (2000) confirmed the presence of the two driftnet gears, "bonitera" or "mелvera" mainly directed to fish bonito and frigate tuna.

The catalogue of fishing gears of Cortés and Manrubia (2003) mentioned the presence of small driftnets named "sardinal" and "volaera" targeting sardine and flying fishes in Andalucía-Spain, without providing information of their use.

As for the French fisheries, the inventory provided by Guillou and Crespi (1999) of the artisanal fisheries in the Gulf of Lions (GSA 7) reported, among the gears used in the area, a typology of driftnet named "thonnaille" that targeted large pelagic species became illegal since January 2002. Presence of small scale driftnets for sardine was also reported.

2.2.2.2. Current situation

With all the limitations abovementioned, on the basis of the EU fleet register as updated at September 2013, around 476 driftnet fishing vessels are reported for the Mediterranean; the bulk of the driftnet fleet is concentrated in Italy (463) and the other vessels are in France (8), Greece (1) and Slovenia (4).

A similar analysis of the fleet register done by the Driftmed study, as updated at 31 December 2012, provides a repartition of the driftnet vessels by GFCM- Geographical Subareas (GSA) which is reported in the table 5 below. This analysis gives an idea of the dispersion of the driftnet fishing fleets in a great number of harbors (130) and of the small scale nature of the vessels involved which are on average smaller than 12 meters length overall. The Italian driftnet vessels are mostly distributed in the southwestern part of Italy, mainly GFCM-GSA10 (South-Central Tyrrhenian sea) and GFCM-GSA19 (western-Ionian Sea), with 264 and 99 vessels, respectively.

Table 5 - Main characteristics of the vessels associated with the GND fishing type (both as main and second gear) in the Mediterranean EU waters updated to December 31st 2012 (DRIFTMED study-data from EU Fleet Register).

GFCM-GSA	Country	Harbours	n. vessels	Tonnage GT	Length overall	Engine power kW
				mean	mean	mean
7- Gulf of Lions	France	8	8	5,0	9,2	117,5
9 Ligurian- North Tyrrhenian Sea	Italy	16	47	7,9	11,0	96,4
10 Central-South Tyrrhenian Sea	Italy	51	264	4,9	8,9	55,8
11 Sardinia	Italy	5	13	10,5	10,8	121,5
16 South of Sicily	Italy	7	16	9,6	9,1	74,7
17 Central-North Adriatic	Italy	12	17	4,4	8,0	87,3
	Slovenia	2	4	4,9	8,8	65,0
18 Southern Adriatic	Italy	5	11	3,4	8,0	63,8
19 Western Ionian Sea	Italy	23	99	10,4	11,3	94,2
22 Aegean Sea*	Greece	1	1	2,9	8,3	11,0
	Total	130	480			

* Greece reports that no driftnet fisheries is authorized and the fleet register has not been updated

According to the information provided by Italy a total of 819 vessels are granted with driftnets in their fishing licences; out of these vessels only 41 and 26 resulted respectively operating with driftnets in 2012 and 2013 (data source: Centro Nazionale di Controllo Pesca).

On the basis of the newly information collected on the ground through field surveys by the DriftMed study in 2013, around 100 vessels carrying out the following 9 small-scale driftnet fisheries have been identified in Italy:

- 1) "Menaide" for anchovy, *Engraulis encrasicolus*, in Catania area (GSA19);
- 2) "Menaide or menaica" for anchovy, *Engraulis encrasicolus*, in the Cilento area (GSA10);
- 3) "Occhiatarà" for saddled sea bream, *Oblada melanura*, in Ligurian Sea (GSA9);
- 4) "Sgomberara" for horse mackerel, *Trachurus trachurus*, in northern Sicily (GSA10);
- 5) "Menaide" for anchovy, *Engraulis encrasicolus*, in S. Agata di Militello (GSA10);
- 6) "Ricciolara" for greater amberjack, *Seriola dumerili*, in S. Agata di Militello (GSA10);
- 7) "Ferrettara" for blue fish, *Pomatomus saltatrix*, in Gulf of Naples (GSA10);
- 8) "Menaide" for sardine, *Sardina pilchardus*, in northern Adriatic (GSA17);
- 9) "Menaide" for anchovy *Engraulis encrasicolus* /sardine *Sardina pilchardus* in western Sicily (GSA 16).

The fishing fleets carrying out these fisheries are quite different in terms of number of vessels, fishers and specialization. For example, the vessels involved in the fishery n° 1 in Catania are quite specialised and carry out this fishery for about 88% of their annual fishing days with about 90% of their annual catches and revenues from the driftnet fishing; instead fishing fleets involved in driftnet fishing for anchovy in the Cilento area practices this fishery on a seasonal basis (around 13% of their annual fishing days) and extract 30 % in weight and 21% in value of their annual catches. The other fisheries are between these values.

Annex 3-10.2. reports a synoptic overview of more detailed information of these Italian fisheries concerning fishing capacity, activity, technical characteristics of the nets, landing and catch rates, composition of the catches by species, catches of unauthorized and protected species, size composition of the catches, socio-economic parameters.

As for France it seems that only a few 3-4 vessels currently operate in the French Mediterranean even though no active vessel using small driftnets has been detected during the period of the study. Official information provided by France indicates around 6 driftnet vessels exploiting sardine, anchovy, horse mackerel and sea-brems.

As for Slovenia a few vessels fish seasonally (spring-summer) with "menaide" for sardine, *Sardina pilchardus*; however around 48 vessels are licensed to carry out driftnet fishing.

Spain, Greece, Malta, Cyprus, and Croatia have reported that driftnet fisheries are prohibited under their national legislation. However, rumors, though not properly substantiated with evidences, report the use of driftnets also in the south of Spain and in the Greek islands.

2.2.3. North-East Atlantic, North Sea, Black Sea,

Bulgaria currently has two small-scale driftnet fisheries: a marine fishery that operates in the Black Sea (GFCM GSA 29) and an inland fishery in the Bulgarian Danube River. Shad

species (*Alosa immaculata* and *Caspialosa pontica*) are exploited in the inland fishery, and Atlantic Bonito (*Sarda sarda*), an unauthorized species of the Annex VIII, is targeted by the marine fishery. Some 135 vessels have been identified as participating in the marine fishery for Atlantic Bonito.

France has currently 15 small-scale driftnet fisheries targeting both freshwater and marine species. These fisheries are present across a range of sea basin but are primarily active in ICES divisions VIIIa and VIIIb, in the Bay of Biscay, and VIId in the English Channel. Eleven French driftnet fisheries occur in rivers and estuaries while four are marine fisheries. The main rivers and estuaries where driftnet fisheries occur are the Adour, the Loire, and the Gironde-Garonne. The two fisheries with the most vessels involved target Meagre (*Argyrosomus regius*) in the Gironde estuary (ICES division VIIIb) and for Atlantic herring (*Clupea harengus*) in the English Channel (ICES division VIId). Two marine driftnet fisheries exist in the French overseas territory (French Guiana and Martinique), where around 130 vessels target flying fish (Exocetidae spp) and Acoupa weakfish (*Cynoscion acoupa*). In overall, around 240 vessels have been identified as participating in the marine fisheries and 173 in the estuaries/delta river fisheries.

Portugal has two driftnet fisheries currently active in ICES division IXa (Portuguese waters-East) - one targeting sea bass (*Dicentrarchus labrax*) in Rio Tejo and one targeting European pilchard (*Sardina pilchardus*) in the northern part of Portugal. Some 112 vessels have been identified as participating in these marine fisheries. However, a much higher number of vessels totalling to 482 is licensed to fish with driftnets in the estuaries/delta river for sea lampreys and other brackish and catadromous species.

Romania has one distinct driftnet fishery active in GFCM area 29 (Black Sea) in the Danube River and Delta targeting mainly species of shad, among which Black Sea Shad (former Pontic shad) *Alosa immaculata*. Numerous other fresh-water species are also captured. Approximately 1,355 vessels out of 1650 licensed with driftnets are actually involved in these river and estuarine/delta river fisheries and are considered operating in fresh waters and thus not included in the EU fleet register. However, it is not yet clear whether and how many of these vessels are actually operating also in the marine areas or where to put the limit between the marine and freshwater areas in the Danube delta.

The **UK** currently has 13 distinct driftnet fisheries exploiting 9 species as primary or secondary targets: target species include Atlantic herring (*Clupea harengus*), Atlantic mackerel (*Scomber scombrus*), Atlantic salmon (*Salmo Salar*), sea trout (*Salmo trutta*), European sea bass (*Dicentrarchus labrax*), mullet (Mugilidae spp.), common sole (*Solea solea*), European pilchard (*Sardina pilchardus*), and Atlantic Cod (*Gadus morhua*). These fisheries operate in a number of ICES region including IVb and IVc, in the North Sea, VIId, VIIe in the English Channel, and VIIf in the Bristol Channel. Driftnet fisheries also operate in a number of rivers and estuaries (i.e. herring are targeted in the Thames estuary (ICES division IVc), salmon and sea trout are targeted in the Ribble and Lune estuary (ICES division VIIa), and driftnet fisheries targeting salmon operate in close proximity to estuaries

in ICES division IVb (North Sea). The number of vessels involved is approximately 250 for approximately 502 fishers accounting for around 4% of employment.

In France and UK, some driftnet fisheries are actually carried out with "trammel-driftnets" that is a drifting net composed by more than one panel of netting attached to the headline. Strictly speaking this gear, though operating in the same manner of a driftnet, seems to be outside the scope of the driftnet definition as currently provided by the Council Regulation (EC) [No 809/2007](#). In fact, that definition identifies the driftnet as gillnet that is a net made up of a single panel of netting attached to the headline.

Notwithstanding a total driftnet ban is implemented through national legislation in **Spain**, unverified rumours from the fishing sector (pers.comm. chair of a fishermen association) indicate that at least 24 small vessels carry out seasonal fishing for sardine with a driftnet locally known as "xeito".

2.2.4. *Baltic*

The use of driftnets in the Baltic is prohibited since 1 January 2008³⁶ and all the riparian EU Member States bordering the Baltic have declared that no driftnet fisheries are currently authorized or operating.

Poland continues authorizing the use of so called "semi-driftnet" fishery operating in the Baltic sea within ICES division 24- 26 to exploit salmon (*Salmo salar*) and sea trout (*Salmo trutta*). The semi-driftnets are drifting gillnets anchored to the bottom at one end of the net.

This "semi-driftnet" vessels had been classified as GND (=gillnet driftnets) before the ban to use driftnets in the Baltic entered into force. Then they have been classified in the category of bottom-set gillnets (GNS) and no longer considered as driftnets. Around 50 vessels are considered currently active; the majority of these vessels fish primarily in Puck Bay.

This issue needs further investigations; in fact on the basis of the agreed EU driftnets definition as recalled in section 2.1.1 the anchoring on one side should fall within the different devices aiming to stabilise the net or to limit its drift. If this interpretation is correct then this semi-driftnet fishery seems not complying with the EU driftnet ban.

2.2.5. *Economic and social parameters of driftnet fisheries*

It should be noted that economic information is not available at the fishery level for almost all driftnet fisheries identified by both studies. Although these vessels may be included in the various programmes under the DCR/DCF³⁷, they are mostly not selected by the ranking system established therein or data are usually aggregated at a higher gear level which encompasses driftnets and fixed nets within the same gear grouping (DFN). During the last ten years, driftnet usage has been stable for a few countries or regions (UK³⁸, Italy³⁹ and French Guiana⁴⁰) but mostly declining (all other case studies). Deployed by polyvalent fleets,

³⁶ Council Regulation (EC) [No 2187/2005](#) of 21 December 2005

³⁷ Commission decision of 18 December 2009 (C(2009)10121)

³⁸ Appendix 4.10: UK case study Report, Section 1.1

³⁹ Appendix 4.5: Italy case study Report, Section 1.1

⁴⁰ Appendix 4.3: France Case Study Report, section 3.1.1.5

national administrations are less inclined to include these driftnet vessels as a separate grouping within their sampling strategies for the DCF.

Detailed information on number of vessels and fleet segmentation is reported in Section 2.2.1 and tables from 2 to 4.

Overall, around 880 small-scale vessels using driftnet in marine jurisdictions have been identified. Species targeted are mainly small pelagic (UK, France, Portugal, Italy) and diadromous species (Poland, France, Portugal, Bulgaria, Romania).

Except for Italy, it was not possible to assess profit levels of these driftnet fleets. Furthermore, some of the case study countries did not provide economic data for the latest Annual Economic Report (AER). For the purpose of this evaluation, the conclusions are based on the latest information available for countries that reported data; proxies will be used for the other Member States (Table 6).

Table 6: Economic indicators as a percentage of turnover (AER data for 2010)

	France	Portugal	United Kingdom	Italy
DCF reference	DFN 0-10	DFN 0-10	DFN 0-10	PGP 6-12
fuel	7%	10%	16%	13%
crew	47%	29%	34%	14%
Gross profit	14%	26%	4%	35%
Gross value added	60%	68%	50%	66%
Net profit	4%	8%	-9%	16%

For Italy, the data collected by the DRIFTMED study allow deriving cost structures only for the driftnet activities for seven fisheries (Table 7), but do not allow to detail the overall cost structure of the vessels. Overall, the level of profit generated by the use of driftnet is highly variable, ranging from 1% to 54% of the turnover generated by the vessels, with an average of 22% across all fisheries. However, the various costs reported by the DRIFTMED study present all a high level of variability from one fishery to the other. It should be noted that the Menaide” fishery present in Catania is accounting for almost 76% of the turnover generated by using driftnet among these seven fisheries.

2.2.5.1. Economic importance of the gear

The majority of fisheries identified are seasonal, and the participating fleets are comprised of polyvalent vessels, totalling at least 840 vessels (excluding the Baltic Sea), dispersed over a wide area.. For most fishers employing driftnets, driftnetting represents only a few months of fishing activity in any year with some fishers using driftnets for less than half a month per year.; with some fishers using driftnets for less than a single month (like the herring fisheries in the English Channel⁴¹).

⁴¹ Appendix 4.10: UK Case Study

It has not been possible to collect accurate landings data from driftnet fisheries apart from Italy and UK, which makes it almost impossible to identify the economic importance of the gear at the European level.

On the basis of the information collected for the impact assessment the economic performance and importance of the gear for the vessels and fleets is highly variable though limited at national level. For the fleets where the data are available such as the UK vessels the total value of small scale driftnets, for around 250 vessels, represent 0.14% (1.3 million €) of the total value of UK landings in 2011 (946 million €) and account to 0.1% of the UK landings..

In Italy, the economic importance of Italian driftnets is low if compared with the overall small scale fleet at national level (2.456 million € that is 0.8% in value, and 1.3 % in weight of 36,716 tonnes of small scale fleets landing) though the value landed ranges from around 20% to 55% (up to 90% in one fishery) of the turnover generated by the driftnet vessels(table 8). For around 90 vessels for which data has been made available, the use of driftnet represents almost 78% of the volume landed and 68 % of the value generated, for 54% of the days at sea spent. When detailing these indicators fishery by fishery, there is a high variability of dependence. The vessels deploying “menaide” close to Catania are almost exclusively using driftnet, which represent 91% of the quantity and the value landed by these vessels. At the other end of the spectrum, the two other “menaide” fisheries (Cilento and Sant’Agata di Militello) and the “occhiatara” fishery represent only 20% to 25% of the value landed by these vessels. For the three remaining fisheries (“sgomberara”, “ferrettara” and “ricciolara”), the use of driftnet accounts for close to half of the turnover generated by these vessels.

It has been reported on several occasions that landings from driftnet fisheries were receiving a price premium due to the consumer perception of a high quality fish, like for example the Sea bass/ seabream fishery in Portugal⁴² or the menaide fishery for anchovy in Italy⁴³.

In the English Channel (UK and France), herring festivals are still very popular with local fleets landing herring caught by driftnet for the occasion. Fishermen interviewed indicated that the demand associated with these festivals (and the associated high price) was the only driver to go fishing as it would otherwise be uneconomical to target herring with driftnet⁴⁴.

2.2.5.2. Number of fishers in small scale driftnet fisheries

The lack of compulsory fishing authorizations³⁵ and the polyvalent nature of most vessels, which are licensed to potentially use several fishing gears and carry out different fisheries, makes impossible to define the exact number of fishers actually involved in small-scale driftnet fisheries.

⁴² Appendix 4.7: Portugal Case Study Report, Section 3.1.2.1

⁴³ Appendix 4.5: Italy case study Report, Section 2.1.2

⁴⁴ Appendix 4.3: France case study Report, Section 3.1.2.1 and Appendix 4.10: UK case study Report, Section 2.3.1.3

According to the latest Annual Economic Report⁴⁵ (2011 data) around 58170 units (46% of all EU fishing sector=127686 units) are employed in the small scale fishing fleets (i.e. vessels < 12 m and using passive/static gears).

A first estimate of the potential employment in the small-scale driftnet fishing sector can be drawn on the basis of an average number of 2.5 fishers/vessel, as estimated from the outcomes of the two scientific studies, and the number of GND-vessels smaller than 10-12 m in the fleet register (table 3), which are supposed to be less dependent from catches of highly migratory pelagic species..

Some 1423 GND-vessels smaller than 10 meter are in the fleet register that would correspond to around 3560 fishers possibly employed in the marine small-scale driftnets sector, that is 6.1 % of the EU small scale fishing sector.

Some 1680 GND-vessels smaller than 12 meter are in the fleet register that would correspond to around 4200 fishers possibly employed in the marine small-scale driftnets sector, that is 7.2 % of the EU small scale fishing sector.

If a different statistic is used and namely the amount of 887 vessels actively driftnetting in marine areas, as recently monitored by the two scientific studies (table 4), the number of employees would be 2217 units, that is 3.8% of the 58,170 employees in the EU small scale fishing sector.

In conclusion, taking into account the variation of the different sources, the number of current employees in the marine driftnet fishing sector should range between 2000 and 4500 units.

⁴⁵ <http://stecf.jrc.ec.europa.eu/reports/economic>

Table 7: Economic indicators for seven Italian driftnet fisheries

Fishery	Species targeted	Turnover (driftnet)	Energy costs	Labour costs	Other Variable costs	Fixed costs	Gross profit	GVA
Menaide (Catania - GSA19)	Anchovy	1,869	5%	55%	9%	5%	26%	81%
Sgomberara (Northern Sicily -GSA10)	Mackerel and bogue	339	30%	41%	14%	14%	1%	42%
Menaide (Cilento -GSA10)	Anchovy	82	6%	42%	4%	21%	28%	69%
Menaide (Sant'Agata di Militello -GSA10)	Anchovy	49	36%	41%	11%	8%	4%	45%
Occhiataro (Liguria -GSA9)	Saddled sea bream	40	5%	33%	2%	6%	54%	87%
Ferrettara (Gulf of Naples -GSA10)	Blue fish	46	7%	47%	2%	13%	31%	78%
Ricciolara (Sant'Agata di Militello -GSA10)	Greater amberjack	31	20%	39%	16%	8%	17%	56%
Combination of all fisheries		2,456	10%	52%	9%	7%	22%	74%

Source: Italian case study⁴⁶

Table 8: Relative importance of the use of driftnet for seven Italian driftnet fisheries

Fishery	Species targeted	Turnover (total)	Vessels	Days	Volume	Value
Menaide (Catania - GSA19)	Anchovy	2,058	28	88%	91%	91%
Sgomberara (Northern Sicily - GSA10)	Mackerel and bogue	665	30	58%	83%	51%
Menaide (Cilento - GSA10)	Anchovy	384	19	13%	30%	21%
Menaide (Sant'Agata di Militello -GSA10)	Anchovy	195	7	20%	38%	25%
Occhiataro (Liguria - GSA9)	Saddled sea bream	160	5	12%	34%	25%
Ferrettara (Gulf of Naples -GSA10)	Blue fish	84	2	47%	47%	55%
Ricciolara (Sant'Agata di Militello -GSA10)	Greater amberjack	70	3	49%	35%	44%
Combination of all fisheries		3,616	94	54%	78%	68%

Source: Italian case study⁴⁷

⁴⁶ Appendix 4.5: Italy case study Report, Section 2.1.2

⁴⁷ Appendix 4.5: Italy case study Report, Section 2.1.2

2.3. General and specific problems

On the basis of all available information there are a number of driftnet fisheries involving a significant number of EU vessels carrying out small-scale driftnet fisheries in coastal areas, estuaries and lower part of rivers (around 3150 including both the marine, estuaries/delta and rivers; around 890 strictly considering only the sea fisheries; around 2000 pooling the marine and estuaries/delta without the river fisheries).

This number could potentially increase since more polyvalent vessels, with respect to those recorded as GND vessels in the fleet register, have an authorization to use driftnets in their fishing licence. For example, in Italy around 470 boats with driftnets are registered in the EU fleet register whilst there are 819 boats licensed to use this type of net; analogously for Slovenia where 48 vessels are licensed with driftnets whilst only 5 are reported in the fleet register. In practice all UK vessels smaller than 10 meter in overall length could use the driftnets without any further specific authorisation.

Therefore, the number of active driftnet fishing vessels has the ability to change and increase or decrease over time depending on various factors.

However, the number of currently active driftnets, as estimated through the scientific studies, is much smaller than what would be potentially possible and is reported in Table 4 and Annex 2.

The general problem, as emerging from the studies and consultations, indicates the current EU legal framework on driftnet has shown some weaknesses which have facilitated the continuation of illegal fishing as well as some evidences of possible interactions with protected species.

2.3.1. Control and monitoring issues

From a control point of view, the lack of compulsory fishing authorization to strictly ring-fencing the authorised vessels together with the possibility to land in several small places in the absence of a mandatory landing obligation in specifically designated ports could be seen as undermining the controls and the compliance with the driftnets rules; this characteristic is however common to several fisheries. Amongst the factors that could facilitate bypassing the rules it is worth mentioning, the possibility of carrying on board driftnets together with other fishing gears, thereby creating the possibility to report falsely that catches of highly migratory species (Annex VIII species), which are not allowed under the EU driftnet regime, were made with the other gears, most commonly the bottom set gillnets or longlines.

Another weakness which could be mentioned is the unclear language of Article 11a of Regulation (EC) No 894/97 which prohibits the use driftnets when "intended" for capture of certain species listed in Annex VIII. The prohibition is therefore conditioned on a subjective element which could be difficult to prove unless specific characteristics of the net suitable to catch certain species are established. In fact there is some kind of relationship between the dimension of the target species and the mesh size of the gear used; the bigger the fish the bigger shall be the mesh size and twine thickness and vice-versa.

The lack of specifications of the maximum mesh size for small-scale driftnets, thus makes it more difficult to control and to enforce the prohibition of using driftnets for the capture of highly migratory species.

All these potential problems facilitate the circumvention of rules and create a disproportionate burden of proof for the control authorities when trying to detect offences.

Such weaknesses might be the reason for a proliferation of national measures supplementing the existing EU legal framework. Using the possibilities offered in Articles 9 and 10 of Regulation (EC) No 2371/2002⁴⁸ corresponding to Article 19 and 20 of the new CFP Regulation⁴⁹, some Member States had over time enacted a series of national/local measures that have not been very effective in ensuring that those weaknesses are not exploited and, on the contrary, may have left room to some more abuses and non-compliance by operators. This resulted in misuse of driftnets, particularly in the Mediterranean, that technically complied with EU and national legislation but to all intents and purposes were in fact illegal driftnets by targeting unauthorized highly migratory species (i.e. tunas etc.) and continuing to cause incidental takings and death of protected species (e.g. marine mammals, sea turtles, sea birds, etc.).

Though concerned Member States, namely France and Italy, have recently adopted further national measures to address these issues (section 2.1.3), these national legislations may not be sufficient to definitively address the problems of control, proper enforcement and possible persisting environmental problems and there is still potential in the near future of the same problems re-emerging if national rules are again changed in the wrong direction.

Therefore, also under the new CFP legal framework, the effectiveness of controls against illegal drift-netting can be negatively affected and highly demanding for national control bodies, in terms of human and technical resources, particularly in those countries with a quite big number of small-scale artisanal fishing vessels distributed along a quite extensive coastline with a high number of potential landing places, including a lot of islands (e.g. Greece, France, Italy,, Spain, UK). In fact, also for countries prohibiting the use of all kind of driftnets through national law such as Spain there are indications of fishery using driftnets targeting seasonally sardines (e.g. "xeito" fishing in Galicia) (pers. comm. of involved fishers).

It is worth signalling that, although the use of driftnets is prohibited in the Baltic Sea since 2008, there are evidences that the Polish fishermen, around 50 vessels, have been authorised to use a "semi-driftnet" gear, (i.e. a driftnet anchored to the bottom at one end) which has been subsequently categorised as bottom-set gillnet by the Polish authorities (see 2.2.4). This

⁴⁸ Member States may take, under specific conditions, non-discriminatory measures for the conservation and management of fisheries resources and to minimise the effect of fishing on the conservation of marine ecosystems within 12 nautical miles of its baselines provided that the EU has not adopted measures addressing conservation and management specifically for this area. Furthermore, Member States may take measures for the conservation and management of stocks in waters under its sovereignty or jurisdiction provided that they apply solely to fishing vessels flying its flag and are no less stringent than existing EU legislation. In both cases, the Member State measures shall be compatible with the CFP objectives.

⁴⁹ [Regulation \(EU\) No 1380/2013](#) of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy. OJ L 354, 28.12.2013, p.22.

approach seems a way to circumvent the driftnet ban following a similar approach developed by France to regulate the "thonaille" in the Mediterranean and that was disallowed following rulings by the ECJ. Also a Bulgarian driftnet fishery in the Black Sea targets illegally an Annex VIII species (Atlantic bonito).

These problems run the risk of being more exacerbated in those countries with important small-scale fishing fleets and numerous landing places spread around the coastline. The resources required to effectively control these specific and dispersed landing sites could be disproportionate in comparison to other priorities of control bodies.

2.3.2. *Environmental issues*

On the basis of the past experience and way of operating, some small-scale driftnet fisheries might have the potential to interact with strictly protected (e.g. marine mammals, sea turtles, etc.) or unauthorised species (tunas, swordfish, tuna-like species, sharks of Annex VIII) while the EU rules may be relatively easy to circumvent and still pose persisting environmental and conservation problems in some area.

In that respect monitoring and reporting systems established under Council Directive 92/43/EEC of 21 May 1992 (Habitats Directive) and Directive 2009/147/EC of 30 November 2009 (Birds Directive) have proven to be not effective for the identification and recording of the anthropogenic causes of death of strictly protected species due to fishing activities.

The two scientific studies do not provide strong evidences of recurrent incidental takings of strictly protected species (Annex IV HD; Annex I BD), except for some French fishery in the outermost regions (sea turtles) and in some French estuarine waters of the Atlantic façade (e.g. sturgeons). In the latter case, it seems that sturgeons are returned unharmed and alive because of the limited soaking time and specific surveillance for bycatch for a restocking programme of sturgeon.

Annex 4 provides an overview on protected species likely to interact with driftnets (A) as well as on interactions rates for the protected species along with their population status based on IUCN criteria and where available estimates of Potential Biological Removal (B).

Out of the cetaceans for which interactions with driftnets have been reported, harbour porpoise in the Baltic Sea are of the greatest conservation concern, based on their population status in this region; IUCN considers the Baltic Sea populations to be Critically Endangered due to recent sharp declines in abundance⁵⁰. Conflicting information currently exists on the intensity of harbour porpoise interaction with the Polish semi-driftnet fishery: However, unintended bycatch of the harbour porpoise in gillnet fisheries is believed to have a growing impact on the Baltic Sea population⁵⁰, and is listed as one of the main threats to their conservation^{51, 52, 53} ..

⁵⁰ Benke, H., Bräger, S., Dähne, M., Gallus, A., Hansen, S., Honnef, C.G., Jabbusch, M., Koblitz, J.C., Krügel, K., Liebschner, A., Narberhaus, I., and U.K. Verfuß. 2014. Baltic Sea harbour porpoise populations: status and conservation needs derived from recent survey results. *Mar Ecol Prog Ser* 495: 275-290

⁵¹ Koschinski, S. 2001. Current knowledge on harbour porpoises (*Phocoena phocoena*) in the Baltic Sea. *Ophelia*, 55(3), 167-197

Black Sea harbour porpoise (*Phocoena phocoena*) populations in the Black Sea, which are considered to be endangered or threatened by ACCOBAMS and IUCN respectively, are also considered to potentially interact with Bulgarian driftnet fisheries targeting Atlantic Bonito.

Moreover, evidences of cetaceans, pinnipeds and seabirds interacting with driftnets exist for fisheries monitored in the UK⁵⁴.

Of the species for which data exists on interactions with currently active driftnet fisheries, the Harbour porpoise in the Baltic Sea warrants most concern based on the population status of this species and additional threats from similar gear in the region.

Harbour porpoise might also be considered at risk in the North Sea, Northeast Atlantic and in the Black Sea, based on limited data and perceived impacts of similar gear types such as static gillnets.

Review of literature and other information sources indicates that for many of the species identified as being at risk of incidental capture in driftnet fisheries currently active, a paucity of information makes it difficult to determine the real extent of impact these fisheries might have.

However such a lack of strong evidences of widespread recurrent incidental takings cannot be necessarily interpreted as evidence of absence of recurrent interactions with strictly protected species; in fact the poor monitoring of these fisheries by MS and the limited sampling effort by the two studies were most probably not able to detect these unfortunate events.

Fisheries operating with nets drifting close to or at sea surface and made by two or more walls of netting hung jointly on the headline have been detected; strictly speaking this nets are not covered by the current definition of "driftnet" which refers to a gillnet that is a net made of one wall of netting. Since these nets operate in a manner equivalent to the currently defined driftnets and may cause the same problems, the driftnet definition should be amended accordingly.

Many of the above general problems are driven by a range of specific problems. The most important specific problems, which may be relevant also for other small scale fisheries with nets, are the following:

- fisheries with a high risk of incidental takings of strictly protected species, with nets operating close or at the water surface which is a sensitive area for several air-breathing animals, such as the marine mammals, sea turtles and some sea-birds;
- lack of common standardized technical specifications in terms of gear characteristics and spatial range of fishing operation that create different treatments among fishers

⁵² ASCOBANS 2001 ASCOBANS Recovery Plan for Baltic Harbour Porpoises (Jastarnia Plan). Available at www.bfn.de/fileadmin/MDB/documents/themen/artenschutz/pdf/Jastarnia_Plan.pdf

⁵³ ASCOBANS 2009 ASCOBANS Recovery Plan for Baltic Harbour Porpoises-Jastarnia Plan (2009 Revision). Available at http://www.ascobans.org/pdf/mops/docs/MOP6_7-01_RevisionJastarniaPlan.pdf

⁵⁴ Northridge, SP, Coram, AJ & Kingston, AR 2012, The susceptibility of sensitive species through analysis of their distribution and the overlap with relevant fishing effort distribution: SMRU Contribution to the DefineIt Final Report . DEFRA.

- no specific obligations to ensure a proper control and scientific monitoring of the fisheries concerned (no vessels position systems; no log-book; no designated ports; no compulsory fishing authorizations)
- high-demanding costs, both financially and in human resources and means, to ensure a proper control and monitoring of these small-scale atomized and seasonal fisheries,
- high risk of resurgence of problems of non-compliance with UNGA resolutions and RFMOs binding obligations with negative effects on the activities of legal fishing fleets and the image of Europe.

Current EU provisions can be easily circumvented, for example by linking two regular nets to form an illegal one longer than 2.5 km and by mis-declaring the fishing gear used to catch the unauthorized species of Annex VIII. This state of play, combined with the high economic profit derived from the illegal use of driftnets for tunas and alike species, lead to believe that it is not possible to exclude in the near future a reappearance of illegal activities, even in areas where they have been temporarily eradicated.

- the current definition of driftnet does not include newly described drifting nets (e.g. trammel drift-nets) that would appear to pose similar risks with regards to strictly protected and unauthorized species.

2.4. EU right to act, added value, proportionality and subsidiarity

2.4.1. The right to act - Treaty basis

The Commission act on the basis of Article 3 (1d) and in line with the procedure established by the Article 43(2) of the Treaty on the Functioning of the European Union. In that respect, the driftnet fisheries exclusively carried out in the fresh waters of the rivers are out the scope of this initiative.

2.4.2. Added value of EU action

The EU has the possibility to improve EU rules for a more harmonised, stable, transparent and effective management framework of fisheries and thus overcoming all the weakness detected which have led to a proliferation of national/local measures that although supplementing the existing EU legal framework have not necessarily improved, if not actually weakened, its proper control and enforcement.

2.4.3. Application of the principle of subsidiarity

EU action relates to the conservation of marine biological resources, while integrating environmental concerns into fisheries policy, and falls under the EU exclusive competence according to Article 3 (1d) of the Treaty on the Functioning of the European Union (TFEU). Therefore, the subsidiarity principle does not apply to the matter addressed by this initiative.

2.4.4. Consistency with other EU policies

The requirements by the Treaty on the functioning of the European Union (TFEU), particularly Article 11 therein, to integrate the environmental protection into the definition and implementation of the Union's policies and activities, together with the obligations under the Common Fisheries Policy (CFP) to apply the precautionary approach and implement the ecosystem-based approach to fisheries management, make further EU action to address once

and for all possible persisting environmental, conservation and sustainable fishing problems in relation to the driftnets necessary and justifiable.

There is need for further actions at EU level to address specific issues to enhance certainty for an improved, stable and controllable legal framework in line with the TFEU and CFP requirements.

Furthermore, the joint reading of first and second paragraphs of Article 11a of Regulation (EC) No 894/97 may determine discarding at sea which is no longer in line with the discard ban policy promoted by the new Common Fisheries Policy⁴⁹.

It is in line with other EU policies, particularly those identified under the EU Integrated Maritime Policy, namely the Marine Strategy Framework Directive⁵⁵ (MSFD), the Common Fisheries Policy (CFP)⁴⁹, the Birds and Habitat Directives⁵⁶ and the Biodiversity Strategy.

3. OBJECTIVES

3.1. General Objectives and link with the Common Fisheries Policy

The reformed CFP⁵⁷ in pursuing its objectives to provide long-term sustainable environmental, economic and social conditions and contribute to the availability of food supplies, shall apply the precautionary approach and implement the ecosystem-based approach to fisheries management to ensure that negative impacts of fishing activities on the marine ecosystems are limited and minimised to the maximum extent possible.

Article 11 of the TFEU calls for integrated environmental protection requirements into the implementation of the Union's policies and activities. There is, however, no effective conservation policy if rules are not properly controlled and enforced.

Furthermore, EU is promoting an integrated approach to maritime policy where the different sea-users are invited to contribute to the sustainable exploitation and conservation of goods and services provided by the marine ecosystems⁵⁸.

To comply with EU international obligations vis-à-vis the proper implementation of rules on driftnet fisheries in particular with the UNGA Resolutions and RFMO binding obligations as recalled in section 2.1.1.

The EU is not a signatory of ACCOBAMS. Nonetheless all EU regional Member States are members of that Agreement and have agreed a specific provision prohibiting to take on board or to use any driftnets in the Convention Area (section 2.1.2). We must ask whether and what consequences could reverberate on the credibility and image of the EU if its member countries would not respect this collective commitment taken at regional level.

⁵⁵ 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.

⁵⁶ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

⁵⁷ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy. OJ L 354, 28.12.2013, p.22.

⁵⁸ http://ec.europa.eu/maritimeaffairs/policy/index_en.htm

It should be noted from the outset that a full assessment of the potential impacts could not be done given that complete and comprehensive data sets are often not available or are inconsistent between Member States and over time and a precautionary perspective to address the problems needs to be taken into account.

3.2. Specific Objectives

Within this framework the main specific policy objective are as follows:

- To address and eliminate any possible persisting environmental and conservation problems related to the use of small-scale driftnets in relation in particular to marine mammals, marine reptiles and seabirds.
- To address and eliminate shortcomings in the EU legal framework that may undermine implementation and weaken control and enforcement putting at risk proper implementation by Member States (e.g. scope including the newly described trammel-driftnets) and EU compliance with international obligations.
- To contribute to the objectives and targets for "good environmental status" as established under the Marine Strategy Framework Directive (MSFD)⁵⁹ as well as other conservation legislation such as the Habitats Directive⁶⁰.

4. POLICY OPTIONS

To address these objectives, four policy options have been considered:

- Policy option 1: maintenance of the status quo (baseline scenario);
- Policy option 2: introduction of technical and control measures;
- Policy option 3: selected ban of some driftnet fisheries;
- Policy option 4: total ban of driftnets fisheries.

4.1. Policy option 1: maintenance of the status quo (baseline scenario)

This approach means taking no specific steps to modify the current regulations controlling the use of driftnets included under Council Regulation (EC) No 894/97 as amended by Regulation (EC) No 1239/98.

The only modification could concern changes in the wording to reconcile the driftnet regime with the discard ban policy stipulated by the new Common Fisheries Policy.

If this option is chosen, the implementation weaknesses of the EU framework which have been detected will not be addressed. The risk that the catching sector and some Member States will not properly implement the current rules remains high. The Polish approach to use semi-driftnet fishery in the Baltic and the driftnet fishery for Atlantic bonito in the Black Sea are clear examples of the materialisation of this risk. Under this situation there may be emerging problems related to the conservation of protected species and to the disproportionate burden of proof for EU and national control authorities when prosecuting offenders to rules

⁵⁹ 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)

⁶⁰ Council Directive [92/43/EEC](#) of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

on driftnets. Moreover, the effectiveness and credibility of the EU action on this issue could continue to be questioned by the NGOs and at international level, in particular by the USA, with consequent political and administrative costs.

The only conceivable way to mitigate these risks would be to develop a much stronger control and monitoring effort both at EU and national level with all consequent costs and reservations in terms of proportionality, efficiency and effectiveness.

This option is not expected to simplify or further complicate the current regulatory framework. It relies heavily on continuing to keep a close vigilance and pressure on Member States, particularly in the Mediterranean, the Baltic and the Black Sea. The goal would be to ensure effective control and enforcement of existing EU rules and to avoid the introduction of national measures that could undermine their correct implementation. Specific verification missions by the Commission service will continue to be carried out. In case of recurrent non-compliance with the EU legislation, it could be necessary to open new Court cases against Member States.

4.2. Policy option 2: introduction of technical and control measures

This option seeks to remove misinterpretation and poor implementation of the existing rules on driftnets by introducing specific provision on:

- Additional technical measures (e.g. standards for the rigging of the fishing gears: maximum mesh size and twine thickness; maximum distance from the coast and depths for the use of fishing gears, drop of the net, etc.)

and/or

- Control and monitoring aspects (e.g. one net rule, compulsory fishing authorisations; vessel monitoring systems or equivalent for small scale vessels; revised logbook, restrained list of designated ports/landing places, net attached to the vessel etc.).

This policy option would allow having a clearer, more stable and standardised EU legal framework. It should close any implementation loopholes that have previously been exploited to reduce the effectiveness of the EU driftnet regime, either by circumventing the rules or by weakening effectiveness of control activities. Such approach would also tackle the risk that some Member States could relax adopted national measures in the future with a resurging of the compliance problems. Moreover, enhanced technical measures should further mitigate the persistent environmental impacts.

However, a complicated and costly control system would still be required. Additional administrative burden will incur at national level by imposing the need of issuing fishing authorisations for vessels carrying out these fisheries. Member States will also have to establish substantially improved monitoring systems to measure the impact of the driftnet activities as regulated by the new regime on protected species. Additional costs and burden will affect the small and micro fishing enterprises which will be requested to adapt to the new technical and control measures.

Moreover, there is still a risk that environmental problems persist due to the possible non effectiveness of control measures and to possible new loopholes discovered when implementing the new regime.

4.3. Policy option 3: selected ban of some driftnet fisheries

In line with this option, only the driftnet fisheries identified as being the most harmful to strictly protected species and/or not able to avoid unwanted by-catches of unauthorised species (Annex VIII species) would be discontinued.

This would involve as a first step the clear identification and description of driftnets fisheries across EU waters having leading to incidental catches of protected and/or unauthorised species.

Furthermore, no new driftnet fishery, beyond those already described and authorised at the time of entry into force of the new regime, should be allowed by Member State unless it is duly certified that it complies with the new rules.

This option will entail a very sophisticated control system that would lead to increased complexity and administrative burden for both the Commission and Member States when it comes to the identification of fisheries that could continue to operate. The information available at this stage is in fact insufficient to identify harmful driftnet fisheries to any degree of accuracy although several specific examples exist. This approach can therefore be challenged as controversial. It also introduces a risk of discriminatory treatment, since it will risk not contributing to the creation of a level playing field amongst all EU fishermen using driftnets due to the likely difficulty of distinguishing those most harmful from those that are environmentally friendly.

This option could entail accompanying financial measures, to support reconversion of vessels to other fishing methods or different activities particularly for those fishermen for which driftnets account for a high percentage of their yearly income. Such reconversion could be covered by the new European Maritime and Fisheries Fund provisions. It should also be taken into account that the magnitude of potential costs can be lower than expected since most of the vessels equipped with driftnets are polyvalent vessels already authorised to use a pool of different fishing gears. Therefore, they could simply focus on other fishing methods without additional costs for reconversion.

4.4. Policy option 4: total ban of driftnets fisheries

This option would mean eliminating de facto any driftnet fishery, by introducing a total prohibition to keep on board and/or use this type of fishing gear.

This will result in a simplification of the EU driftnet regime, closing any possible loopholes in interpretation which has made it difficult up to now to properly implement and control EU rules on driftnets. It will also match with the preference showed by some Member States because either they have never developed such a type of fisheries (e.g. The Netherlands, Belgium etc.) or they have adopted national measures (e.g. Spain, Greece, Cyprus, Malta etc) or have signed international obligations (e.g. Mediterranean and Black Sea Member States together with Portugal as Parties of ACCOBAMS) prohibiting the use of any driftnets.

Any persisting environmental problem would be addressed, by applying the precautionary principle. Considering high the risk of incidental takings despite the uncertainty and the lack of precise data on the impact of driftnet activities on protected species, all activities will be prohibited.

The possible initial socio-economic and administrative costs would be transitional and could be offset by the simplification introduced at legislative and control level.

This option could entail accompanying financial measures, to support reconversion of vessels to other fishing methods or different activities particularly for those fishermen for which driftnets account for a high percentage of their yearly income. Such reconversion could be covered by the new European Maritime and Fisheries Fund provisions. It should also be taken into account that the magnitude of potential costs can be lower than expected since most of the vessels equipped with driftnets are polyvalent vessels already authorised to use a pool of different fishing gears. Therefore, they could simply focus on other fishing methods without additional costs for reconversion.

5. ANALYSIS OF IMPACTS

In this section Policy Options 1, 2, 3 and 4 are assessed in terms of their socio-economic and environmental impacts. Moreover, an attempt has also been made to analyse the administrative burden which would result on the Member States for each one of the options proposed.

5.1. Analysis of social and economic impacts by policy options

Due to the lack of sound specific data for most fisheries, no concrete estimates on quantitative impacts for all fisheries are available. Instead, mostly qualitative comparisons are used, with consideration of the likely magnitude of impacts where possible. The rationale is based on a SWOT analysis.

The majority of fisheries identified are seasonal, and the participating fleets are comprised of polyvalent vessels, totalling at least 840 vessels (excluding the Baltic Sea), dispersed over a wide area. For most fishers employing driftnets, driftnetting represents only a few months of fishing activity in any year with some fishers using driftnets for less than half a month per year.

Nonetheless this type of fishery may represent a significant source of income integration for some local community of fishers though, during the past years, the numbers of vessels as well as the number of employees have been substantially decreasing. While it cannot be excluded that the ban may affect some of the vessels carrying out these fisheries, the overall socio-economic impact of the total ban is therefore considered irrelevant at national and sub-regional level (section 2.2).

Moreover, due to the polyvalent nature of practically all the vessels carrying out driftnet fisheries, the total prohibition to use driftnets according to option 4 is not expected to result in a corresponding reduction of fishers which will continue to operate with other gears as already authorised in their fishing licence.

Policy Options are clearly evaluated through scores (see key below for interpretation) indicated in the tables below.

Options	Socio-Economic Impact	Score
<i>Policy Option 1</i>		
Status quo –baseline scenario (no further action at EU level)	<p>Driftnet fishing will continue to be of limited economic importance to Member States at a national level, though with variation between Member States and within Member States.</p> <p>Driftnet fishermen will remain dependent on driftnet fisheries as their main fishing gear, or as one of many gears that provides flexibility in fishing opportunities.</p>	0
<i>Policy Option 2</i>		
Technical and control measures adopted at EU level	Economic and financial costs are expected to adapt the fleet to the new technical requirements and to develop appropriate control tools. Accrued technical measures on the driftnet sectors could determine ceasing of fishing activities	-
<i>Policy Option 3</i>		
Selected ban on some driftnet fisheries	Social and economic impacts on driftnet fishermen affected by the implementation of the ban. Although these costs can be mitigated by carrying out other type of fisheries already authorised in their fishing licence and, where necessary, through accompanying financial measures. They may be aggravated by the potential risk of discriminatory treatment amongst driftnet fisheries. Furthermore, in order to get more reliable data for proper classification also the sector should participate in the scientific surveys with additional costs. The high risk of misclassification of some fisheries could lead to unjustified social costs.	--
<i>Policy Option 4</i>		
Total ban on driftnet fisheries	Social and economic impacts for affected fishermen, although they will be mitigated by carrying out other type of fisheries already authorised in their fishing licence and, where necessary, through	-

Options	Socio-Economic Impact	Score
	accompanying measures to support adaptation (switch to other fishing methods, differentiation of activity, phasing out).	

(Key: + positive impact, ++ substantially positive impact, -negative impact, -- substantially negative impact, 0 no impact, NA not applicable/very difficult to assess).

5.2. Analysis of environmental impacts

An indication of the qualitative environmental impacts has been made on the basis of whether the measures have a direct impact on fostering greener and environmentally sustainable fisheries.

Options	Environmental Impact	Score
<i>Policy Option 1</i>		
Status quo (no further action at EU level)	The current lack of data about the absence of impact of driftnets on protected species will persist, together with shortcomings in the control of fishing activities and in the enforcement of EU rules. Moreover, in the near future there could be a relaxation of measures taken at national level. There is therefore a high environment risk.	--
<i>Policy Option 2</i>		
Technical and control measures adopted at EU level	Same environmental impacts as the Status quo, though it removes the possibility for future relaxation of national legislation to adversely impact unauthorised species.	-
<i>Policy Option 3</i>		
Selected ban on some driftnet fisheries	This option aims to address the persisting environmental problem, including the collection of the evidences needed to support decision. However, it should be noted that the information available in the short term is limited and not enough robust to identify the most harmful fisheries to be prohibited. In this context there is a risk that the most harmful fisheries are not covered by the ban with persisting environmental concerns. The possible transfer of effort from prohibited driftnet fisheries to other metiers should be monitored to avoid negative impact.	+

Options	Environmental Impact	Score
<i>Policy Option 4</i>		
Total ban on driftnet fisheries	Positive impact since this option will address all possible environmental concerns, by prohibiting any activity. The displacement of activity towards other gears, mostly already authorised in their fishing licence, is considered minimal considering the marginal importance given to driftnet activities for most of the vessels. Positive indirect effects for better steering other fisheries with likely interaction with protected species. However, transfer of effort from driftnet fisheries to other metiers should be monitored to avoid unexpected negative impact.	++

(Key: + positive impact, ++ substantially positive impact, -negative impact, -- substantially negative impact, 0 no impact, NA not applicable/very difficult to assess)

5.3. Assessing administrative burden

An assessment of the administrative burden on the Member States for each option is provided in this section. Such assessment is based on the potential requirements of the main measures suggested for each Policy option and the implications for the involved stakeholders (i.e. public bodies and operators) in terms of: a) regulatory requirements (high burdens), b) information obligations (limited burdens), or c) specific adaptation in processes or behaviours (medium burdens).

It should be noted from the outset however that, due to lack of data, it has not been possible to make an exact or approximate estimation of the administrative cost for Member State administrations to implement these actions. This is first and foremost due to lack of disaggregated data by fishery at Member State level.

In any case, financial funds will become available to Member States for the implementation of possible decommissioning or reconversion scheme for those vessels that decide to exit the fishing activity due to the ban of driftnets or, in case they are not yet authorised, to switch to more selective fishing methods.

Options	Impact on administrative burden	Score
Option 1 Status quo (no further action at EU level)	No additional specific administrative requirement is needed compared to the baseline although a higher level of correct control and monitoring is needed to avoid the exploitation of loopholes by the sector.	0/-
Option 2 Technical and control measures adopted at EU level	Important administrative burden, to follow the adaptation process towards new requirement (e.g. changes to mesh size) and to properly monitor the implementation of the new regime (e.g. establish fishing authorization, control plan, v etc.)	--
Option 3 Selected ban on some driftnet fisheries	Important administrative burden to collect the information needed to decide on possible ban of certain fisheries. Difficulties to manage and control two parallel systems: driftnet fisheries possibly banned and driftnet fisheries possibly authorised.	--
Option 4 Total ban on driftnet fisheries	Administrative burden in the short term, to manage and control the transition. In the medium and long term the burden will be largely reduced thanks to simplified legislative framework and control needs. This simplified regime would require a less demanding control and monitoring targeting the driftnets and less fishing gears to administer.	+

(Key: + positive impact, ++ substantially positive impact, -negative impact, -- substantially negative impact, 0 no impact, NA not applicable/very difficult to assess)

6. COMPARISON OF THE POLICY OPTIONS

A summary overview of the impacts of the four policy options from the socio-economic and environmental point of views, as well as in terms of administrative burden, is provided in the table below.

	Option 1 Status quo	Option 2 Technical and control measures	Option 3 Selected ban	Option 4 Total ban

Socio-economic impacts	0	-	--	-
Environmental impacts	--	-	+	++
Administrative burden	0/-	--	--	+

(Key: + positive impact, ++ substantially positive impact, -negative impact, -- substantially negative impact, 0 no impact, NA not applicable/very difficult to assess)

The performances of the four policy options can also be compared against each other using the evaluation criteria of relevance, effectiveness, efficiency, coherence and acceptability.

The relevance of the options is considered in the light of persisting environmental and control problems identified, namely:

- environmental problem: insufficient monitoring of driftnet fisheries to assess impacts on protected species, either those with strict protection status, e.g. cetaceans and other species listed in Annex IV of Habitats Directive, or other protected species
- control problem: some Member States have not been able to prevent current small-scale driftnet fisheries from targeting illegally unauthorised species.

The effectiveness and efficiency of the options is considered in relation to the following evaluation objectives:

- Objective 1: Prevent expansion of large scale driftnets/targeting Annex VIII species and associated indiscriminate catches (including of target species/bycatch);
- Objective 2: Monitoring and Control of driftnets in relation to objectives of UNGA resolution;
- Objective 3: Mitigate impacts of driftnets on species with special conservation and protection needs; and,
- Objective 4: Mitigate and monitor impacts of driftnets on cetaceans.
- Objective 5: Mitigate resulting negative socio-economic impacts

The coherence of the policy options was considered in relation to overarching EU objectives, strategies and priorities.

The acceptability of the policy options was considered in relation to better control and enforcement, the environmental dimension, commensurate administrative burden (i.e. taking account of the proportionality principle). Under Option 2 fishermen will badly accept micro-management on technical characteristics of the gear including an accrued use of logbook and of vessel positioning systems though simpler than satellite Vessel Monitoring Systems. Analogously the same explanations would apply also for option 3 for the authorised vessels

while those banned would perceived it as unfair treatment. Option 4, though more radical, will be more acceptable by fishermen because there will be no discrimination among them and could entail accompanying measures for the transition.

The comparison between the four policy options is summarised in the table below.

Evaluation criteria		Option 1 Satus quo	Option 2 Technical and control measures	Option 3 Selected ban	Option 4 Total ban
<i>Relevance</i>	<i>Environmental</i>	--	+	+	++
	<i>Control</i>	-	-	--	++
<i>Effectiveness</i>	<i>Objective 1</i>	--	+	+	++
	<i>Objective 2</i>	--	+	+	++
	<i>Objective 3</i>	--	+	+	++
	<i>Objective 4</i>	--	+	+	++
	<i>Objective 5</i>	0	0	-	-
<i>Efficiency</i>	<i>Objective 1</i>	--	+	+	++
	<i>Objective 2</i>	--	+	+	++
	<i>Objective 3</i>	--	+	+	++
	<i>Objective 4</i>	--	+	+	++
	<i>Objective 5</i>	0	0	-	-
<i>Coherence</i>	<i>Proportionality principle</i>	+	+	-	-
	<i>Precautionary principle</i>	-	+	+	++
	<i>Ecosystem based management</i>	-	+	+	++

<i>Acceptability</i>	<i>Member States</i>	0	-	--	+/-
	<i>Fishermen</i>	0	--	--	-
	<i>NGOs</i>	--	+	+	++

(Key: + positive impact, ++ substantially positive impact, -negative impact, -- substantially negative impact, 0 no impact, NA not applicable/very difficult to assess)

6.1. Conclusion on Policy option

Based on the above considerations, policy option 4 concerning a total ban of all kind of driftnet fisheries seems to be the preferred option as it satisfies mostly the effectiveness, efficiency, coherence and acceptability parameters while providing the best results in terms of environmental impact and less administrative burden. This option is supported by 52,5% of the respondents to the public consultation including fishermen associations and NGOs.

6.2. Support through the European Maritime Fisheries Fund

The European Maritime Fisheries Fund⁶¹, following the political agreement of January last, is expected to be adopted by the co-legislators in April/May for publication in the Official Journal immediately after in May/early June. This Fund, depending on each Member States' inclination, could be used to support the transition towards a total ban of the small-scale driftnet fisheries. It is still too early to say how each and every suitable provision could be used since no Partnership Agreement and Operational programmes have been adopted so far. However, the following Articles could provide, under specific conditions, the provisions in support of the concerned fishing vessels:

- *Article 33* Permanent cessation of fishing activities;
- *Article 37* Limiting the impact of fishing on the marine environment and adapting fishing to the protection of species;
- *Article 38* Innovation linked to the conservation of marine biological resources;
- *Article 39* Protection and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities.
- Clearly, illegal driftnets fisheries under the already existing regulatory framework will not be eligible for support under the EMFF.

7. MONITORING AND EVALUATION

The Commission shall ensure that systems are in place to evaluate proper enforcement and compliance with the prohibition to take on board and use driftnets as well as to monitor the effects that the prohibition of driftnets has had on the diminution of the rate of interactions with fishing activities of

⁶¹ Consolidated version of the amended proposal for a Regulation of the European Parliament and of the Council on the European Maritime and Fisheries Fund. Council 6152/14 ADD1Rev1 of 10 February 2014

strictly protected species and, in particular, to measure the conservation benefits and compatibility with respect to the state of strictly protected species. New monitoring and evaluation systems other than those already existing shall not be created; it is a matter to make them properly functioning.

In that respect, the Commission shall closely verify and cooperate with Member States to ensure that the control, monitoring, inspection and enforcement tools together with deterrent measures established, under the Common Fisheries Policy, by the Council Regulations (EC) No 1224/2009⁶² and No 1005/2008⁶³ are effectively and efficiently implemented by Member States.

Moreover the reformed CFP⁴⁹ creates a Union framework for an improved control, inspection and enforcement system by Member States and the Commission based, *inter alia*, on a risk assessment strategy focused on systematic and automated cross check of all available relevant data. Within that context, an expert group on compliance will be established by the Commission to assess, facilitate and strengthen the implementation of, and compliance with, the obligations under the Union fisheries control system.

The new European Maritime and Fisheries Fund (EMFF), whose formal adoption is expected by May this year, will also support a data collection system for better fisheries management, including environmental and by-catch data in support of the Marine Strategy Framework Directive⁶⁴ (MSFD, which will substantially improve the EU fisheries data collection system in place since 2001.

The new tools and mechanisms established by the Marine Strategy Framework Directive will facilitate and improve the monitoring and reporting systems by Member States as established by the Birds and Habitats Directives⁶⁵ which have proven so far to be not effective for the identification and recording of the anthropogenic causes of death of strictly protected species due to fishing activities.

⁶² Council Regulation (EC) No [1224/2009](#) of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy. OJ L 343, 22.12.2009, p.1.

⁶³ Council Regulation (EC) No [1005/2008](#) of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, OJ L286, 29.10.2008, p.1.

⁶⁴ 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.

⁶⁵ Directive [2009/147/EC](#) of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Council Directive [92/43/EEC](#) of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

8. ANNEX 1 CONSULTATIONS

8.1. A: Summary Report of the on-line public consultation

Small-scale driftnet fisheries

Summary Report of the Online Public Consultation

27 March to 15 September 2013

Results

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BACKGROUND

Environmental concerns about the impact of driftnet fishing started in the late 70's-80's with the expanded use of driftnets with much greater overall size and mesh sizes than the traditional driftnets. This resulted in a higher and more numerous incidences of unwanted by-catches of protected species.

In the early 90's, following the United Nations General Assembly (UNGA) Resolutions⁶⁶, which called for a moratorium on large-scale pelagic driftnet⁶⁷ fishing on the High Seas, the EU developed legislation on driftnet fisheries to ensure sustainable exploitation of target resources as well as to mitigate or annul the negative impact on protected species. Since June 1992, keeping on board or using driftnets whose individual or total size is more than 2.5 km has been prohibited in EU waters and for all EU vessels outside EU waters⁶⁸.

The implementation of the 2.5 km rule presented many practical problems and did not stop the expansion of large-scale pelagic driftnets. Therefore, since 2002, EU has prohibited the use of all driftnets, regardless of their length, when intended for the capture of a certain group of pelagic species⁶⁹. Moreover, since 1 January 2008 it is prohibited to keep on board or use any kind of driftnets for fishing in the Baltic Sea, the Belts and the Sound recognising the serious threat the driftnet fisheries for salmon posed, in particular, to already depleted harbour porpoises populations.

Under EU rules, vessels are currently allowed to keep on board and use small-scale driftnets, except in the Baltic Sea, the Belts and the Sound, provided that:

- a) their individual or total length is equal to or smaller than 2.5 km,
- b) their use is not intended for the capture of species listed in Annex VIII of Regulation No 894/97 as amended by Regulation (EC) No 1239/98, and
- c) the species listed in Annex VIII which have been caught in driftnets cannot be landed.

The current EU legal framework on driftnet has shown weaknesses that could facilitate circumvention of the law. With the exception of the Baltic, the Belts and the Sound⁷⁰, where

⁶⁶ [United Nations General Assembly Resolutions: 44/225 of 22 December 1989 , 45/197 of 21 December 1990; 46/215 of 20 December 1991](#)

⁶⁷ Large-scale driftnets were defined as nets over 2.5 Km in length under the Convention for the prohibition of fishing with long driftnets in the South Pacific (Wellington Convention); Wellington, 24 November 1989) which entered into force on the 17th May 1991. <http://www.mfe.govt.nz/laws/meas/wellington.html>; <http://www.jus.uio.no/english/services/library/treaties/08/8-02/large-driftnets.xml>

⁶⁸ A) Council Regulation (EEC) No 345/92 of 27 January 1992 amending for the eleventh time Regulation (EEC) No 3094/86 laying down certain technical measures for the conservation of fishery resources.

B) Council Regulation (EC) No 894/97 of 29 April 1997 laying down certain technical measures for the conservation of fishery resources

⁶⁹ Council Regulation (EC) No 1239/98 of 8 June 1998 amending Regulation (EC) No 894/97 laying down certain technical measures for the conservation of fishery resources.

⁷⁰ Council Regulation (EC) No 2187/2005 of 21 December 2005 for the conservation of fishery resources through technical measures in the Baltic Sea, the Belts and the Sound, amending Regulation (EC) No 1434/98 and repealing Regulation (EC) No 88/98. Provisions included in this Regulation were based on the previous 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.

these fisheries are fully prohibited, there are still a quite important number of EU vessels, from the Black Sea to the North Sea, carrying out small-scale driftnet fisheries in coastal areas.

The lack of EU obligation to issue national fishing authorizations for these fisheries, does not allow detailed and updated knowledge at EU level about these activities and the number of fishing vessels actually carrying out driftnet fishing.

In the absence of more detailed and updated knowledge, some of these small-scale driftnet fisheries might be considered susceptible of interacting with protected or non-authorized species.

Under the Treaty on the Functioning of the European Union (TFEU)⁷¹ it is required to integrate environmental protection into the definition and implementation of the Union's policies and activities. In addition, the obligations under the Common Fisheries Policy (CFP)⁷² to apply the precautionary approach and implement the ecosystem-based approach to fisheries management call for further actions to evaluate and, where necessary, address possible persisting environmental, conservation and sustainable fishing problems in relation to the driftnets.

Within this context, there is a need for an updated overview of the currently active driftnets fleets, of the various fisheries/metier carried out and of their impact on resources and the environment including the economic and the social aspects.

The aim of the consultation was thus to get an updated overview of the small-scale driftnet fisheries that are currently active in the EU and on their impact on non-target species such as marine mammals, turtles, seabirds and others, in order to assess policy options in this field. These insights will contribute to determine a possible review of the implementation of the EU regime on the small-scale driftnet fisheries (i.e. nets equal to or shorter than 2.5 km) without prejudice to the already established EU regulatory framework on driftnets which is in line with the United Nations General Assembly resolutions and with management measures adopted by relevant Regional Fisheries Management Organizations.

The consultation process took place over six months (27 March – 15 September 2013) and with a view to facilitate contributions from the general public the consultation was translated into the languages of all EU Coastal States. Moreover, all the Regional Advisory Councils, the Scientific, Technical and Economic Committee for Fisheries and the national Authorities of the EU Member States have been duly informed of the public consultation.

As of the 16 September 2013, 41 answers were received from a variety of stakeholders; **only 40** were considered addressing the items of the public consultation and considered in the analysis. The contribution not taken into account for this analysis was essentially arguing against the overall EU approach for the prohibition of driftnets fisheries for large pelagic

⁷¹ Consolidated version of the [Treaty on the Functioning of the European Union](#)

⁷² Council Regulation (EC) [No 2371/2002](#) of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy;

Regulation of the European Parliament and of the Council on the common fisheries policy (New Regulation following the reform of the CFP)

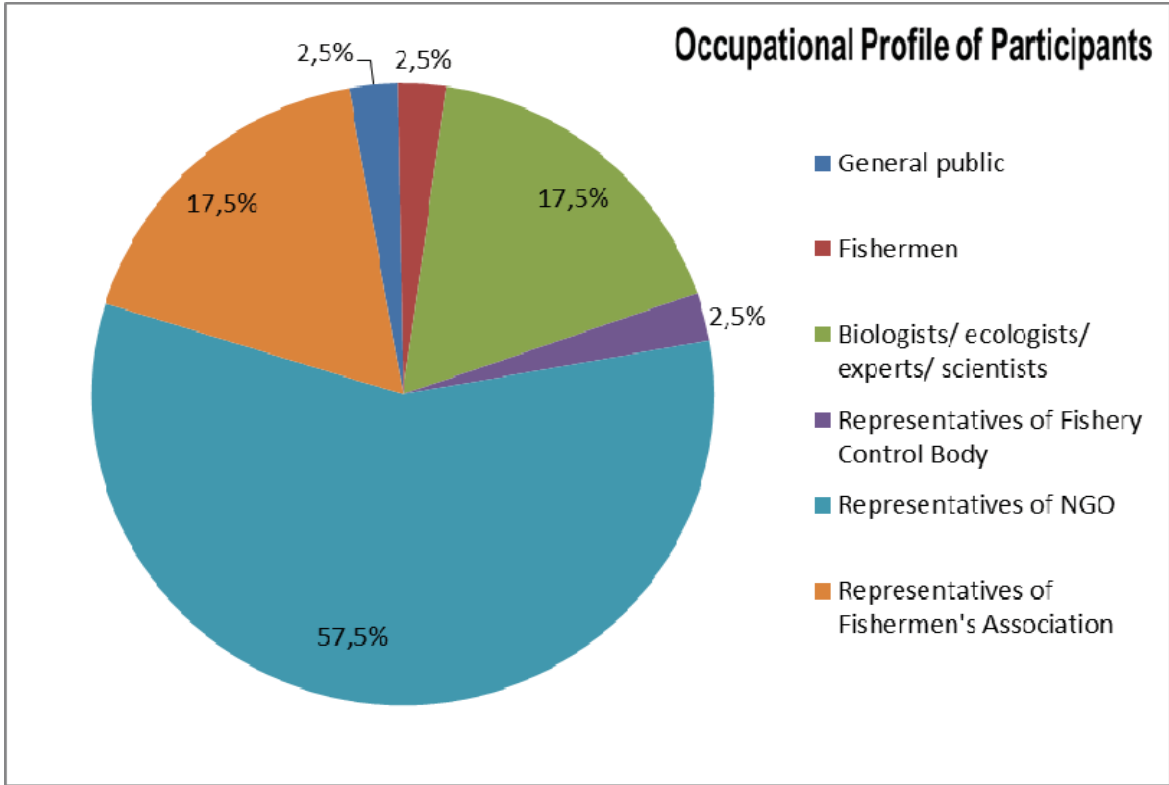
stocks without providing information on the small scale driftnet fisheries which was the goal of the consultation. The key findings of the public consultation and the answers received in the functioning mailbox are reported below.

SECTION 1: Profile of participants (QA1-QA7)

The information analysed in this section has been provided by all 40 respondents.

i) Occupational profile of participants

The representatives of NGOs⁷³ are well represented among the participants, with 57.5% of the replies. The fishing sector is represented by 20% of the contributions from either Representatives of Fishermen's association (17.5%) or individual fisherman (2.5%). 2.5% of the contributors are Representatives of Fishery Control Body. Then the scientific contribution represents 17.5% of the replies and is formed by answers from biologists, ecologist, experts and scientists. Civil society is represented by 2.5% of the replies.



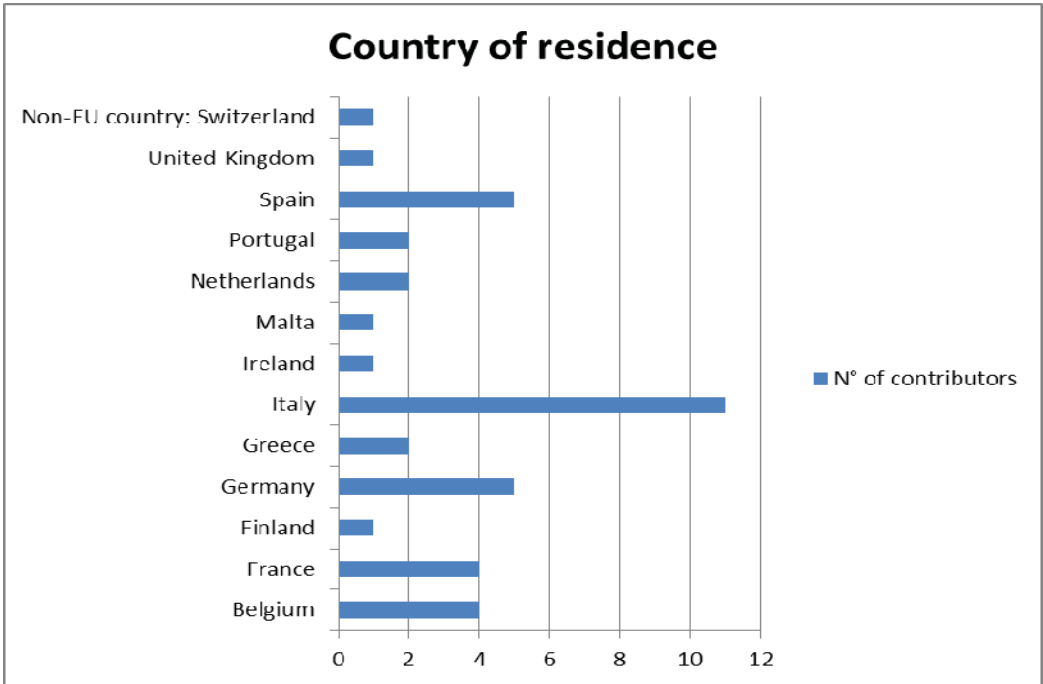
ii) Participants' place of residence

Stakeholders from **12 EU Member States and 1 non-EU country** took part in the public consultation. **The largest proportion of the participants are from Italy (27.5%)**, followed by Germany and Spain (each 12,5%), then by Belgium and France (each 10%). Greece, the Netherlands and Portugal are the place of residence of residence of 5% of the participants

⁷³ NGOs have been assigned to their place of location.

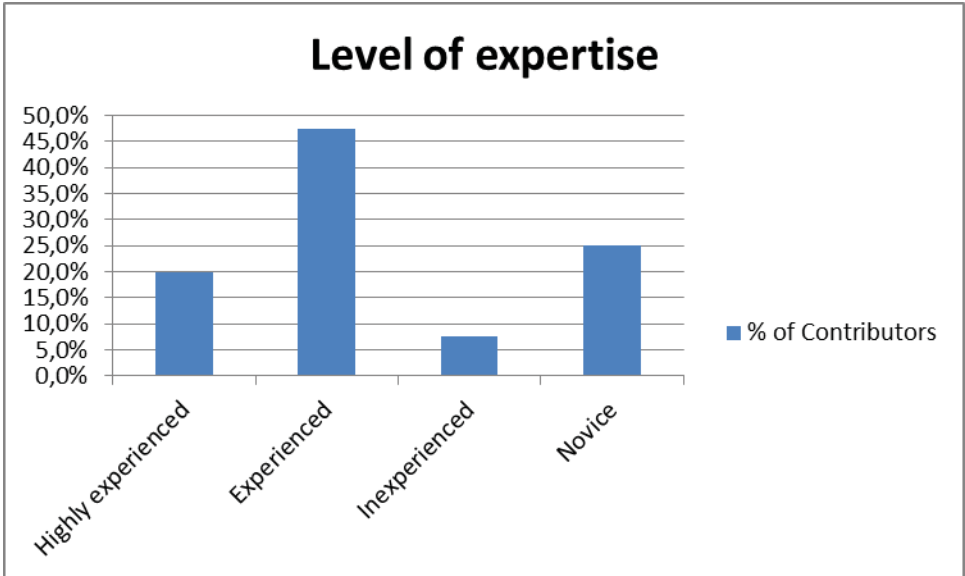
each. Finally, 1 contributor only (2.5%) for each of the following EU – Member States: Finland, Ireland, Malta, the United Kingdom and Switzerland.

It is to notice that the **majority of the participants (57.5%) come from Mediterranean coastal countries**, namely France, Greece, Italy, Malta and Spain.



iii) Participants' level of expertise

Most of the contributors (67.5%) participating in this survey declare to have a **valuable professional level of expertise** in the field of driftnets fisheries. The **largest proportion of the participants (47.5%)** considers themselves as expert in the field, while **20%** of the participants deem them as **highly expert**. A **minority of the participants** judges themselves as **inexperienced (7.5%)** or **novice (25%)** in the field of driftnet fisheries.



SECTION 2: Fisheries description (QBA1-QBA30)

This section aims at gathering more technical data to feed our analysis on the driftnet fisheries. Not all participants have answered these technical questions, which required a good level of expertise and knowledge. Please refer to the Annex 1 to see the raw data collected in this section. Information was asked on seasonality, dimension of the fishing fleet, the number of fishermen, vessel length, mesh size, length of the net, height of the net, maximum distance from the coast, maximum depth of water column, on the relative importance compared to other fisheries, risk of by-catch and on the hanging ratio.

The consultation has not provided enough data to make robust claims for the description of driftnet fisheries from this source of information.

Generally speaking we can however put forward some main outcomes:

- The respondents have provided some information on one or more of the 19 driftnet fisheries identified by the questionnaire⁷⁴; other driftnets fisheries targeting the meagre (*Argyrosomus regius*), sea spotted bass, European sea-bass, herring, sea trout and some sea-brems have been reported for the French Atlantic facade. The fisheries more frequently quoted concern: anchovy, sardine, greater amberjack, grey mullets, garfishes-needlefishes, scads-horse mackerels and saddled bream.
- The majority of vessels are less than 12 meters length.
- The number of fishermen operating in a specific area is mainly less than 30; on a wider geographic perspective, some respondents indicate that the number of fishermen involved in Italy is between 200 and 400.
- The fishing fleets operating in a specific area are mainly composed by few vessels usually not exceeding the 10 boats. Due to the different geographical scope and precision of the replies, the questionnaire does not allow having a precise estimate of the overall number of vessels actually carrying out these fisheries in each country; nonetheless, some rough estimate could be provided for Italy, where the overall amount of active vessels using driftnets should be between 100 and 200, and for France where around 200 vessels, mostly (95%) operating in the Atlantic-North Sea façade, have been reported.
- The mesh size varied according to the specific fishery and mostly ranging between 10 and 90; for the specific fisheries targeting the greater amberjack or the meagre the mesh size is usually bigger ranging from 80 up to 200 mm.
- The length of the net varied widely according to the specific fishery between less than 49 m to 2500 m.
- The height of the net is reported ranging between 1 to 20m.

⁷⁴ Allis shad, Anchovy, Barracudas, Bogue, Garfishes-needlefishes, Greater amberjack, Grey mullets, Mackerels, Picarels, River lamprey, Round sardinella, Saddled bream, Salmon, Sandsmelts, Sardine, Sargo brems, Saupé, Scads- jack and horse mackerels, Striped sea bream.

- The maximum distance from the coast is between 0.1 to 3 NM; though in some cases it is reported up to 5 NM for the greater amberjack and meagre.
- The maximum depth of the water column where driftnet operates ranges between less than 9 m to 200 m.
- The relative importance of driftnet fisheries is considered lower than other kind of fisheries carried out by the same vessel.
- By-catch of non-authorized species (i.e. the species reported in the Annex VIII of Regulation (EC) 1239/98 seems unlikely except for the fishery targeting the greater amberjack.
- The risk of by-catches of several protected species (i.e. cetaceans, sea turtles, sea birds) is reported by 5 answers. An additional answer point out the by-catches of sturgeons, a group of protected species, in the estuarine area and coastal waters of the French Atlantic façade. The specimens caught survive the fishing operation and are released unharmed and alive (monitoring of the French National Plan for the recovery of sturgeons).

SECTION 3: Problems appraisal (QBA1-QBA30)

This section provides an overview of the replies answered by 37 respondents.

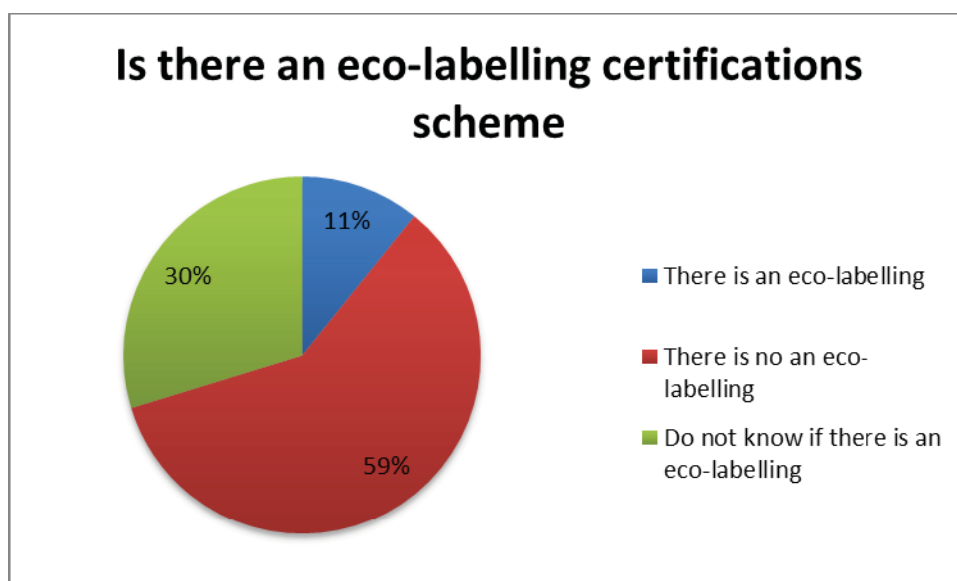
i) Eco-labelling

59 % of the participants affirm that an eco-labelling certification scheme does not exist in their country of residence.

30 % of the participants do not know if there is an eco-labelling certification scheme which is followed by the driftnet fisheries.

11 % of the participants know that there is an eco-labelling in their country.

The responses indicate that there appears to be a low level of awareness on eco-labelling certification schemes among the participants.

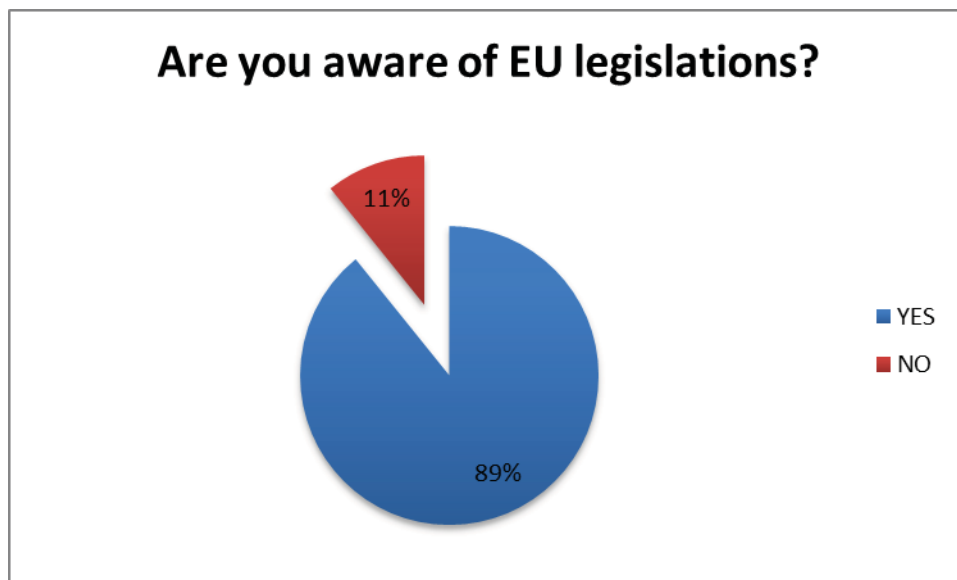


Participants could also provide more details regarding the eco-labelling certification scheme from their country. Two Italian respondents name the food-cultural praesidium of Slow Food (an Italian NGO), which is a non-government based eco-label, aiming to enhance the local culture and economy that does not damage ecosystems and nature. Two German participants make reference to a non-governmental-based eco-label implemented by Marine Stewardship Council (MSC), SAFE (Earth Institute), EDSMO (European Dolphin Monitoring Organisation) and FoS (Friends of the Sea).

ii) EU Directives

Regarding the level of awareness on the European legislations which provide measures for biodiversity conservation in the marine environment, **89 % of the participants are aware of the Marine Strategy Framework Directive, the Habitat Directive and the Birds Directive.** However 11 % of them are not aware of these EU legislations.

The responses indicate that there appears to be a high level of awareness among the participants on EU legislations aiming at protecting biodiversity.

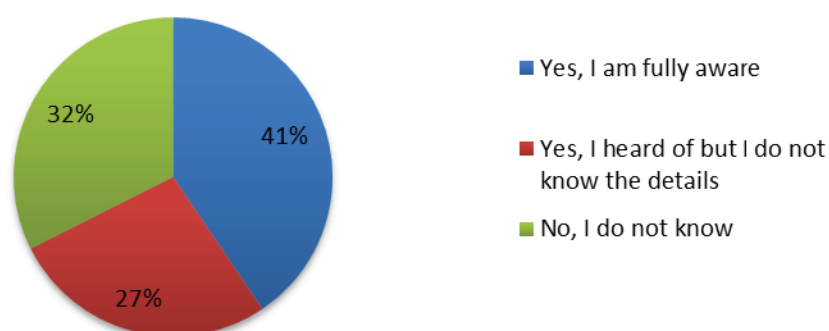


In that regard, 5 participants indicate that all or some of the driftnet fisheries may have, with high probability, by-catches of **marine and seabirds species** subject to a strict protection either under the Habitats Directive or the Birds Directive.

iii) National system providing for the reporting, recording and monitoring

The participants were asked to evaluate the level of awareness regarding the national system providing for the reporting, recording and monitoring of incidental capture or killing of specimens of protected marine species as stipulated by the Habitats Directive and the Birds Directive.

Are you aware of a national system for the reporting, recording and monitoring?



41% of the participants are fully aware of this system.

27 % of the participants have heard about the national system but do not know it in details.

32% of the participants do not know what the national system is. Among them, one participant suggested to raise public awareness on the national system as it is, according to their view, a system not known even among experts.

35.1 % of the participants consider that the national system is not controllable and properly implemented. For instance, an Italian participant points out the lack of control and the absence of sanction to explain the poor result of this national system. A Greek participant underlines the little support from the responsible Ministry and the little incentive put in place to implement a systematic reporting moreover most of the stakeholders might be unaware of the existing system.

While **64.9 % have no opinion on it as they do not know how it works or have never used it.**

8 % of the participants have already used this national system to communicate incidental capture or killing of protected species. One participant, whose expertise is high, considers that his national Italian system is "partly" controllable and properly implemented. According to this Italian Representative of a Regional Fisheries Management Organisation, there are some actions already in place, but monitoring is extremely difficult and expensive, due to the small size neither of the vessels and the fact that they can operate not only from ports. He regards self-reporting as never working with the small-scale fisheries. A German participant points out that it is important to have a system which enables to follow the itinerary of vessels. Another German participant mentions ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas) which, according to the participant, lacks almost completely of implementation in almost all EU countries, except for research in some countries. A Greek participant underlined that the national system for reporting, recording and monitoring is non-controllable in his country as it is implemented on an at-will bases.

Moreover, only a few stakeholders are aware of its existence. An Italian participant, who has already used his national system providing the reporting, recording and monitoring, underlines that the network TARTANET (whose aim is to protect turtles) sends on a periodic base a report to the Italian Ministry of Environment.

iv) Open question

Under this open question the participants were entitled to provide further information on driftnet fisheries other than those mentioned in the previous question, if they wanted to.

Around half of the participants (21 exactly) have answered this open question

More than half of these answers points out the situation in Italy by recalling the records of vessels using driftnets to target non-authorized species and causing high by-catches of protected species essentially in the regions of Campania, Calabria and Sicily. One of the contributors mentions the 2010 report of the General Command of the Italian Guard Coast on the use of driftnet, which confirms what NGOs have been denouncing.

Two participants highlight the dangers of implementing a generalist regulation on artisanal fisheries. A place-based or regional management approach would be more efficient.

Two other contributors explain the difficulties and the price of control and monitoring. According to one of them, self-reporting never worked with the small scale fisheries. An expert thinks that if driftnet is correctly used (respecting the mesh size (less than 150 mm), the coast distance (3 NM)), these fisheries had no impact on protected species. According to this expert, accidental by-catches of species included in the Annex VIII can happen, but the probability is not higher than in another kind of fishery. The scope of Annex VIII should be reviewed to be more realistic, eliminating species of little size which are not in a recovery plan.

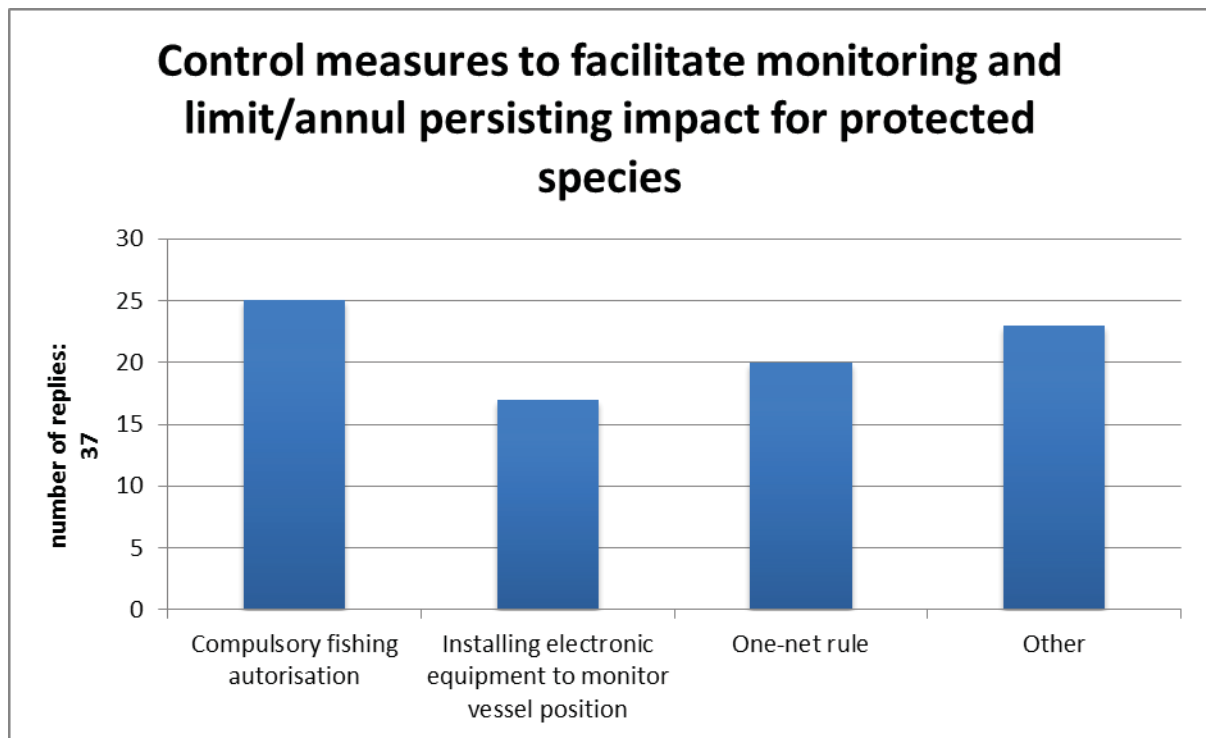
SECTION 4: Evaluation of policy options (QBB1-QBB28)

i) Measures to facilitate monitoring and to limit or annul possible persisting impacts on protected species

In this section participants had the possibility to choose **multiple options** as an answer.

Additional control management measures

The information analysed in this section has been provided by 37 respondents.



62.5 % of the participants considers that compulsory fishing authorisation could be a good additional control management measure to implement. A "fishing authorisation" means a fishing authorisation issued by a EU Member State in respect of a European Union fishing vessel in addition to its fishing licence, entitling it to carry out specific fishing activities during a specified period, in a given area or for a given fishery under specific conditions.

42.5% of the contributors consider that the option of installing electronic equipment to monitor vessel position could be an interesting option. Several participants underline that electronic equipments should be compulsory on boats of less than 15 m. Among the devices put forward, the AIS (Automatic Identification system), VMS (Vessel monitoring system), VDS (Vessel Detection System) and CCTV on board.

57.5 % of the participant regard the one-net rule option as a good option. This rule means for instance that a vessel having driftnet on board is not entitled to take or store on board another fishing gear.

More than half of the participants choose the option "other". It gives the possibility for the participants to propose another option than the one proposed in the questionnaire according to their knowledge and experience.

Within this option some respondents advocate for a total and general ban of driftnet fisheries as being the most efficient manner to avoid by-catches of protected species.

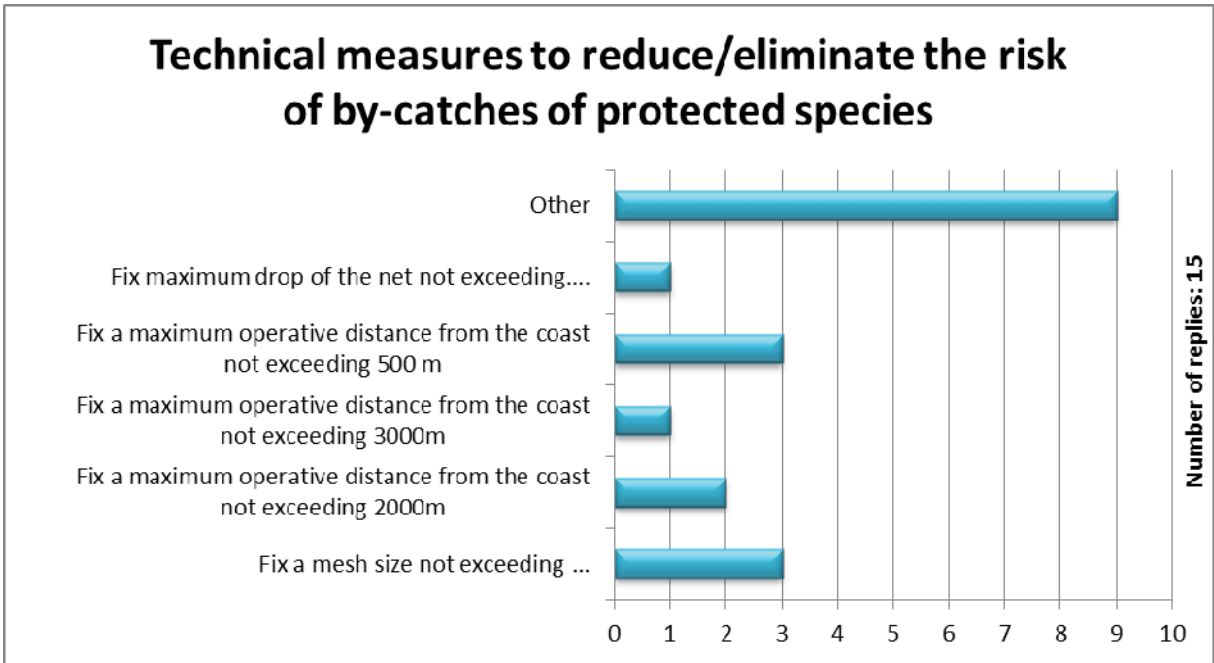
Some participants advocate for a better control and stricter rules. for instance with a weekly declaration of catch and efforts or by a case by case control. It is also underlined that campaigns of information and awareness raising should be launch to inform stakeholders on

the measures to take when there are accidental by-catches. Another idea is to design subtle programme of time/area closures which would enable a reduction of the environmental impact of driftnet fisheries. One participant underlined the importance of having independent bodies preparing studies on the different measures to measure the efficiency, for instance set a limit of the depth of the nets or the number of fishing trip. Participants propose technical measures to be implemented. For instance, in the Netherlands, there is a current investigation on by-catches of harbour porpoises by small-scale bottom-set nets which is monitored through CCTV (REM) on board of vessels (2013-2015). One participant, a representative of fishery control body, highlights that CCTV (or REM) can be an effective tool to monitor by-catches of seabirds or easily recognisable protected fish species. On-board observers can be an asset to make rules be respected. Deterrents such as UV-illuminated nets and pingers can be used though the noise pollution is a high risk. But the anthropological factor should not be underestimated and fishermen should be involved in surveillance and co-management. The creation of protected areas or no-take zone could also help. Some replies underline that the new EMFF should invest in ensuring monitoring and enforcement.

Several participants mention that any measure should take into account the **uniqueness of local communities and traditional practices**.

Additional technical management measures

The information analysed in this section has been provided by 15 respondents. Most of the participants did not answer the question on additional technical management measures.



7.5 % of the participants considered that an additional technical management measure could be to **fix a mesh size not exceeding** 100 or 150 mm.

15 % of the participants think that fixing a maximum **operative distance from the coast** would be a good option: 7.5% consider it should not exceed 500 m, 5% consider it should not exceed 2000 m and 2.5% consider it should not exceed 3000 m.

The majority of respondents chooses the option "other" and provides further suggestions such as a total and general ban of driftnet fisheries as being the most efficient option.

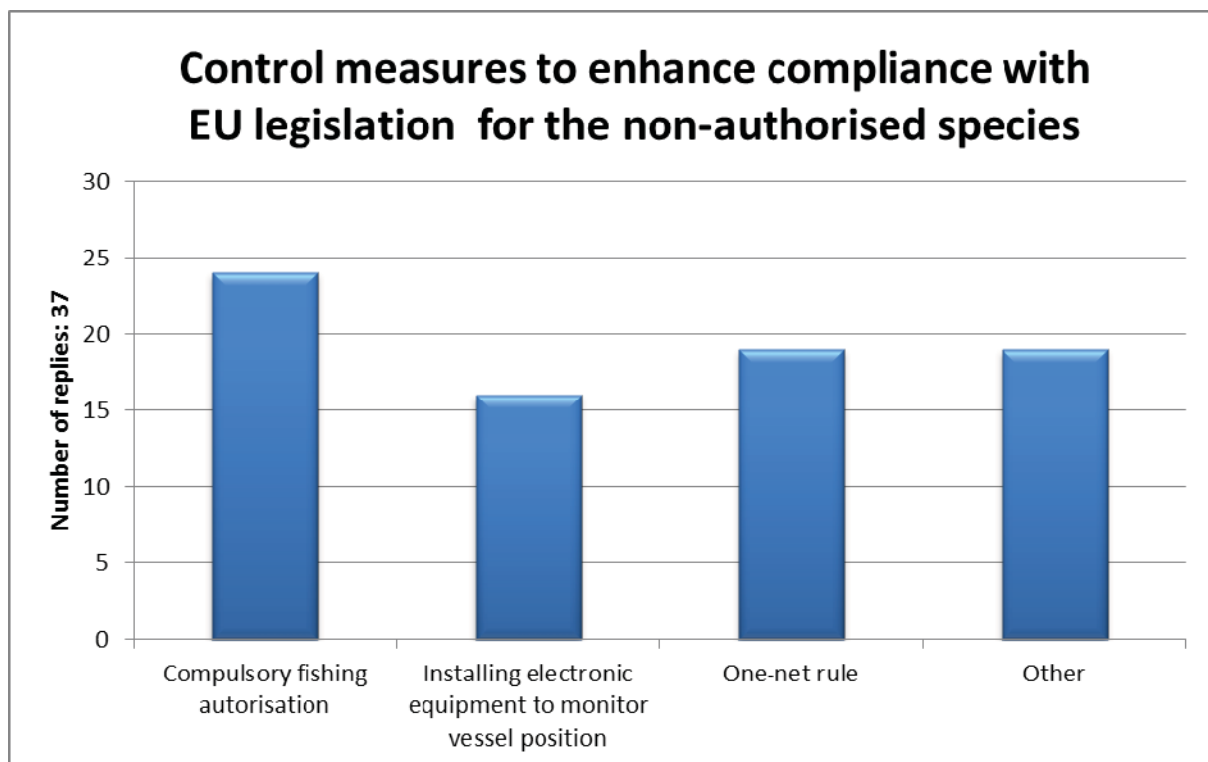
The participants also propose other technical management measures, such as the limitation of the drifting time if the net (i.e. between 30 minutes and 3 jours), the limitation of the length of driftnet, the limitation of the number of fishing trips, rules on vessel size (i.e. maximum 12 m.) or the minimum size of the fishes caught, also the use of acoustic devices (pingers) to avoid cetacean by-catches.

ii) Measures to enhance compliance with EU legislation on driftnet fishing and conservation of non-authorized species as listed in the Annex VIII of Regulation (EC) N° 894/97

In this section participants had the possibility to choose **multiple options** as an answer.

Additional control management measures

The information analysed in this section has been provided by 37 respondents.



60% of the participant considers that compulsory fishing authorisation could be a good additional control management measure to implement. A "fishing authorisation" means a fishing authorisation issued by a EU Member State in respect of a European Union fishing vessel in addition to its fishing licence, entitling it to carry out specific fishing activities during a specified period, in a given area or for a given fishery under specific conditions.

40% of the participants consider the option of installing electronic equipment to monitor vessel position as an interesting option. Several participants underline that electronic equipment should be compulsory on boats of less than 15 m. Among the devices put forward, the AIS (Automatic Identification system), VMS (Vessel monitoring system), VDS (Vessel Detection System) and CCTV on board.

47.5% of the participant regard the one-net rule option as a good option. This rule means for instance that a vessel having driftnet on board is not entitled to take or store on board another fishing gear.

47.5 % of the participants choose the option "other".

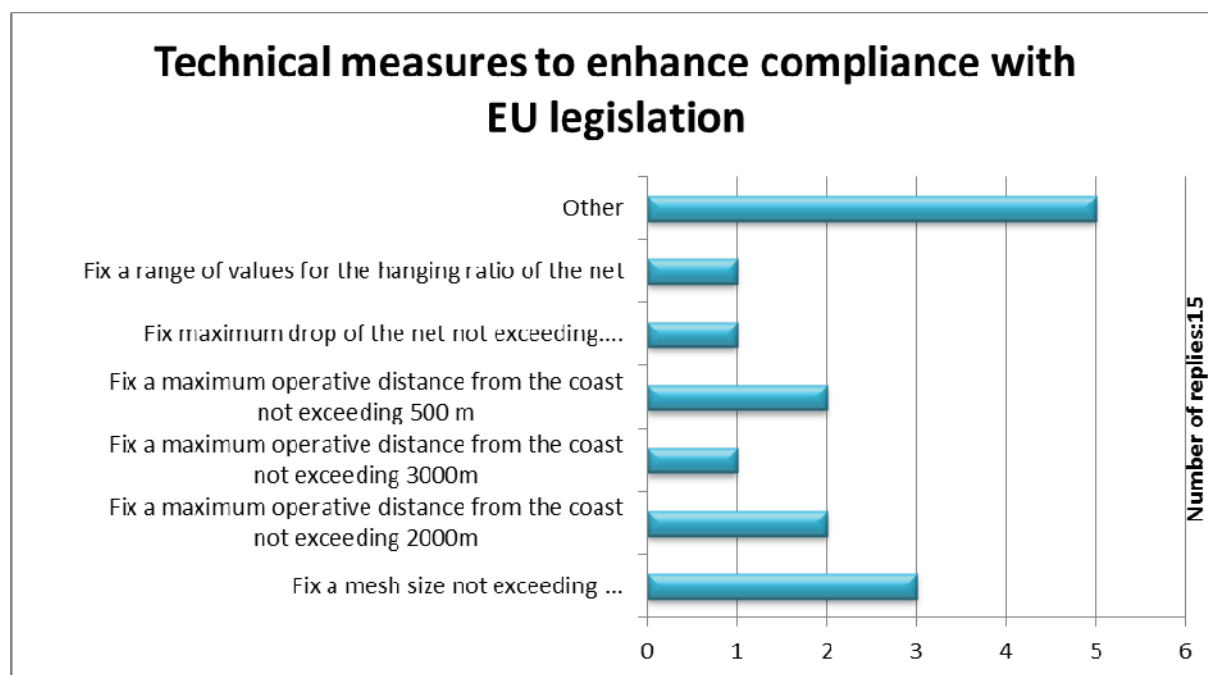
Within the option "other" some participants advocate for a total and general ban of driftnet fisheries as being the most efficient manner to avoid by-catches or intentional illegal use to exploit the non-authorised species (mostly large pelagic).

A **better control** and stricter rules have been pointed out as well. For instance with a weekly declaration of catch and efforts or through dedicated controls on the basis of risk assessment evaluation. It is also underlined that campaigns of information and awareness on what are the measures to take when there are accidental by catches should be promoted. Another idea is to design a subtle programme of time/area closures which would enable a reduction of the environmental impact of driftnet fisheries. One of the participants, a fisherman, underlines the importance to have independent bodies preparing studies on the different measures to measure the efficiency, for instance set a limit of the depth of the nets or the number of fishing trips. Finally in the Netherlands, there is a current investigation on by-catches of harbour porpoises by small-scale set net fishermen on board with CCTV (REM) (2013-2015). The participant, a representative of fishery control body, highlights that CCTV (or REM) can be an effective tool to monitor by-catches of seabirds or easily recognisable protected fish species. A participant mentions the reverse burden of the proof, that is to say that it is to the fisherman to demonstrate that he/she did not catch protected/non-authorised species and that, when there is a high risk, did utmost to avoid by-catches. On-board observer is also a solution put forward by a contributor. It is also mentioned that EU sanctions should be implemented when Member States are not strict enough in the implementation of EU rules.

Several participants mention that any measure should take into account the uniqueness of local communities and traditional practices. The rules should be the same in all the EU territory.

Additional technical management measures

The information analysed in this section has been provided by 12 respondents. Most of the participants did not answer the question on additional technical management measures.



7.5 % of the participants consider that an additional technical management measure could be to **fix a mesh size not exceeding** 100 or 150 mm.

12.5 % of the participants think that fixing a maximum **operative distance from the coast** would be a good option, 5% consider it should not exceed 500 m, 5% consider it should not exceed 2000 m and 2.5% consider it should not exceed 3000 m.

2.5 % of the participants consider that **fixing a maximum drop of the net** is a good option.

2.5 % of the participants consider that **fixing a range of values for the hanging ratio of the net** is a good option.

12.5% of the participants choose the option **"other"**. It gives the possibility for the participants to propose another option than the one proposed in the questionnaire according to their knowledge and experience.

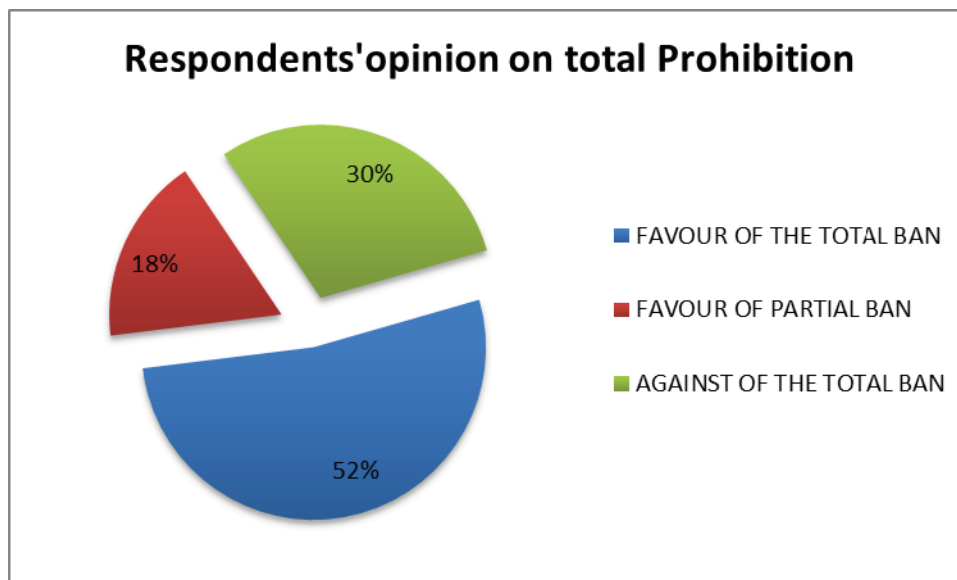
2.5% of the participant advocate for a **total and general ban** of driftnet fisheries as being the most efficient option.

7.5 % of the participants propose **other technical management measures**, such as the limitation of the drifting time if the net (i.e. between 30 minutes and 3 jours), the limitation of the length of driftnet and of the mesh size, the limitation of the number of fishing trips, rules

on vessel size (i.e. maximum 12 m.) or the minimum size of the fishes caught. Stricter sanction is also an option proposed by one participant.

iii) Full or partial prohibition of all driftnet fisheries in order to address possible and/or unavoidable persisting problems with conservation and sustainable fishing.

The information analysed in this section has been provided by 40 respondents.

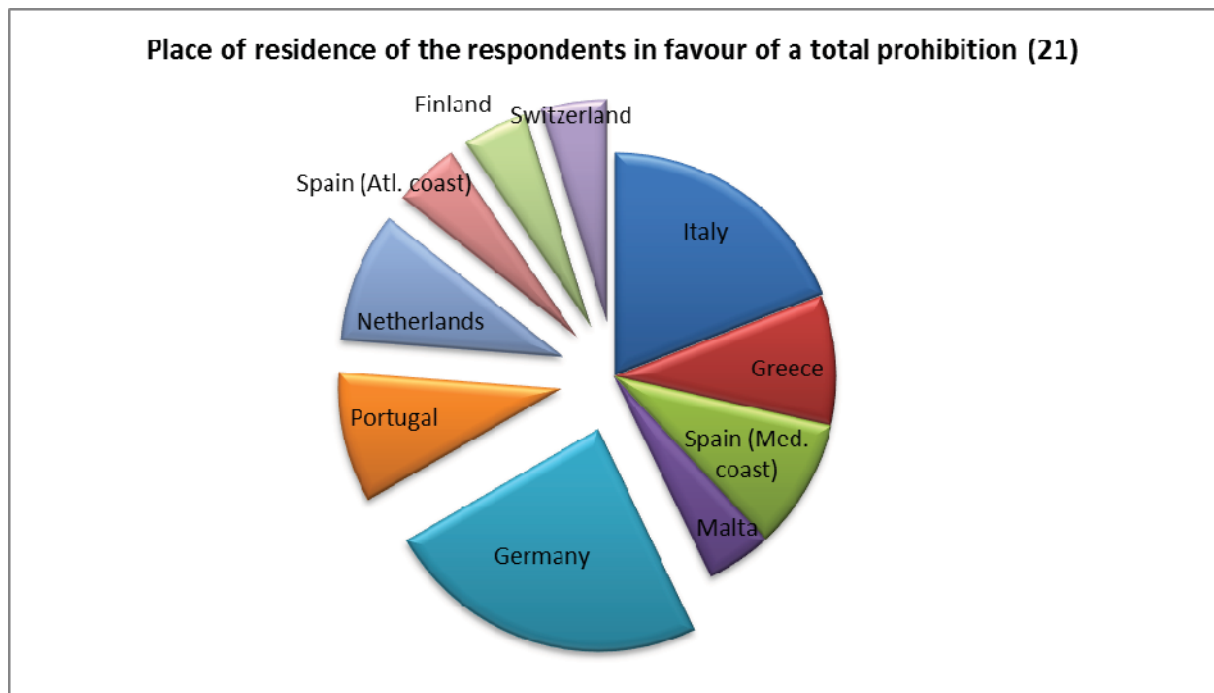


28 out of 40 replies are in favour of a ban.

Amongst these 28 respondents in favour of a total or partial ban, **14 respondents** stress the need to ban these fisheries in particular in the **Mediterranean Sea**. Amongst them there are 6 respondents resident in Mediterranean countries: Italy (4), Spain (1) and Greece (1). Then there are 8 respondents from non-Mediterranean countries, namely Belgium (4), Germany (3) and Switzerland (1)/

Amongst the 28 respondents in favour of a ban (either total or partial), **64%** indicate that the main rationale for the ban would be to address **problems of controllability and implementation** whilst **36 %** identify **still persisting environmental problems**.

- **Among the total number of replies, 52% of the participants (21 replies) support a total ban on driftnet fisheries.** More than half of them (52.4%) declare to have a good or high level expertise in driftnet fisheries. Then 9.5% consider themselves inexperienced and 38.1% are novice in the field of driftnets.



There are **9 participants** from Mediterranean countries: 4 from Italy, 2 from Greece, 2 from Spain and 1 from Malta. There are 7 representatives of NGOs, 1 experts and 1 representative of fishermen's association.

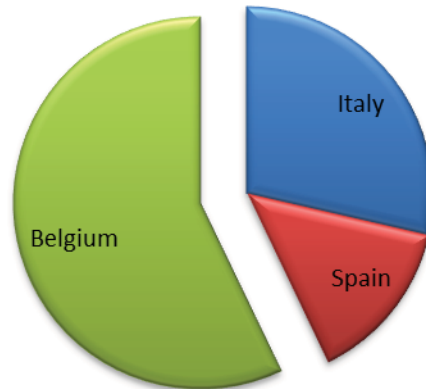
There are **12 participants** from non-Mediterranean countries: 5 from Germany (North and Baltic Sea country), 2 from Netherlands (North Sea country), 2 from Portugal (Atlantic sea country), 1 from Spain (from the Atlantic sea regions), 1 from Finland (Baltic Sea country) and 1 from Switzerland (landlocked country). There are 6 representatives of NGO's, 3 experts/biologists, one representative of fishermen's association, 1 representative of fishery control body and 1 respondent from the general public.

They considered that the damages done to the ecological system, the fish stocks and the protected and non-authorized species are too high compared to the possible socio-economic benefits. For them, control and monitoring are very difficult to implement and expensive, and as today, have been very inefficient. In many areas, driftnet fisheries are marginal fishing activity, so they think that its full prohibition would have a limited economic impact.

Most respondents indicate that a full prohibition should be implemented through a phasing out in order to take into account the social and economic impact in some region and in order to let the fishermen adapt themselves and develop environmentally friendly fishing solutions. A total ban would facilitate and simplify monitoring, control, surveillance and sanctioning.

- **18% of the participants (7 replies) support a partial ban.** Half of the respondents hold a good expertise in driftnet fisheries whilst half of them are novice or inexperienced in the field.

Place of residence of the respondents in favour of a selected prohibition (7)

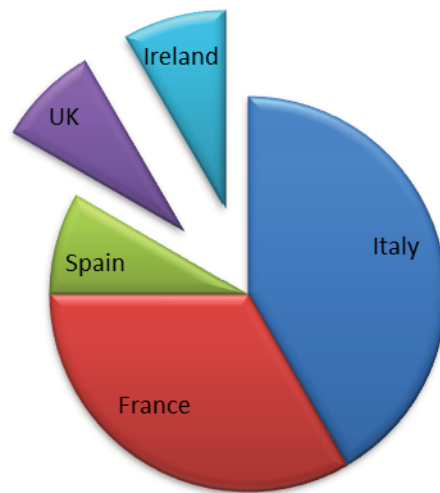


There are **3 contributors from Mediterranean countries**: 2 from Italy and one from Spain. There are 2 biologists and one NGO. There are **4 non-Mediterranean contributors** all resident of Belgium, a North Sea country. The 4 of them are representatives of an NGO.

Several contributors point out that despite the decrease in the use of large scale driftnet, smaller driftnet are used to target prohibited species (tuna or swordfish), even though regulatory measures and controls were implemented. That is why a full prohibition of all driftnets fisheries is essential with exception of traditional activities with driftnet exploiting the small pelagic in the Mediterranean Sea, such as the so-called "*menaide*" or "*menaica*". According to them, it is essential to have a targeted approach by region on a deep analysis and that for example in the Mediterranean, there should be an exemption for authorised vessels targeting small pelagic. A reinforcement of reporting requirement is also an essential step for contributors.

30% of the participants (12 replies) are opposed to a ban on driftnet fisheries. All the participants opposed to the ban declare to have a good or high level of expertise.

Place of residence of the respondents against the prohibition



There are **10 contributors from Mediterranean countries**: mainly from Italy (5 replies) and France (4 replies), and also Spain (1 reply). There are 3 representatives of fishermen 'association, 1 representative of a regional fisheries management organisation, 3 experts, 2 representatives of NGO, 1 fisherman. There are **2 non-Mediterranean respondents** from United-Kingdom and Ireland and composed by a representative of NGO and a representative of a fisherman association.

According to the contributors opposed to the full prohibition, the currently active driftnet fisheries, if carried out in line with national and EU legislation, have no major environmental and conservation problems; it is rather a matter of control and proper enforcement of the rules to curb illegal behaviours. Stricter and proportionate approach is essential. They highlight that full prohibition would mainly affect artisanal driftnet fisheries legally behaving which have never been problematic. They claim that this approach would damage the small scale fisheries at local level. Some participants claim that artisanal fisheries are the wrong scapegoat. Participants recommend a field independent study in order to draw conclusions and smart regulations.

8.2. B Summary report of the information provided by Member States on control, monitoring and surveillance

Country	Presence/Absence of driftnet fisheries YES= presence; NO = absence Add some short qualification that may be indicated in the reply (N° of active vessels, N° fishing licences, target species, seasonality, distance from the coast, area-region, etc.)	Fishing authorisations (YES/NO) How many? Mechanisms/Conditions to grant the fishing authorization and to control or limit the activities of driftnets vessels?	Additional Technical measures adopted at national/regional level	Monitoring, Control and Surveillance measures on driftnet fisheries including evolution of inspection effort (inspections/number of landings) and compliance (infractions documented by target species) How many controls/inspections/surveillance trips are carried out on a yearly basis? Electronic monitoring of vessels position? Marking of fishing gears? Specific monitoring for protected species (Habitats Directive, Birds Directive) or unauthorised species (Annex VIII)
1. BELGIUM	NO - Only 2 active fishing vessels use gillnet and trammel nets - Recreational fishing cannot use gillnets, trammel nets and driftnets.			
2. BULGARIA	Pending reply			
3. CYPRUS	NO	NO		
4. DENMARK	NO (not since 2007, before : driftnet fishing for salmon in the Baltic, sub areas 25 and 26)			
5. ESTONIA	NO – prohibition since 2008	NO		
6. FINLAND	NO	NO		
7. FRANCE	Oui – pêche professionnelle uniquement. Navires de 8,5 m (1,9 marins à bord) – Environ 241 navires en tout, mais ces	Soumis à la détention d'une licence – Navire de 12 m et moins,	Encadrement réglementaire : - au niveau national	Programme en cours d'installation de balises de géolocalisation à bord de navires de moins de 12 m (25 % de la flotte devrait être équipés).

	<p>navires pratiquent également d'autres types de pêche. Zones concernées : estuaires et/ou bande très proche de la côte, où les conditions de mer ne permettent pas l'emploi d'engins de pêche fixes.</p> <p>Façade Atlantique (bar, mullet, maigre, saumon Atlantique, truite de mer, grande alose, lamproie marine – accessoirement dorade, sar, sole, merlan, alose feinte) - pêche souvent saisonnière. Les filets utilisés et les conditions d'utilisation sont très variables d'un estuaire à l'autre, selon les espèces ciblées, les pratiques locales, la réglementation applicable et les caractéristiques de la zone de pêche.</p> <p>Bassin Arcachon : env. 15 navires pratiquent occasion. cette pêche lors des grandes marées (dorade grise, royale, marbrée, sole.</p> <p>5 navires pratiquent le filet dérivant en océan, en hiver, dans les brisants (bar, spariés et maigre)</p> <p>Estuaire de la Gironde : env. 12 navires pêchent au filet dérivant (bar, maigre, sole et raie – licence CMEA).</p> <p>Manche : activité saisonnière et d'appoint par des navires de moins de 12m (hareng, bar, mulets).</p> <p>Nord Pas de Calais : 40 navires (filets de 800 m en moyenne)</p> <p>Normandie : 10 navires.</p> <p>Méditerranée : 6 navires (moins de 12m) utilisent des filets dérivants, en complément d'autres métiers – pêche</p>	<p>tonnage inférieur ou égal à 10 ou 15 UMS, puissance motrice inférieure ou égale à 110 kW ou 73 kW. Le nombre de licence est contingenté, les contingents étant définis par bassin hydrographique et par ressort de comité régional ou départemental des pêches maritimes et des élevages marins.</p> <p>Des règles locales peuvent être plus restrictives. Egalement des contingents de droit de pêche spécifiques (au total, 618 contingents de licence et 204 droits de pêche)</p>	<p>(code de l'environnement – concerne les poissons vivant alternativement dans les eaux douces et dans les eaux salées – période de fermeture pour le saumon et la truite de mer, utilisation de dispositifs d'identification des saumons capturés en amont de la limite transversale de la mer, interdiction d'utiliser des driftnet à moins de 50 m d'une barrage entre la limite de salure des eaux et la limite transversale de la mer</p> <p>- local.</p> <p>Méditerranée : seuls les navires de moins de 10 m peuvent pêcher avec des driftnets d'une longueur inférieure ou égale à 2.5 km (arrêté du 11/7/2011)</p>	<p>Pas d'observateur en mer vu la taille des bateaux. Pas de collecte d'informations pour les captures accidentelles de tortue, de mammifères marins et d'oiseaux prévus dans le Data Framework Collection. Taux réduit de probabilité de captures accidentelles d'espèces protégées en raison usage limité dans le temps et l'espace.</p> <p>Des cas de capture de cétaqués et tortues rapportés en Guyane mais pas quantifiés.</p> <p>Les objectifs de contrôle sont fixés par les plans annuels nationaux de contrôle.</p> <p>Pas de contrôle ciblé pour les navires utilisant le filet dérivant.</p> <p>Le recueil des déclarations des navires de moins de 10 m au moyen des fiches de pêche tient lieu de plan d'échantillonnage et de suivi.</p> <p>Obligation de marquage des engins.</p>
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	<p>saisonnière et ciblée (petits pélagiques (sardine, anchois, chinchard), dorades et poissons divers</p> <p>DOM/TOM : env. 83 navires en Guyane (canots créoles et pirogues de moins de 12m) et 45 en Martinique (navires de 10 m ou moins).</p>			
8.	GERMANY	NO (not since ban on driftnets of more than 2.5 km)	NO	The ban is fully implemented and there is full conformity with the measures, since following communication with Hellenic Coast Guard authority, responsible for fisheries control, during the last 2 years there are no relevant infringement reports recorded
9.	GREECE	NO (the use of driftnets for fisheries has been totally banned by national legislation since 1993, following the implementation of presidential decree pd40/1993. The ban covers the Greek territorial waters and has been a precautionary measure taken by fisheries authorities due to the recognized environmental impact of the specific fishing practice especially concerning unwanted catch of protected species)	NO	
10.	IRELAND	Ireland banned the use of driftnets for salmon fishing in 2006. The sole driftnet fishery remaining in Ireland is an extremely small one that targets herring in the Celtic Sea under specific licence. No such licences have issued since 2011. The open fishery in question is for vessels less than 20m in length and has a 5% allocation of the overall available Celtic Sea Herring quota (approx 800t annually during a 6 week fishing period). Approximately 50 vessels are involved in this fishery. Of these, 15 vessels in 2010 and 10 vessels in 2011 were authorised to use driftnets. Each of these vessels would		<p>The vessels seeking to access this fishery using these gears did so under application and by issue of a specific authorisation which detailed the conditions under which the authorisation was issued.</p> <p>Celtic Sea Sentinel driftnet Fishery was artisanal / hobby and not of a scale to merit electronic equipment.</p> <p>Celtic Sea Sentinel driftnet Fishery was overseen by its association with the Sentinel Trawl fishery and under industry review under a Ministerial appointed management Advisory committee. The driftnet element was authorised to be operated by a small number of vessels annually.</p> <p>Landings would be generally small scale i.e. less than 250kg per landing with less than 10 such landings by these vessels operating this gear over a 6 week period in any year. No specific additional targeting result was or is considered as</p>

	<p>have had an allocation of approximately 2-3 tonnes of herring quota for the 6 weeks in which the fishery was open.</p>			<p>being required. Low risk in terms of a requirement to adopt a specific cross check programme for the very small numbers of landings that took place. The vessels in the fishery operate within the confines of Waterford Harbour estuary and are visible from shore and the participant boats normally operate in the immediate vicinity of their gears. The Sea Fisheries Protection Authority make use of the sales notes generated by the buyers of the catches of the driftnet authorised vessels and would use this data to establish for the less than 10 landings annually an analysis of the catches of these vessels.</p>
<p>11. ITALY</p>	<p>YES (ferrettara driftnet – 819 vessels, all fitted with fishing license) - All these vessels are regularly authorized to use other (3/4) gears (especially long-line). 528 units have a LOA (length overall) less than 12 meters and 618 units have a GT (gross tonnage) less than 10 tons. Almost the half of the fleet (at least 330 vessels) is registered and operates in Sicily and, in general terms, the great majority of the concerned operators are concentrated in the central/southern Italian regions. 41 and 26 vessels have used the ferrettara driftnet in 2012 and 2013 (October) respectively.</p>	<p>YES 819 fishing licenses</p>	<p>- Ministerial Decree on the 25th July 1995 (as modified by Ministerial Decree on the 26th January 2012), whose provisions define the general rules in order to issue the fishing license; - Ministerial Decree on the 1st July 2011, which establishes the mandatory alternative use between “FERRETTARA” and “PALANGARO (LL)”, in the sense that, during a fishing trip, it's possible to have on board only one of the above fishing</p>	<p>Since 2010, all the control and inspections procedures/measures are included in a National Control Plan properly dedicated to the fight against the illegal driftnets. This Plan is issued, on the basis of specific parameters (as described below), by the General Headquarter of the Italian Coast Guard, in its quality of National Fishing Control Centre. Since 2012, the National Plan was integrated with Local Plans (adopted by the Local Fishing Control Centers) in order to achieve better results, in terms of major dissuasiveness effectiveness, especially in the most risk regional areas. During the period from 2009 to 2013, the control Authorities carried out a total amount of 50.400 inspections, detecting a total number of 237 infringements. In full accordance with the specific provisions of EU Control Regulations (1224/2009 and 404/2011) all the concerned vessel with LOA (length overall) less than 12 meters are exempted from the VMS obligation. Considering that these vessels are very small, and this circumstance may create some technical difficulties in fitting them with the Blue-Box, it would be better to study alternative measures in order to</p>

				gears; - Ministerial Decree on the 21st September 2011, which establishes relevant limitations to the use of "FERRETTARA" (distance from the coast: no more than 3 nautical miles, full length: no more than 2.500 meters; mesh size: no more than 100 millimetres); Further administrative and technical measures may be adopted in the context of the "Action Plan" which is going to be approved by the EU Commission.	monitor their position during each fishing trip. Specific MCS in relation to protected or non-authorized species (National Driftnets Control Plan and BFT National Control Plan = 100% inspection coverage)
12. LATVIA	NO – prohibited in Baltic Sea since 2008	NO			
13. LITHUANIA	NO – Driftnet fisheries are forbidden in the Baltic Sea	NO			Since small scale Lithuanian fishing vessels which are engaged in fisheries activities in the Baltic Sea are not using any driftnet gears, consequently in Lithuania there is no national legislation or special mechanisms for control and monitoring for this kind of fishery.
14. MALTA	NO Malta has no vessels that are authorised to fish with driftnets. Use of driftnets is illegal in Malta.	NO			No inspection benchmarks have been set, however, since the use of the said gear is illegal any gears found would be confiscated and the necessary action is taken.
15. NETHERLANDS	Pending reply				
16. POLAND	NO (a total ban on the use of driftnets in	NO			Fishing with driftnets was not the subject of targeted controls

	<p>the Sea Baltic has been introduced as from 1 January 2008).</p> <p>To that date, gillnets (driftnets) were the main method for salmon fishing used by Polish fishermen. Currently, catches of this species are carried out mostly by longline drifting. Driftnets have not been replaced by drifting trammels</p> <p>Poland was against a total ban on the use of driftnets in the waters of the Baltic Sea. In their interventions, the representatives of the Ministry of Fisheries indicated the specificity of the Polish salmon fisheries, as well as the shape of the Polish coast, which has a simple coastline, characterized by a lack of bays and islands, which prevents the use of anchored traps (trappnets) instead of driftnets</p>			<p>due to the total ban and severe penalties for insubordination of fishermen.</p> <p>No tracking devices have been installed on vessels with an overall length of less than 12 m in view of the above prohibition on the use of driftnets and lack of derogations. Control of documents related to the use of driftnets is not carried out because of the obvious lack of endorsements on their use (with the exception of fishing activities for the purpose of research and development, which are subject to special permits and are monitored both by the presence on board of researchers and to monitoring/control once the vessels participating in such research fisheries return to the designated port)Monitoring Programme on the catch of Cetaceans (carried out by the Sea Fisheries Institute in Gdynia)</p>
<p>17. PORTUGAL</p>	<p>YES</p> <p>low use, targeting small pelagic characterized by the seasonality (approximately 3 months period summer)</p> <p>Vessels are usually small or very small, primarily local fishery (88 vessels - dimensions between 4.7 and 9 meters, with powers between 7 and 44.6 Kw). The remaining vessels (11 coastal fishing), have dimensions between 11 and 16 meters, with powers between 45 and 184 KWG.</p> <p>These vessels are licensed to operate simultaneously with other arts, and the use of this type of art is predominant in the north of Portugal, including the ports</p>	<p>99 licenses assigned to vessels that are licensed to this art since 2004 ;</p> <p>no new licenses granted this year.</p> <p>Maintain licenses for "tradition" and not for actual use.</p> <p>No license in the Autonomous Regions of the Azores and Madeira</p> <p>a. Mesh size range: 35-40 mm</p> <p>b. Prohibition of drifting trammel</p>		<p>There is no requirement to install VMS for vessels less than 12 meters (limited fishing with this type of gear). In most licensed vessels it would become physically impossible to install any such equipment due to the paucity of vessels, absence of mast antenna installation, lack of power supply, etc. Regarding the activity of Inspectors, due to the characteristics of the national ports and the fishing fleet, we have sought to privilege one mode of action seeks to cover all types of vessels, fishing gear and catches. Not the main objective of inspection because of the small size of the fleet, its seasonality and greatly reduced expression.</p> <p>Mechanisms are ensured for necessary control, eliminating thus the need for another type of crossing information.</p> <p>The use of driftnet is not subject to any specific system of monitoring, control and surveillance. The fishing gear drift-are identified with a buoy equipped with flag or radar</p>

	of Porto and Braga, which hold about 50 % licensed vessels. In the Lisbon area are also licensed 8 vessels. Use is limited to the Sea Territorial in areas near or very near the coast.	c. Ban on drift net gear in the Autonomous Region of Madeira d. Dimensions: 500 x 10 m e. Requirement to submit catch 70% of species alvo (In the case of drift-arts are Sardinha, Jewish and Boga Sea) f. Capturing prohibition of more than 5% crustaceans g. Prohibition of use between ¼ mile and 1 mile	reflector, also with a headlamp, as referred to in DR 43/87 of 17 July, is amended by conferred by DR 7/2000, of 30 May
18. ROMANIA	Pending reply		
19. SLOVENIA	YES (small scale, targets only sardines – limited from April to June, vessels ranging from 6.25 to 13.60 meters – fishing trips decreasing from 54 in 2005 to 4 in 2012, limited to territorial sea of SL)	No particular mechanisms to control specifically driftnet fisheries –	No electronic equipment – no specific inspections – fishing logbooks filled in for quantities and species fished
20. SPAIN	NO (not allowed in "aguas exteriores" i.e. beyond the baseline). It is not clear whether it is not prohibited in "aguas interiores"	NO	
21. SWEDEN	Pending reply		
22. UK	YES but very limited (see attached table) – 2012 : 250 registered vessels using driftnets, landing a total catch of 914 tonnes. NO of vessels involved in the fishery : 94 (English channel - Pilchards,	All UK fishing vessels must hold a current valid license issued by a UK Fisheries Administration. They do	Vessels are not required to operate VMS – There is a project to develop an inshore vessel monitoring system that would involve 12m boats, but most driftnet fisheries are carried out beyond the inshore zone, so these boats would not be capture by this system.

	Bass, Herring, Mackerel) – 4 (Central North Sea - Sea trout, Salmon), 88 (Southern North Sea - Bass, Cod, Herring, Sole, Skates and Rays)	not specifically authorise the use of driftnets within vessel licenses, but any vessel targeting those species listed in Council Regulation (EC) n°894/97 would require authorisation. No such authorisations are currently in force.	Inspection objectives over last 5 years did not target driftnet fisheries – not identified as a high risk objective. 7 inspections carried out on driftnet vessels in 2012. No infringements detected, but may be difficult to detect as the gear inspected at sea will be only that which the vessel's master chooses to haul during an inspection. Landings of catches from driftnet fisheries (boats under 10m length) are monitored on the basis of sales note information (re. Art 16-4 of Council Regulation (EC) 1224/2009 – Given the size and risk profile of driftnet fisheries, UK does not operate specific additional monitoring.
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9. ANNEX 2 SUMMARY OF DRIFTNET FISHERIES CURRENTLY OPERATING IN EU WATERS

#	Species (common name)	Species (binomial)	Fishery Area	Stock	Gear	Net length m	Mesh size mm	No. of vessels	MS	Region	Marine	Estuarine	River
1	Atlantic herring	<i>Clupea harengus</i>	ICES VIIId	North Sea Autumn spawning	Driftnet	150-400	42-54	25	France	NE Atlantic	X		
2	Atlantic herring/mackerel	<i>Clupea harengus</i> , <i>Scomber scombrus</i>	ICES VIIId & f	Herring - North Sea Autumn spawning Mackerel - Western component of NE Atlantic	Driftnet	350-450	55-65	< 30	UK	NE Atlantic	X		
3	Atlantic herring	<i>Clupea harengus</i>	ICES IVc	North Sea Autumn spawning	Driftnet	Unknown	55-65	< 50	UK	N Sea	X		
5	Shad spp	<i>Alosa</i> spp.	ICES VIIId	Loire	Drifting trammel net	< 500	60 (400)	15	France	NE Atlantic		X	X
5.2	Shad spp	<i>Alosa</i> spp.	ICES VIIId	Adour	Drifting trammel net	< 180	110-120 (540)	ref #9	France	NE Atlantic		X	X
6	Shad spp	<i>Alosa</i> spp.	GFCM GSA 29	Rivers & Danube delta	Driftnets	200-300	70-120	1355 total in Romania	Romania	Black Sea		X	X
8	Lamprey spp	<i>Petromyzon</i> spp.	ICES VIIId	Loire	Drifting trammel net	< 500	120 (400)	ref #5	France	NE Atlantic		X	X
8.2	Lamprey spp	<i>Petromyzon</i> spp.	ICES VIIId	Gironde- Garonne	Drifting trammel net	200-300m	70 (variable)	ref #15	France	NE Atlantic		X	X
8.3	Lamprey spp	<i>Petromyzon</i> spp.	ICES VIIId	Adour	Drifting trammel net	<600m	68 (540)	ref #9	France	NE Atlantic		X	X
9	Salmon & sea trout	<i>Salmo salmar</i>	ICES VIIId	Adour	Drifting trammel net	< 180	110-120 (540)	15	France	NE Atlantic		X	X

10	Salmon/sea trout	<i>Salmo salmar</i>	ICES IVb	Multi-stock fishery	Driftnet	<550	100-120	14+	UK	N Sea	X	X
12	Sea trout	<i>Salmo trutta</i>	ICES IVc	Unknown	Driftnet	<550	100-120	27	UK	N Sea	X	X
13	Salmon/Sea trout	<i>Salmo salmar/Salmo trutta</i>	ICES 24-26 (and 22-32)	Baltic salmon and sea trout	Semi-driftnet	400+	65-70, >80	50	Poland	Baltic Sea	X	X
14	Salmon/Sea trout	<i>Salmo salmar/Salmo trutta</i>	ICES VIIa	Lune and Ribble River	Driftnet	<300	NA	11	UK	NE Atlantic	X	X
15	Meagre	<i>Argyrosomus regius</i>	ICES VIIIb	Gironde - Garonne	Driftnet	300-400	90	45	France	NE Atlantic	X	X
15.2	Meagre	<i>Argyrosomus regius</i>	ICES VIIIb	Gironde - Garonne	Drifting trammel net	300-400	130 (800-1000)	ref #15	France	NE Atlantic	X	X
16	Sea bream spp	Sparidae spp.	ICES VIIIb	Arcachon	Driftnet	300	100	5	France	NE Atlantic	X	X
16.2	Sea bream spp	Sparidae spp.	ICES VIIIb	Adour	Driftnet	300	100	ref #9	France	NE Atlantic	X	X
17	Sea bass spp.	Dicentrarchus spp.	ICES VIIIb	Adour	Drifting trammel net	<180	100 (540)	ref #9	France	NE Atlantic	X	X
18	Sea bass spp.	Dicentrarchus spp.	ICES VIIId	English Channel	Driftnet	200-300	90-120	<5	France	NE Atlantic	X	X
19	European sea bass	<i>Dicentrarchus labrax</i>	ICES VIIId	English Channel	Driftnet	<2,300	150	~6	UK	NE Atlantic	X (offshore)	X
20	European sea bass/mullet	<i>Dicentrarchus labrax/Mugilidae</i>	ICES VIIId,e & f	English Channel & West coast of UK	Driftnet	400	90, 112-127	<70	UK	NE Atlantic	X (inshore)	X
21	European sea bass/mullet	<i>Dicentrarchus labrax/Mugilidae</i>	ICES VIIId & e	English Channel	Driftnet	Unknown	112	<6	UK	NE Atlantic	X	X
22	European sea bass	<i>Dicentrarchus labrax</i>	ICES IVc	North Sea (IVb & c)	Driftnet	Unknown	90-220	<40	UK	N Sea	X	X
23	Sea bass/Sea bream/Meagre	<i>Dicentrarchus labrax/Sparus aurata/Argyrosomus Regius</i>	ICES IXa	Unknown	Driftnet	40	60	50	Portugal	NE Atlantic	X	X

24	Common sole	<i>Solea solea</i>	ICES IVc	North Sea (IV)	Drifting trammel	400	100 (1200)	~10	UK	N Sea	X	
25	Common sole	<i>Solea solea</i>	ICES VIIId	Eastern channel (VIIId)	Drifting trammel/driftnet?	Unknown	100-120	< 30	UK	NE Atlantic	X	
26	European pilchard	<i>Sardina pilchardus</i>	ICES VIIe & f	Not known (perhaps migrating part of Bay of Biscay stock)	Driftnet	450	45	~ 30	UK	NE Atlantic	X	
27	European pilchard	<i>Sardina pilchardus</i>	ICES IXa	VIIc and IXa	Driftnet	400-600	35-60	62	Portugal	NE Atlantic	X	
28	Atlantic cod	<i>Gadus morhua</i>	ICES IVc	IV, VIIId & IIIa	Driftnet	Unknown	120-220	< 20	UK	N Sea	X	
29	Atlantic bonito	<i>Sarda sarda</i>	GFCM GSA 29	Stock structure unknown, migratory	Driftnet	500, 1000 & 1500	36, 48	135	Bulgaria	Black Sea	X	
30	Exocetidae	Exocetidae spp	FAO 31	Martinique	Driftnet	Unknown	Unknown	45	France	Outermo st	X	
31	Acoupa weakfish	<i>Cynoscion acoupa</i>	FAO 31	Guiana	Driftnet	100 - 2500	140, 120, 160, 180	83	France	Outermo st	X	
32	Saddled sea bream	<i>Oblada melanura</i>	GFCM GSA 9	Unknown - Liguria	Driftnet (occhiata)	1200-1800	70-90	< 10	Italy	Mediterranean	X	
33	Anchovy	<i>Engraulis encrasicolus</i>	GFCM GSA 10	Unknown - Cilento	Driftnet (menaide)	300	19-28	20	Italy	Mediterranean	X	
34	Atlantic mackerel/chub mackerel/bogue	<i>Scomber scombrus</i> , <i>Scomber colias</i> , <i>Boops boops</i>	GFCM GSA 10	Unknown - Milazzo Patti	Driftnet (sgomberara & bogara)	Unknown	Unknown	25	Italy	Mediterranean	X	
35	Amberjack	<i>Seriola dumerilii</i>	GFCM GSA 10	Unknown - Palermo area	Driftnet (ricciolara)	100-150	74-100	25	Italy	Mediterranean	X	

36	Anchovy/European pilchard/amberjack	<i>Engraulis encrasicolus, Sardina pilchardus, Seriola dumerili</i>	GFCM GSA 10	Unknown - Sant'Agata di Miitello	Driftnet (ricciolara)	100-150	74-100	7	Italy	Mediterranean	X	
37	Anchovy	<i>Engraulis encrasicolus</i>	GFCM GSA 10	Unknown - Gulf of Naples	Driftnet (menaide)	300	19-28	90	Italy	Mediterranean	X	
37.2	European pilchard	<i>Sardina pilchardus</i>	GFCM GSA 10	Unknown - Gulf of Naples	Driftnet (menaide)	300	34	ref #37	Italy	Mediterranean	X	
38	Anchovy/European pilchard	<i>Engraulis encrasicolus, Sardina pilchardus</i>	GFCM GSA 19	Unknown - Catania	Driftnet (menaide)	300	20	30	Italy	Mediterranean	X	
39	Scomber spp	<i>Scomber spp</i>	GFCM GSA 19	Unknown	Driftnet (sgomberara)	Unknown	Unknown	4	Italy	Mediterranean	X	
41	Shad spp	<i>Alosa immaculata, Cospialosa kessleri pontica</i>	GFCM GSA 29	Black Sea	Drifting trammel nets	400-500	25-34	Unknown	Bulgaria	Black Sea		X

code number as reported in the study "Study in support of the review of the EU regime on the small-scale driftnet fisheries (Specific contract 5 (SI2.650655)).

10. ANNEX 3 DETAILED OVERVIEW OF THE SMALL SCALE DRIFTNET FISHERIES IN THE MEDITERRANEAN

10.1. Fiches by fishery

1) "Menaide" for anchovy, *Engraulis encrasicolus*, in Catania area (GSA19)

In the eastern Sicily (GSA19) a fleet using small scale driftnets for small pelagics is present and mainly concentrated in the Catania area (Catania, Ognina and Aci Castello ports).

It is a specialized for a traditional fishery using "menaide" driftnets for anchovy, *E. encrasicolus*.

Since 2007, under the EU DCF framework, this fishery is monitored also by means of onboard observations, though the monitoring can be irregular, depending on the sorting of the métier by the ranking system.

This fishery is performed all year round. The monthly landings in tons, averaged over 2007-2012, highlighted certain variability and a peak in mid-spring early summer months, reaching a value of about 35 tons. The production raised from about 200 tons in 2007-2009 to 450 in 2010, then it gradually decreased to 300 tons in 2012. The GND production of anchovy represented a fraction not negligible and ranged between the 22% in the 2007 and 44% in the 2010 of the total anchovies landing in the GSA 19.

The most important species belonging to the commercial by catch of this fishery is sardine, *S. pilchardus*; the contribution of this species to the landings is much lower and has a more variable pattern compared to anchovy. Anchovy represented a share from 80 (in 2008) to 98% (in 2010) in the landings of this fishery.

As concerns the characteristics of this fleet, the LOA segment that contributes more to the landings and accounts for a remarkable number of active vessels and fishing days is the LOA 6-12 m.

Regarding fishing activity, the mean monthly number of vessels using "menaide" is rather variable along the time and the seasons. Peaks are observed in spring-early summer and then in October-November.

About 30 vessels are currently involved in this fishery with "menaide"; the size of this fleet decreased in the last years, being represented by about 60 vessels in 2007. Most of the activity (approximately 80%) of these vessels is based on menaide fishery.

In the recent years, the anchovies of Catania caught by menaide have obtained a brand for the typicality of the product ("Slow food" presidium "Masculine da magia", www.fondazioneSlowFood.it).

In the investigated year, 2013, the SSD fleet in the ports of Catania, Ognina and Aci Castello has been represented by 28 vessels. The LOA of the boats in Catania port is included between 9.3 and 13.1, in Ognina between 10.8 and 11.8 m and in Aci Castello between 8.2 and 12.8 m. The fishing activity of driftnets for anchovies requires good sea conditions. In the investigated period (end of May – end of July), on average, each boat realised 5 fishing days per week with "menaide"; it was estimated an annual value per vessel of 145 of fishing days.

The fishing operations start in the last hours of the night with the search of the fishing's shoal through the eco-sounder. The net (average length 280 m, drop 25 m, mesh size 20.5 mm) is deployed at sea close to the shoal and is hauled during the sunrise about 1 hour and a half later.

Fishing grounds are located in areas close to the fishing harbour (max 6.6 km) with depths ranging from 35 to 135 m and characterized by sandy-muddy bottoms.

The crew of the vessels involved in "menaide" fishing ranged between 4 and 6 persons (mean 4).

The average CPUEs of anchovy in the investigated period was 44 kg/fishing day and 0.68 kg/100m² of net/fishing hour. The peak was registered in the last week of May; a similar value was observed in the second week of June with a decrease starting from the following weeks.

The target species, *E. encrasicolus*, represented the 91.5% of the total catch in weight. By catch was made only by sardines. Discard was negligible, 0.4% of the total catch and represented by specimens of sardine, depending on the size of the specimens and the market demand. Catches of protected/vulnerable species were never recorded, as well as those of a species included in the Annex VIII.

It was approximately estimated, for the year 2013, a value of total annual landings of 206,131 kg, corresponding nearly to 1,869 Keuro.

The modal size of the anchovies caught was 11.5 cm on the whole sampled period. Only 0.7% of the specimens of anchovy measured were lower than the Minimum Conservation Size (9 cm TL, EC Reg. 1967/2006), and only 1.1% of the specimens was lower than the size at first maturity (9.7 cm TL, www.fishbase.org).

2) "Menaide or menaica" for anchovy, *Engraulis encrasicolus*, in the Cilento area (GSA10)

The area of Cilento is located in Campania administrative Region, Salerno Province. It spreads for over than 140 km in the southern Tyrrhenian Sea (GSA10). Several fishing ports and mooring places are present, hosting principally small scale fleets: the most important are Acciaroli, Marina di Casal Velino, Marina di Pisciotta, Palinuro and Marina di Camerota.

Among the small scale vessels, there are several boats using small driftnets targeting anchovy, *Engraulis encrasicolus*, with a specific gear called "menaide" or "menaica". The presence of this fishery was noticed since at least the last century. The fishing practices are made according to ancient traditions, the catch of anchovy was commercialized fresh or was subjected to a preparation ("alici di menaica") made according to an ancient recipe.

The commercial value and the organoleptic values of "menaica" anchovies are higher than those of the anchovies usually caught with other systems, like purse seine or pelagic trawl. In the recent years the anchovies of Cilento have obtained a brand for the typicality of the product ("Slow food" presidium "alici di menaica" , www.alicidimenaica.it; www.slowfood.it). This significantly increased the knowledge and the price of the product with consequent benefits on all the local fisheries.

The fleet involved in the "menaide" fishery increased in the last years; according to the interviews carried out in the framework of DRIFTMED, 19 vessels used this gear in 2013;

these vessels have similar technical characteristics: LOA of about 9 m, GT of about 2.8 and engine power of about 50 kW.

In 2013 the fishing season with driftnets for anchovy lasts three months (April-June).

Fishing trips lasted from sunset to first hours of the night; fishing time varied from 50 minutes to about 2 hours. Nets were hauled by hand. The fishing operation requires good sea and weather conditions; from the interviews an average of 30 fishing trips for each vessel in the whole fishing period has been collected. In this period, these vessels alternate the use of driftnets with trammel nets and gillnets.

The average length of the nets used was 425 m, the drop 24 m, the mesh size 27 mm. Fishing grounds are located in areas close to the mooring harbors, characterized by muddy bottoms and depths ranging from 80 to 150 m.

In the investigated period, according to the fishing trips monitored by logbooks, the catches were composed entirely by the two target species of this fishery, the anchovy and sardine. The average catch rates of anchovy were 28 kg/fishing day and 0.537 kg/100m² of net/fishing h. By catch was about 25% of the total catch and was represented by sardine. No discard was observed, nor the catch of unauthorized and protected species.

The peak of catches was registered in April, while the values of May and June were lower and similar.

The size structure of the specimens caught of *E. encrasicolus* was very similar in the different monitored hauls: the modal size was 14.5 cm TL, with minimum and maximum sizes at 13 cm TL. No specimens were under the Minimum Conservation Size of 9 cm TL (EC Reg. 1967/2006) nor under the size at first maturity of 9.7 cm TL (www.fishbase.org).

The crew of the vessels involved in “menaide” fishing was on average 3 persons. The fishing days performed by the vessels involved in this fishery are approximately the 13% of the yearly fishing days carried out by these vessels; this contribution increased to 21% if the value (in euro) of landings is considered.

3) “Occhiatarà” for saddled sea bream, *Oblada melanura*, in Ligurian Sea (GSA9).

During the period monitored by DRIFTMED 6 vessels (5 in the Marine District of Imperia and one in Savona) were identified in Ligurian Sea (GSA9) using small scale driftnets.

In the past years, the artisanal fleet employing driftnets in Liguria was more numerous; most of the vessels licensed with the so called “ferrettara” net, employed a net with 160-180 mm mesh size to exploit Atlantic bonitos, albacore and also, even though more rarely, swordfish and bluefin tuna.

In 2013, the vessels used small driftnets to exploit the saddled sea bream, *O. melanura*, as target species. The local name of these small driftnets is “occhiatarà”.

According to the interviews made with the fishermen, this gear is used seasonally, in a short period of time, no more than about 40 days, between May and June. In the investigated period of 2013 the number of fishing days realised with driftnets for each vessel was on average 19. The average number of fishermen per vessels was two.

The "occhiatarà" fishing activity is carried out during the night. The employed net was divided in 3-4 sets, each measuring about 450 m in length, for an overall length of about 1200m.

Nets were deployed in coastal areas close to the coast on sandy bottoms. The maximum distance from the coastline was 500 m, the depth ranged from 12 to 45 m. Sea grass beds were avoided by fishermen, considering the high risk that a net, drifting close to the bottom, could be “entangled” on sea grass plants, with consequent damages to the gear.

The first set of net was deployed after sunset; the deploying of the entire gear lasted about one hour and half. Depending on the intensity of the current, nets were left at sea up to 4 hours and then hauled. The hauling operations lasted at least 2 hours or more, depending on the abundance of catches.

The average catch rates (total species) in the monitored period were 83 kg/fishing day and 0.101 kg/100m² of net/fishing h. By catch was about 29% of the total catch. By catch species were mainly constituted by the chub mackerel, *Scomber colias*, and the Mediterranean mackerel, *Trachurus mediterraneus*.

Some species included in the Annex VIII of the EU Council Regulation 894/97 were found in the catches, two cephalopods and one fish: *Todarodes sagittatus* (less than 1% in weight), *Ommastrephes bartrami* (only one specimen recorded) and *Sarda sarda* (it was caught only one time).

Discards were negligible, only 0.7% of the total catch.

The measured specimens of the target species (*O. melanura*) ranged from 21 to 36 cm TL and the most represented size class was 27 cm TL. All the specimens were greater than 17.5 cm (size at maturity, according to Cetinic *et al.*, 2002). No Minimum Conservation Size has been established for the saddled sea bream in Mediterranean.

The catches of *O. melanura* are generally divided into three commercial categories of different economic value, according to the size: in the investigated period the price ranged between 5 and 12 Euro/kg.

Even performed in a short time period (approximately the 12% of the yearly fishing activity of the involved fleet), this fishery contributed for roughly 25% of the total yearly economic value and for approximately 34% of the total yearly biomass landed.

4) “Sgomberara or sgombetara” for horse mackerel, *Trachurus trachurus*, in northern Sicily (GSA10)

In a wide area of northern Sicily several vessel using a similar typology of small scale driftnet locally called "sgomberara or sgombetara" were detected during the DRIFTMED investigations. They belong to the artisanal fleets of several little mooring places, the most important of them are S. Agata di Militello, Milazzo and Porticello. This fishery is targeted mainly to the horse mackerel, *Trachurus trachurus* and, according to the interviews, performed mainly in summer-autumn period.

On yearly basis, an average of 60 days of fishing days per vessels was estimated for this fishery, which involved, in the current year, at least 22 artisanal vessels, all of them lower than 12 m overall length. The average crew is 2 fishermen.

The small driftnets used had an average mesh size of 80.2 mm, average overall length of 920 m and average drop of 35 m; they were used from 2.6 to 14.2 km offshore and on depths ranging from 30 to 400 m.

In the monitored period the target species represented only 1% of the total catch; by catch was dominated by the bullet tuna, *Auxis rochei*, species included in the Annex VIII. Discards were not observed, as well as the presence of sensitive or protected species.

The average catch rates (total species) in the monitored period were 142 kg/fishing day and 0.092 kg/100m² of net/fishing h. On the basis of the sampled data, it was approximately evaluated a total annual landing of 187 tons corresponding to barely 288 Keuro.

The measured specimens of *T. trachurus* showed a modal size at 23 cm TL; all the specimens caught were greater than the Minimum Conservation Size of this species for the Mediterranean (15 cm TL, EC reg. 1967/2006) and also greater than the size at maturity (18.5 cm TL; Carbonara *et al.*, 2012).

The socio economic analyses performed for this fishery highlighted that the approximated contributions of this fishery to the annual fishing days (58%) and the annual incomes of the involved vessels (55%) are similar, while in terms of landed biomass the "sgomberara" fishery contributed for about 85% of the annual landings.

The results provided for this fisheries are however not final, due that some data collected in the last week have not been considered in this analysis. In the draft final report the complete outcomes of this fishery will be presented.

5) “Menaide” for anchovy, *Engraulis encrasicolus*, in S. Agata di Militello (GSA16)

In northern Sicily, in the port of S. Agata di Militello, a local fishery using small driftnets (local name "menaide") was identified. This fishery is carried out in a restricted period of the year (from June to August), targeting anchovies, *E. encrasicolus*. During the investigations made in the framework of this project, 7 artisanal vessels were identified; a total of 15 fishermen were involved in this fishery, on average 2 per vessel. A fishing activity of 20 days per vessel was approximately evaluated in 2013. The characteristics of the employed small driftnets, as well the fishing practices and the typology of fishing grounds were similar to those of the "menaide" fishery of Catania.

The average CPUEs of anchovy in the investigated period was 86 kg/fishing day and 0.61 kg/100m² of net/fishing h.

The target species, *E. encrasicolus*, represented practically 100% of the total catch in weight. Discard was negligible, 0.6% of the total catch, and was represented by damaged specimens of anchovy. Catches of protected/vulnerable species were never recorded, as well as those of a species included in the Annex VIII.

For the year 2013, a total annual landing of 12,081 kg, corresponding to about 49 keuro, was guess estimated.

6) “Ricciolara” for the greater amberjack, *Seriola dumerili*, in S. Agata di Militello (GSA10)

In S. Agata di Militello (northern Sicily), a fishery using small driftnets locally called “ricciolara” was identified. The target species is the greater amberjack, *Seriola dumerili*.

This is a strictly seasonal fishery, performed from September to October, when the target species is closer to the coasts; the sampling activities of DRIFTMED could monitor only the beginning period of this fishery.

Three vessels were identified and followed for catch and effort. It is likely the presence of other vessels involved in this fishery both in S. Agata di Militello as in other ports of Sicily.

The interviewed fishermen declared to perform, on average, 40 fishing days per year targeting greater amberjacks with “ricciolara”. The average length of the used nets was 900 m, the drop 21 m, the mesh size 70 mm. Fishing grounds are located in areas close to the mooring harbor (average distance 2.8 km), characterized by depths ranging from 18 to 30 m.

In the investigated period, according to the monitored fishing trips, the average catch rates of *S. dumerili* were 9.3 kg/fishing day and 0.011 kg/100m² of net/fishing h. By catch was about 42% of the total catch and represented mostly by the Mediterranean mackerel, *Trachurus mediterraneus*, the common Pandora, *Pagellus erythrinus* and by the striped sea bream, *Lithognathus mormyrus*.

No discard was observed, nor the catch of unauthorized and protected species.

From the sampling data it was approximately evaluated an annual landing of the target species of 8,488 kg corresponding to about 78 keuro.

The size structure of the specimens measured of *S. dumerili* was characterized by a modal class of 27.5 cm TL; this size is lower than the size at maturity reported for the species, 80 cm of Standard Length (Andaloro *et al.*, 1998). For this species there isn't a Minimum Conservation Size.

7) "Ferrettara" for blue fish, *Pomatomus saltatrix*, in Gulf of Naples, GSA10

A specialized fishery with small driftnets “ferrettara” was identified in the Gulf of Naples, namely in the artisanal fleet of Torre Annunziata. This fishery is targeted to the bluefish, *Pomatomus saltatrix*. According to the interviews, it resulted that the use of “ferrettara” for bluefish was recently introduced in this fleet, due to the increase in abundance of the target species occurred since the last ten years. During the DRIFTMED investigations, two vessels carrying out this fishery were identified and monitored for catches and effort, even though the presence of at least four more vessels (two in Castellammare di Stabia and two in Pozzuoli) performing this same fishery was noticed from the interviews.

This fishery is practiced on seasonal basis, from June to September; 70 average fishing days were approximately estimated for each vessel. The small driftnets used were characterized by an average mesh size of 88 mm, average length of 2400 m and average drop of 26 m. Fishing grounds were on average situated 3.7 km from the harbor and around 40 m depth.

The average catch rates of the target species in the monitored period were 44.7 kg/fishing day and 0.028 kg/100m² of net/fishing h. The target species represented around 94% of the total catches; by catch was mainly represented (90%) by *Trachinotus ovatus*. In the by catch the presence of two species included in the Annex VIII (*Sarda sarda* and *Euthynnus alletteratus*) was observed, even though the two species accounted only 9.6% of the by catch. No sensitive or protected species were observed during the samplings, nor reported from the interviews.

The measured specimens of *P. saltatrix* showed a modal size of 44 cm TL; all the specimens measured were greater than the size at first maturity reported for this species (25 cm TL, www.fishbase.org); no Minimum Conservation Size has been established for this species.

This fishery, even though represented approximately the 47% of the annual fishing days performed by the vessels involved, contributed for barely the 67% of the total yearly incomes.

8) "Menaide" for sardine, *Sardina pilchardus*, in northern Adriatic (GSA17)

A little number of vessels using since many years a "menaide" small driftnet, with sardine, *Sardina pilchardus*, as the main target species is present in Slovenia. This fleet was monitored since 2005 under the DCF framework. Thanks to the availability of the colleagues of the Fishery Research Institute of Slovenia, information from this fishery was collected. In addition, during DRIFTMED contract, direct measurements of nets were made. The collection of information for this fishery is still in progress; therefore the data presented in this document are not final.

The number of vessels involved in this fishery ranged from 1 to 7 in the period 2005-2012. This fishery is practised in a restricted period of the year, essentially in April and May.

In addition to the vessels in Slovenia, the presence of two more vessels in Trieste (Italy), performing the same fishery, was noticed from the interviews.

The small driftnets used were characterized by an average mesh size of 34.4 mm, average length of 418 m and average drop of 21 m. The catches are dominated by the sardine that, in the period of highest activity (April-May) accounted for 90-95% of the total caught biomass; by catch is composed by several species, with *Spicara flexuosa* and *Merlangius merlangus* the most represented ones.

The presence of discard is negligible. Specimens of sensitive/endangered species or species included in the Annex VIII were not reported.

9) "Menaide" for anchovy *Engraulis encrasicolus* /sardine *Sardina pilchardus* in western Sicily (GSA 16)

A small SSD fishery has been detected in the south-western coast of Sicily, namely in Selinunte harbour (GSA16); information on the fishery have been collected through fishers interviews. Some 5 vessels carry out driftnet fishing for anchovy and sardine. This fishery is strictly seasonal from May to September.

The fishing gears used have characteristics rather similar to the "menaide" fisheries identified in other areas, as in GSAs 10 and 19. The nets employed had an average length of 200 m, and an average drop of 21 m; the average mesh size was 20 mm.

According to the interviews realised, 33 fishing days per vessel were on average carried out in 2013. All the 5 vessels are small-scale, with LOA less than 10 m.

The fishing activity is performed during the night, on a fishing ground close to the harbour of Selinunte, having an average depth of 20 m; the average soaking time is of approximately 2 hours.

The interviewed fishermen reported that the catch is almost entirely composed by anchovies and sardines, by catch and discards were noticed as negligible. No catches of specimens of sensitive/protected species were declared, as well as of unauthorized species included in the Annex VIII.

10.2. Synoptic table: fleets, gears, catches and economic characteristics

Detailed description of the Mediterranean small scale driftnet fisheries 1) "Menaide" for anchovy, *Engraulis encrasicolus*, in Catania area (GSA19); 2) "Menaide or menaica" for anchovy, *Engraulis encrasicolus*, in the Cilento area (GSA10); 3) "Occhiatarà" for saddled sea bream, *Oblada melanura*, in Ligurian Sea (GSA9); 4) "Sgomberara" for horse mackerel, *Trachurus trachurus*, in northern Sicily (GSA10); 5) "Menaide" for anchovy, *Engraulis encrasicolus*, in S. Agata di Militello (GSA10); 6) "Ricciolara" for greater amberjack, *Seriola dumerili*, in S. Agata di Militello (GSA10);

7) "Ferrettara" for blue fish, *Pomatomus saltatrix*, in Gulf of Naples (GSA10);

8) "Menaide" for sardine, *Sardina pilchardus*, in northern Adriatic (GSA17).

9) "Menaide" for anchovy *Engraulis encrasicolus* /sardine *Sardina pilchardus* in western Sicily (GSA 16)

Fisheries	1	2	3	4 (*)	5	6
General characteristics (1)						
Country	ITALY	ITALY	ITALY	ITALY	ITALY	ITALY
GFCM - GSA where fishery takes place	19	10	9	10	10	10
Area	Catania	Cilento	Liguria	Northern Sicily	S. Agata di Militello	S. Agata di Militello
Local denomination of the fishery	"menaide"	"menaide"	"occhiatarà"	"sgomberara"	"menaide"	"ricciolara"
List of target species	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Oblada melanura</i>	<i>Trachurus trachurus</i>	<i>Engraulis encrasicolus</i>	<i>Seriola dumerilii</i>
Fishing period (months of occurrence)	All year	April- June	May-June	All year	June-August	September-October
Annual fishing days (average by boat) (1), (5)	145.0	30.0	14.5	60.0	30.0	40.0
Number and size of vessels involved Total	28	19	5	22	7	3
Gear configuration (1), (2), (3), (4)						
Mesh sizes (min-max, average)	min-max: 19-22 mm, avg: 20.53 mm	min-max: 26-29 mm, avg: 27 mm	min-max: 70-90 mm, avg: 79.4mm	min-max: 70.5-85 mm, avg: 80.17 mm	NA	70 mm

Length of the nets employed (min-max, average)	min-max: 240-300 m, avg: 280 m	min-max: 300-500 m, avg: 425 m	min-max: 375-500 m, avg: 412.5 m	min-max: 500-1500 m, avg: 921 m	NA	min-max: 800-1000 m, avg: 900 m
Fully extended net drop (min-max, average)	min-max: 23-26 m, avg: 25 m	min-max: 21-26 m, avg: 24 m	min-max: 11-36 m, avg: 18m	min-max: 28-43 m, avg: 35 m	NA	21 m
Hanging ratio	min-max: 0.74 - 1, avg: 0.87	min-max: 0.72-0.85, avg: 0.81	min-max: 0.62-0.83, avg: 0.70	NA	NA	NA
Twine tickness	0.24 mm	0.24 mm	min-max: 0.25-0.35 mm, avg: 0.26 mm	0.30 mm	NA	0.30 mm
Fishing grounds: distance offshore (min-max, average)	Distance min-max: 0.585 km - 6.592 km; avg: 4.337 km	Distance: max 3 nautical miles from the coast	Distance min-max: 0.050 km – 0.500 km; avg: 0.275 km	Distance min-max: 2.633 km – 14.208 km; avg: 9.068 km	Distance min-max: 3.568 km – 8.480 km; avg: 4.641 km	Distance min-max: 2.252 km – 3.100 km; avg: 2.805 km
Depth (min-max, average)	Depth min-max: 35 - 135 m; avg: 84.0 m	Depth min-max: 80 - 150 m; avg: 120.0 m	Depth min-max: 12 - 45 m; avg: 23.8 m	Depth min-max: 30 - 400 m; avg: 194.0 m	Depth min-max: 40 - 150 m; avg: 70.0 m	Depth min-max: 18 - 30 m; avg: 26.0 m
Soak time of the nets (min-max, average)	Soak time min-max: 1h – 5h; avg: 1h 36'	Soak time min-max: 48' – 1h 30'; avg: 1h 06'	Soak time min-max: 3h– 7h; avg: 4h 30'	Soak time min-max: 1h 30' – 6h 30'; avg: 3h 36'	Soak time min-max: 1h – 6h; avg: 2h 6'	Soak time min-max: 3h – 5h; avg: 4h
Do the vessels of this fishery ever target the same species with a different gear type? if yes please give details	No	No	No	No	No	No
Socio-economic characteristics						
Total number of fishermen involved in this fishery (5)	115	57	10	46	15	6

Average number of fishermen per vessel	4	3	2	2	2	2
Incomes (all fishery)						
Mean price of the target species	9.44 €	7.00 €	13.00 €	6.22 €	4.50 €	15.00 €
Average price of the target species caught with other gears	6.00 €	2.00 €		1.58 €	1.77 €	12.80 €
Total annual landings from driftnet /total landings	In weight 90.7 %	In weight 29.8 %	In weight 34.2 %	In weight 83.0 %	In weight 37.6 %	In weight 35.0 %
	In value 90.8 %	In value 21.4 %	In value 24.8 %	In value 51.0 %	In value 25.1 %	In value 44.0 %
Total number of days spent with driftnets/total number of fishing days	88.4 %	13.4 %	12.3 %	58.3 %	19.6 %	39.0 %
Social and cultural aspects (traditional fishery)	Yes ; Presidium Slow food "Masculine da Magghia"	Yes; Presidium Slow food "Alici di Menaica"	No	No	No	No
Typicality of the product						
Sustainability						
(1), (3), (4), (6)						
CATCH RATES						
a) Total catches (irrespective of the target species)	min 0.1 kg/day - max 160.0 kg/day - avg 48.0 kg/day	min 6.0 kg/day - max 215.0 kg/day - avg 37.0 kg/day	min 17.5 kg/day - max 315.2 kg/day - avg 88.3 kg/day	min 0.3 kg/day - max 1000.0 kg/day - avg 142.0 kg/day	min 15.0 kg/day - max 250.0 kg/day - avg 86.0 kg/day	min 14.0 kg/day - max 18.0 kg/day - avg 16.0 kg/day
Kg/fishing days (min-						

max average)								
Kg/100 m² net/h of fishing (average value)	0.738 kg/100m ² /h	0.664 kg/100m ² /h	0.101 kg/100m ² /h	0.092 kg/100m ² /h	0.61 kg/100m ² /h	0.019 kg/100m ² /h		
b) Only target species Kg/fishing days (min-max average)	min 0.1 kg/day - max 160.0 kg/day - avg 44.0 kg/day	min 6.0 kg/day - max 200.0 kg/day - avg 28.0 kg/day	min 8.0 kg/day - max 247.0 kg/day - avg 62.9 kg/day	min 5.0 kg/day - max 20.0 kg/day - avg 11.3 kg/day	min 15.0 kg/day - max 250.0 kg/day - avg kg/day	min 1.4 kg/day – max 15.0 kg/day - avg 9.3 kg/day		
Kg/100 m² net/h of fishing (average value)	0.678 kg/100m ² /h	0.537 kg/100m ² /h	0.072 kg/100m ² /h	0.019 kg/100m ² /h	0.610 kg/100m ² /h	0.011 kg/100m ² /h		
LFD of the catch of the target species: Average and modal length	Avg: 11.5 cm Modal: 11.0 cm	Avg: 14.3 cm Modal: 14.5 cm	Avg: 27.0 cm Modal: 27.0 cm	Avg: 24.7 cm Modal: 23.0 cm	Avg: NA Modal: NA	Avg: 29.1 cm Modal: 27.5 cm		
Minimum Conservation Size (from Ec Reg. 1967/2006)	9 cm	9 cm	NA	15 cm	9 cm	NA		
Proportion (in number) of specimens under the MCS	16/2301 (0.7 %)	(0/178) 0%	NA	(0/50) 0%	NA	NA		
Length at first maturity (7)	9.7 cm TL	9.7 cm TL	17.5 cm TL	18.5 cm TL	9.7 cm TL	80 cm SL		
	(25/2301) 1.1 %	(0/178) 0%	(0/1185) 0%	(0/50) 0 %	NA	(43/43) 100.0 %		

Proportion in number of specimens under the length at first maturity	No	No	Yes (Atlantic bonito).	No	No
Are unauthorised species (e.g. those listed in the Annex VIII) caught?	No	Yes. Cephalopods (<i>T. sagittatus</i> , <i>O. bartramii</i>) 3.9% of total by-catch. <i>S. sarda</i> 1.5% of the total by catch	No	No	No
Are protected species caught?	No	No	No	No	No

SOURCE OF INFORMATION:

- (1) from interviews with fishermen;
- (2) from direct measurements of nets;
- (3) from logbooks;
- (4) from embarks;
- (5) the information from the whole fisheries were obtained raising the information coming from the sampling (logbooks, embarks, interviews) to the total number of the vessels involved in the fishery;
- (6) estimates refer to the period sampled in the DRIFTMED contract;
- (7) from literature;

Table: Continuation: detailed description of the following fisheries 7) "Ferrettara" for blue fish, *Pomatomus saltatrix*, in Gulf of Naples (GSA10); 8) "Menaide" for sardine, *Sardina pilchardus*, in northern Adriatic (GSA17); 9) "Menaide" for anchovy *Engraulis encrasicolus* /sardine *Sardina pilchardus* in western Sicily (GSA 16)

Fisheries	7	8	9
General characteristics (1)			
Country	ITALY	SLOVENIA-ITALY	ITALY
GFCM - GSA where the fishery takes place	10	17	16
Area	Gulf of Naples	Northern Adriatic	Western Sicily
Local denomination of the fishery	"ferrettara"	"menaide"	"menaide" or "tratta"
List of the target species	<i>Pomatomus saltatrix</i>	<i>Sardina pilchardus</i>	<i>Engraulis encrasicolus</i> ; <i>Sardina pilchardus</i>
Main landing port(s)	Torre Annunziata	Izola, Koper, Trieste	Selinunte
Fishing period (months of occurrence)	June-October	April-May	May-September
Annual fishing days (average by boat) (1), (5)	70	n.a.	33
Number and size of vessels involved - Total	2	1	5
Gear configuration (1), (2), (3), (4)			
Mesh sizes (min-max, average)	88 mm	min-max: 34-35 mm, avg: 34.4 mm	20 mm
Length of the nets employed (min-max, average)	avg: 2400 m	min-max: 85-1050 m, avg: 418 m	min-max: 200-210 m, avg: 202 m

average)			m	
Fully extended net drop (min-max, average)	26 m		min-max: 20-21 m, avg: 21 m	min-max: 20-24 m, avg: 21.2 m
Hanging ratio	-		min-max: 0.84-0.90, avg: 0.86	NA
Twine thickness	0.54 mm		0.24 mm	0.20 mm
Fishing grounds: distance offshore (min- max, average)	Distance min-max: 1.353 km – 12.100 km; avg: 3.673 km			NA
Depth (min-max, average)	Depth min-max: 15 - 120 m; avg: 40 m			Depth min-max: 18 - 45 m; avg: 31.5 m
Soak time of the nets (min-max, average)	Soak time min-max: 2h – 3h 18'; avg: 2h 36'			2h
Do the vessels of this fishery ever target the same species with a different gear type? if yes please give details	No		No	No
Socio-economic characteristics				
Total number of fishermen involved in this fishery (5)	4			
Average number of fishermen per vessel	2			
Total annual landings from this fishery/total annual landings of this			In weight	In value
			In weight	In value

fleet irrespective of the gear used (5)	47.0 %	55.0 %			
Total number of days spent when using driftnets/total number of days at sea irrespectively of the gear used (5)	47 %				
Social and cultural aspects (traditional fishery)					
Typicality of the product	No				
Other					
Sustainability(1), (3), (4), (6)					
CATCH RATES					
a) Total catches (irrespective of the target species) Kg/fishing days (min-max average)	min 12.0 kg/day - max 80.0 kg/day - avg 48.0 kg/day				
Kg/100 m ² net/h of fishing (average value)	0.03 kg/100m ² /h				
b) Only target species Kg/fishing days (min-max average)	min 10.0 kg/day - max 80.0 kg/day - avg 44.7 kg/day				
Kg/100 m ² net/h of fishing (average value)	0.028 kg/100m ² /h				

<p>LFD of the catch of the target species: average and modal length</p> <p>Minimum Conservation Size (from EC Reg. n. 1967/2006)</p> <p>Proportion (in number) of specimens under the MCS</p> <p>Length at first maturity (7)</p> <p>Proportion in number of specimens under the length at first maturity</p>	<p>Avg: 44.3 cm Modal: 44.0 cm</p> <p>NA</p> <p>NA</p> <p>25.0 cm</p> <p>(0/51) 0.0 %</p>	<p>11 cm</p> <p>12.4 cm</p> <p>NA</p>	<p>Sardine 11 cm Anchovy 9 cm</p> <p>Sardine 12.4 cm Anchovy 9.7 cm</p> <p>NA</p>
<p>Are unauthorized species (e.g. those listed in the Annex VIII) caught?</p>	<p>Yes, only in September. The main important aspect are the Fishery location and time of year</p>	<p>NA</p>	<p>NA</p>
<p>Are protected species caught?</p>	<p>No</p>	<p>No</p>	<p>NA</p>

11. ANNEX 4 INTERACTIONS WITH PROTECTED SPECIES

11.1. 4A Protected species likely to interact with driftnets

Species		Potential Interaction	Confirmed Interaction	Region	Habitats Dir. Annex II	Habitats Dir. Annex IV	Habitats Dir. Annex V	Birds Dir. Annex I
Sea Lamprey	<i>Petromyzon marinus</i>		X	Northeast Atlantic	X			
Sturgeon	<i>Acipenseridae</i>		X	Northeast Atlantic	X		X	
Atlantic Salmon	<i>Salmo salar</i>		X	Baltic, North Sea, Northeast Atlantic	X			
Shad spp.	<i>Alosa alosa, Alosa fallax</i>		X	Northeast Atlantic	X		X	
Pontic shad	<i>Alosa immaculata</i>		X	Black Sea	X		X	
Harbour porpoise	<i>Phocoena phocoena</i>		X	Baltic, Northeast Atlantic, North Sea	X	X		
Harbour Porpoise	<i>Phocoena phocoena ssp. relicta</i>	X		Black Sea	X	X		
Harbour Porpoise	<i>Phocoena phocoena ssp. phocoena</i>	X		Mediterranean	X	X		
Common dolphin	<i>Delphinus delphis ssp. ponticus</i>	X		Black Sea		X		
Common dolphin	<i>Delphinus delphis</i>	X		Mediterranean		X		
Bottle-nosed dolphin	<i>Tursiops truncatus ssp. ponticus</i>	X		Black Sea	X	X		
Bottle-nosed dolphin	<i>Tursiops truncatus</i>	X		Mediterranean	X	X		
Baltic ringed seals	<i>Pusa hispida</i>	X		Baltic				
Common/harbour	<i>Phoca vitulina</i>		X	Northeast	X			

Species		Potential Interaction	Confirmed Interaction	Region	Habitats Dir. Annex II	Habitats Dir. Annex IV	Habitats Dir. Annex V	Birds Dir. Annex I
seals				Atlantic, North Sea				
Grey seals	<i>Halichoerus grypus</i>	X	X	Baltic, Northeast Atlantic, North Sea	X			
Black throated loon/ diver	<i>Gavia arctica</i>	X		Northeast Atlantic				X
Great northern loon/ diver	<i>Gavia immer</i>	X		Northeast Atlantic				X
Red-throated loon/ diver	<i>Gavia stellata</i>	X		Northeast Atlantic				X
Pygmy coromorant	<i>Phalacrocorax pygmeus</i>	X		Northeast Atlantic				X
European shag	<i>Phalacrocorax aristotelis</i>	X		Mediterranean				X
Yelkouan shearwater	<i>Puffinus yelkouan</i>	X		Mediterranean				X
Manx shearwater	<i>Puffinus puffinus</i>	X		Mediterranean				X
Cory's shearwater	<i>Calonectris diomedea</i>	X		Northeast Atlantic				X
Slavonian grebe	<i>Podiceps auritus</i>	X		Baltic				X
Long tailed duck	<i>Clangula hyemalis</i>	X		Baltic				X
Smew	<i>Mergellus albellus</i>	X		Baltic				X
Guillemot	<i>Uria aalge</i>	X	X	Northeast Atlantic, North Sea				X
Razorbills	<i>Alca torda</i>	X		Northeast Atlantic				X
Loggerhead turtle	<i>Caretta caretta</i>	X		Mediterranean	X	X		

Species		Potential Interaction	Confirmed Interaction	Region	Habitats Dir. Annex II	Habitats Dir. Annex IV	Habitats Dir. Annex V	Birds Dir. Annex I
Leatherback turtle	<i>Dermochelys coriacea</i>		X	Northwest Atlantic ⁷⁵		X		
Green turtle	<i>Chelonia mydas</i>		X	Northwest Atlantic		X		

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French Outermost territories: driftnet fisheries in French Guiana

11.2. 4B Protected species likely to interact with driftnets Summary of population status and interactions rates of protected species with driftnet fisheries

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Sea Lamprey	<i>Petromyzon marinus</i>	LC	#8/ #8.2/ #8.3/ #44	HD II	NE Atlantic	Target	Loire/Gironde-Garonne/Adour/ Portugal	-	No catch data available
Pontic shad	<i>Alosa immaculata</i>	VU	#6/ #41	HD II	Black Sea	Target	Danube/ Black Sea	-	Fishery #6 28.66 tonnes caught by driftnets in the Danube during 2012 ⁷⁷ No catch data for fishery #41.
Shad spp.	<i>Alosa alosa</i> <i>Alosa fallax</i> <i>Alosa Maeotica</i>	LC	#5/ #5.2/ #45 #6	HD II	NE Atlantic Black Sea	Target	Loire/Adour/ Portugal/ Danube/ Black Sea	-	No catch data for fisheries #5 /#5.2 /#6/ #45 Fishery #6 46 tonnes caught in 2011 in marine waters.
Atlantic Salmon	<i>Salmo salar</i>	LC	#9/#12	HD II	NE Atlantic North Sea	Target #9 Bycatch	Mixed Stock	-	No catch data available for fishery #9/ #12

⁷⁶ HD refers to Habitats Directive and BD refers to Bird Directive. Accompanying numbers refer to the annex of the relevant directive the species are listed on.
⁷⁷ Appendix 4.8: Romania Case Study

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Sturgeon	Acipenseridae	CR	#8/ #8.2/ #8.3	HD II	NE Atlantic	Bycatch	Loire/Gironde-Garonne/Adour	-	No catch data available
Allis shad	<i>Alosa alosa</i>	LC	#26	HD II	NE Atlantic	Bycatch	Plymouth sound & estuaries	-	Bycatch levels not available
Harbour porpoise	<i>Phocoena phocoena</i>	CR	#13	HD II HD IV	Baltic, North Sea, NE Atlantic	Bycatch	Baltic	<2 individuals per year (ASCOABANS, 2009) ⁷⁸ 84 individuals per year ⁷⁹	2.1 per year reported in the Polish Baltic ⁸⁰ Overall rates in the Baltic unknown bycatch events are rare and unreported (ICES, 2011) ⁸¹ Low numbers caught by drifting gillnets and drifting trammel nets in North Sea and off the southwest coast of the UK ⁸²

⁷⁸

Extraction rate estimated for surveyed subarea of the Baltic from ASCOBANS 2009. Recovery Plan for the Baltic Harbour Porpoises (Jastarnia Plan). ASCOBANS, Bonn

⁷⁹

This figure is based on the assumption that there could be more than four thousand porpoises in Subdivision 24 in the western Baltic. This was derived from the SCANS II survey that covered this area as part of the whole of the Belt Seas. In reality porpoise densities are probably lower in Subdivision 24 than in other parts of this survey block, so this number represents a likely overestimate of the 1.7% limit for the wider Baltic.

⁸⁰

Bycatch rates of harbour porpoise in polish waters 2000-2009(K. Skóra & I. Pawliczka, unpubl. data).

⁸¹

ICES. 2011. Report of the ICES Advisory Committee, 2011. ICES Advice, 2011. Book 1, 31 pp

⁸²

SMRU, pers. comm, 2014

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Harbour porpoise	<i>Phocoena phocoena ssp. relicta</i>	EN	#9	HD II HD IV	Black Sea	Bycatch	Black Sea	<ul style="list-style-type: none"> • ≈ 510 (ICES,2011) 	High incidental catches reported in bottom set gillnets: 1000s per year estimated to have been taken during 1990-2000 (Birkun et al., 2009 ⁸³)
Common dolphin	<i>Delphinus delphis ssp. ponticus</i>	VU	#9	HD IV	Black Sea	Bycatch	Black Sea	≈ 1700 (ICES,2011)	Unknown (ICES,2011)
Common dolphin	<i>Delphinus delphis</i>	EN	#32/#33 /#34/#35 /#36/#37/#38/ #43	HD IV	Med	Bycatch	Mediterranean	-	Interaction with Moroccan driftnet fishery in the Alboran Sea (Tudela et al. 2005 ⁸⁴) Interaction with Turkish driftnet fishery in the Aegean Sea (Akyol et al. 2009 ⁸⁵)
Bottle nosed dolphin	<i>Tursiops truncatus ssp. ponticus</i>	EN	#9	HD I HD IV	Black Sea	Bycatch	Black Sea	50 (ICES, 2010 ⁸⁶)	Incidental catches reported in bottom set gillnets; two dolphins per 100km of Turbot nets (Birkun et al 2009)

⁸³

Birkun, A., Krivokhizhin, S., Masberg, I., & Radygin, G. 2009. Cetacean by-catches in the course of turbot and spiny dogfish fisheries in the Northwestern Black Sea. In 23rd Annual Conference of the European Cetacean Society Istanbul, Turkey.

⁸⁴ Tudela, S., Kai Kai, A., Maynou, F., El Andalossi, M., & Guglielmi, P. 2005. Driftnet fishing and biodiversity conservation: the case study of the large-scale Moroccan driftnet fleet operating in the Alboran Sea (SW Mediterranean). *Biological Conservation*, 121(1), 65-78.

⁸⁵ Akyol, O., Erdem, M., Ünal, V., & Ceyhan, T. (2009). Investigations on drift-net fishery for swordfish (*Xiphias gladius* L.) in the Aegean Sea. *Turkish Journal of Veterinary and Animal Sciences*, 29(6), 1225-1231.

⁸⁶ ICES. 2010. Report of the ICES Advisory Committee, 2010. ICES Advice, 2010. Book 1, 47pp

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Bottle nosed dolphin	<i>Tursiops truncatus</i>	VU	#32/#33 /#34/#35 /#36/#37 /#38/#43	HD I HD IV	Med	Bycatch	Mediterranean	-850 (ICES,2011)	9700 individuals per year for set nets (ICES,2011)
Baltic ringed seals	<i>Pusa hispida</i>	VU	#13	-	Baltic	Bycatch	Baltic	-	Lake Saimaa ringed seal subpopulation known to interact with gillnets (ICES 2010)
Common/Harbour seals	<i>Phoca vitulina</i>	LC	#10	HD II	North Sea	Bycatch	<i>P. v. vitulina</i> (Eastern Atlantic)	Scotland-61 ⁸⁷	
Grey seals	<i>Halichoerus grypus</i>	LC	#10/#12 /#13/#20 /#21	HD II	North Sea NE Atlantic	Bycatch	<i>H. grypus grypus</i> (Atlantic) & <i>H. g. macrorhynchus</i> (Baltic)	Scotland- 3002	Estimate of 2 seals per 100 hauls with driftnets in UK North Sea fisheries (species not specified) (Northridge et al., 2012 ⁸⁸)
Black-throated	<i>Gavia arctica</i>	LC	#1/#8/#16	BD I	NE Atlantic	Bycatch	European	Estimate of 1,935 for red and black throated divers in	No information available for case study MS fisheries

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<http://www.scotland.gov.uk/Topics/marine/Licensing/SealLicensing>

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Northridge, S., Coram, A., and Kingston, A. 2012. *The susceptibility of sensitive species through analysis of their distribution and the overlap with relevant fishing effort distribution*. Contribution to the Definit Final Report: Task 3.2.2: by Sea Mammal Research Unit, St Andrews, UK.
http://randd.defra.gov.uk/Document.aspx?Document=10254_MF1206parttwo.pdf

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
loon/diver					North Sea			North Sea (Northridge et al., 2012)	Estimate of 483± 385 total annual bycatch of loon/diver species in the Baltic Sea for all gillnets (MRAG et al., 2011 ⁸⁹)
Red-throated loon/diver	<i>Gavia stellata</i>	LC	#1/#8/#9/#16	BD I	NE Atlantic North Sea	Bycatch	European		
Great northern loon/diver	<i>Gavia immer</i>	LC	#1/#8/#9/#16	BD I	NE Atlantic North Sea	Bycatch	European	-	
Pygmy cormorant	<i>Phalacrocorax pygmeus</i>	LC	#9	BD I	NE Atlantic	Bycatch	European	Estimate of between 202 – 422 for Cormorant species in the North Sea (Northridge et al., 2012)	No information available for case study MS fisheries Estimate of 148± 71 total annual bycatch of cormorant species in the Eastern North Sea for all gillnets (MRAG et al., 2011)
European shag	<i>Phalacrocorax aristotelis</i>	LC	#32/#33/#34/#3	BD I	Mediterranean	Bycatch	European	Estimate of between 925-1852	Estimate of 17,779± 7,227 total annual bycatch of cormorant species in the Baltic Sea for all gillnets (MRAG et al., 2011) No reported interactions rates

⁸⁹ MRAG Ltd. Poseidon, Lamans (2011) Contribution to the preparation of a Plan of Action for Seabirds. Final Report to EC DG-MARE, Framework Contract No FISH/2006/09 - Lot 2 (SI2.571135) 290 pp. June 2011 http://ec.europa.eu/fisheries/documentation/studies/seabirds_2011_en.pdf

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
			5/#36/ #37//#3 8					in the North Sea (Northridge et al., 2012)	
Yelkouan shearwater	<i>Puffinus yelkouan</i>	LC	#32/#33 /#34/#3 5/#36/ #37//#3 8	BD I	Mediterranean	Bycatch	European	-	No reported interactions rates
Manx shearwater	<i>Puffinus puffinus</i>	LC	#32/#33 /#34/#3 5/#36/ #37/#38 /#41	BD I	Mediterranean	Bycatch	European	-	No reported interactions rates
Cory's shearwater	<i>Calonectris diomedea</i>	LC	#16/#27	BD I	NE Atlantic	Bycatch	European	Estimates of between 10,897 and 31,855 for the European Population (MRAG et al., 2011)	No reported interactions rates

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Slavonian grebe	<i>Podiceps auritus</i>	LC	#13	BD I	NE Atlantic	Bycatch	European	-	No information available for case study MS Estimate of 219 ± 190 total annual bycatch of grebe species in the Baltic Sea for all gillnets (MRAG et al., 2011)
Long tailed duck	<i>Clangula hyemalis</i>	VU	#13	BD I	Baltic	Bycatch	Western Siberian European	Estimate for western Palearctic populations of 189,000 birds (Żydelis et al 2009) Estimate of 2325 in the North Sea (Northridge et al., 2012)	No information available for case study MS Estimate of 234 ± 213 total annual bycatch of sea duck species in the Eastern North Sea for all gillnets (MRAG et al., 2011) Estimate of 63,418 ± 10,075 total annual bycatch of sea duck species in the Baltic Sea for all gillnets (MRAG et al., 2011)
Smew	<i>Mergellus albellus</i>	LC	#13	BD I	Baltic	Bycatch	European	-	No reported interactions rates

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Guillemot	<i>Uria aalge</i>	LC	#20/21/ #26	BD I	NE Atlantic	Bycatch	European	Estimate of between 15,733-28,110 in the North Sea (Northridge et al., 2012)	No reported interaction rates for case study MS Estimate of 474 ± 327 total annual bycatch of auk species in the Baltic Sea for all gillnets (MRAG, 2011)
Razorbills	<i>Alca torda</i>	LC	#20/21/ #27	BD I	NE Atlantic	Bycatch	European	Estimate of between 3,754 - 6,422 in the North Sea (Northridge et al., 2012)	Estimate of 43/1000 hauls for driftnets in the North Sea, based on observation of 93 hauls (Northridge et al., 2012)
Loggerhead turtle	<i>Caretta caretta</i>	EN	#32/#33 /#34/#35/#36 /#37/#38/#41	HD II HD IV	Mediterranean	Bycatch	Mediterranean	-	No reported interaction rates
Leatherback turtle	<i>Dermochelys coriacea</i>	CR	#31	HD IV	W Atlantic	Bycatch	Atlantic	-	No reported interaction rates

Common Name	Latin Name	IUCN Status	Fishery ID#	HD/ BD ⁷⁶	Region	Bycatch or target	Stock or subpopulation	PBR	Interaction/catch rate
Green turtle	<i>Chelonia mydas</i>	EN	#31	HD IV	W Atlantic	Bycatch	Atlantic	-	No reported interactions rates