Agenda Item 6.2.1  Further Implementation of the Agreement

Conservation Issues

Monitoring and Mitigation of Small Cetacean Bycatch

Information Document 6.2.1.a  Bycatch-related Fisheries Legislation in the ASCOBANS Area

Action Requested  •  Take note

Submitted by  Secretariat

NOTE:
DELEGATES ARE KINDLY REMINDED
TO BRING THEIR OWN COPIES OF DOCUMENTS TO THE MEETING
Secretariat's Note

One obstacle to assessing the situation and gleaning important information on the causes of mortality and health status of porpoises in the Baltic Sea are the low levels of reporting of bycatch and recovery of fresh carcasses. In order to gain an overview of the relevant practices and regulations in the Baltic Sea region, the Jastarnia Group requested the Secretariat, with the assistance of a consultant, “to produce a synopsis of bycatch-related regulations of relevance to individual fishermen, especially with regard to legal sanctions for bycatch and incentives for those delivering carcasses with a view to using the carcasses obtained for porpoise conservation research, irrespective of whether such incentives are laid down in national legislation” (Action Point 6 of the 10th Meeting of the Jastarnia Group).

Thanks to a voluntary contribution from Germany, supplemented by funds from the regular budget, ASCOBANS was able to commission a review covering not only the Baltic Sea region, but the entire ASCOBANS Area, and drawing also from examples in other regions.
Synopsis of Bycatch-related Fisheries Legislation in the ASCOBANS Area

STUDY PREPARED FOR THE ASCOBANS SECRETARIAT
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Introduction

This Study aims to provide an overview of the situation in the ASCOBANS Area of bycatch-related laws and regulations, focusing particularly on:

a) Legal sanctions for bycatch

b) Bycatch-related reporting obligations

c) Incentives for those delivering carcasses, irrespective of whether such incentives are laid down in national legislation

The geographical scope of this report will include all ASCOBANS Parties (Belgium, Denmark, Finland, France, Germany, Lithuania, Netherlands, Poland, Sweden, United Kingdom), and as far as possible also non-Party Range States (Estonia, Ireland, Latvia, Norway, Portugal, Russia, Spain). Relevant examples from other regions are also used for comparison and in order to shape the recommendations, as far as feasible and applicable.

It should be noted that while laws and regulations related to fisheries (including cetacean bycatch in fisheries) are dominated by European Union law (which has exclusive competence in most of the applicable areas) this study focusses on laws at the national level. Inevitably for EU Member States this results in analyzing the national interplay with EU law, which primarily concerns the enforcement aspects (including sanctions for breaches of EU Common Fisheries Policy rules).
Part A | EU Legislation

Context and Legal Effect of EU Legislation

At the outset, the context of EU law must be emphasised. All ASCOBANS Parties are EU Member States, as are all non-member Range States with the exception of Norway and Russia. However, under legal arrangements Norway also undertakes to apply much EU legislation including environmental legislation (but excluding fisheries legislation, although there are some agreed joint rules for shared stocks and many rules are in any case similar). For EU Member States, there are a number of legal and policy implications:

- EU law is binding on Member States. Moreover, where the legislation is contained in Regulations the rules are **directly applicable**. This means not only that the EU Regulations automatically apply in Member States but also that Member States are precluded from adopting national implementing legislation except: (1) in order to enforce the Regulations; or (2) where the Regulations provides for the possibility for Member States to take stricter national measures (subject to certain limits).

- EU Directives on the other hand, require national implementing legislation. The rules in the Directives must be closely adhered to, however, meaning that (depending on the nature of the Directive) rules are closely harmonized across Member States.

- While environmental and fisheries rules are developed at the EU level, enforcement and criminal procedure matters are within the competence of Member States – therefore Member States (subject to some directions at the EU level) determine matters such as the type of enforcement procedure, levels and types of penalties, etc.

- In policy terms, the scope for legislative reform is limited by the EU policy agenda. Therefore, reforms to some key frameworks (e.g. the Habitats or Marine Strategy Framework Directives) are subject to limited potential, except to the extent of implementing rules and modalities. On the other hand, technical regulations – such as the EU fisheries technical rules – are more easily adaptable.

Framework of EU legislation

EU rules concerning cetacean bycatch are found primarily of three sets of legislation: (1) the Habitats Directive; (2) the Marine Strategy Framework Directive; and (3) Common Fisheries Policy Regulations.

Under the **Habitats Directive** (92/43/EEC) Member States are obliged to take measures necessary to establish a system of strict protection for cetaceans in their natural range, prohibiting “all forms of deliberate capture or killing of specimens of these species in the wild” (Art. 12; Annex IV lists the animals, including all small cetaceans, that are afforded this protection). Additionally, Member States are required to establish a system to monitor the
incidental capture and killing of these species, and in the light of the information gathered, to take further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned (Art. 12(4)). There are no specific requirements on reporting under Article 12, however, and in practice regular, detailed reporting formats have not been developed under the Habitats Directive.\(^1\)

Under the **Marine Strategy Framework Directive** (2008/56/EC; MSFD), Member States are required to establish a series of environmental targets and associated indicators and to develop and implement a programme of measures designed to achieve or maintain good environmental status. Additionally, Member States are required to establish a monitoring programme for continuous assessment and regular updating of targets. “Good environmental status” includes a biological element, which in turn means that biodiversity indicators need to be developed for marine mammals, including a bycatch mortality indicator (which if exceeded would imply the need for stronger bycatch mitigation measures). However, there is currently no overall consensus amongst Member States, the European Commission and international organizations (including ICES and ASCOBANS) on how these indicators should be defined.

**Regulation 812/2004** is currently the main laying down measures concerning incidental catches of cetaceans in fisheries has four components: mitigation, monitoring, reporting and phasing out of driftnets in the Baltic Sea. The mitigation measures include a requirement of using pingers with defined technical specifications for vessels with an overall length of 12 m or more in specific fisheries, geographic areas and period of the year, and ensuring these devices are fully operational when setting the gear. For these fisheries, there are various monitoring and reporting requirements (see below).

**Legal Sanctions for Infringements of Bycatch Rules**

While the substantive rules for fishing for EU Member States are set at the EU level, matters of criminal procedure and law are mostly within the exclusive competence of Member States. There are some qualifications to this, however, since EU control rules (primarily the so-called “Control Regulation\(^2\)”) under the CFP set out some parameters – in particular by classifying certain offences as “serious infringements” of the CFP, and establishing a Union-wide ‘penalty points” system for fishers.

\(^1\) Relevant information forms part of the reporting requirements under Article 17 of the Habitats Directive and is currently contained in an EU database. Under Article 17, every six years Member States are required to report on the implementation of measures taken under the Directive and in particular should report on the conservation measures referred to in Article 6 and the main results of the surveillance referred to in Article 11. But there is no explicit requirement to report on Article 12, which requires member states to monitor incidental catches.

\(^2\) Reg. (EU) 1224/2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy.
As regards **serious infringements**, the Control Regulation establishes a number of offences as “serious” meaning that they are eligible for higher penalties, and also for penalty points. These offences include many that would be relevant to cetacean bycatch, including failing to fulfil obligations to record and report catch or catch related data; use of prohibited or non-compliant gear; carrying out of fishing activities in a protected area; among others.

As from January 2012, each Member State should have set up a **point system** which allows for penalty points to be assigned to holders of fishing licences (companies or individuals) and/or masters of vessels in case of serious infringements. The number of points that are to be assigned in case of infringements depend on the nature of the infringement and are specified in an implementing Regulation.\(^3\) In case two or more infringements by the licence holder are detected during one inspection, the points can be summed up. The sum cannot exceed 12 points (Article 162 of the implementing Regulation). When the total number of points assigned equals or exceeds a determined threshold, the fishing licence will be automatically suspended. These thresholds range from two-months suspension at 18 points, to permanent suspension at 90 points.

In general, direct legal sanctions for the act of incidentally capturing cetaceans do not exist in EU or national legislation. Under EU law (Habitats Directive) the deliberate capture or killing of cetaceans is prohibited, but incidental capture is not prohibited – rather there are general obligations (on Member States, but not under EU law on individuals) to take measures to reduce mortality and harm from incidental capture (Habitats Directive, MSFD, CFP). This approach is replicated at the national level (and also in Norway and Russia).

Legal sanctions for bycatch arise primarily (potentially) in two ways.

1) First, if the actions of the fisher are in some way “deliberate”. In EU law and most national legislation, this is given a relatively broad definition and covers acts where cetaceans are wilfully or recklessly harmed. For example, in the UK a person who kills or injures a cetacean “intentionally” (the requirement in law) includes a person who acted recklessly or wilfully. Moreover, the legislation expressly covers a person who “recklessly disturbs” a cetacean - for example to cause it distress by chasing it in a boat. However, the threshold for such an offence is relatively high (it would unlikely be sufficient, for example, simply to show that there had been excessive bycatch). Moreover, in practice there appears to be no example in Range States (or elsewhere) of legal proceedings in relation to technical bycatch only.

2) Second, if there is a breach of technical regulations designed to reduce cetacean bycatch. These might include, for example, fishing using prohibited methods or gear, or failure to meet monitoring and control requirements. The efficacy of such sanctions relies in the

\(^3\) Commission Implementing Regulation (EU) No 404/2011.
first place on the existence of appropriate technical rules and, second, on the willingness and capacity of national authorities to enforce them.

Based on an assessment of the sanctions for fisheries technical offences generally, it can be seen that there is very substantial variance in the sanctions applicable to bycatch offences across the ASCOBANS Range States (and beyond). Some countries rely on administrative fines (applied without the need to go to court), while others can only impose fines following a conviction obtained in a court. The range (in legislation and in practice) of fines also varies considerably. At the EU level, the CFP provides a basic requirement on sanctioning – that the overall level of sanctions shall be calculated in such way as to make sure that they effectively deprive those responsible of the economic benefit derived from their infringement – but this has not resulted in a standardized approach, and also does not expressly take account of non-economic matters (such as the impact on cetacean conservation), although this is implied in the sanctioning system.

**Reporting Obligations**

At the EU level, reporting obligations are not well coordinated and are generally insufficient for cetacean bycatch. The main reporting obligations come under 4 Directives/Regulations:

- **Under the Habitats Directive**, Member States are required to establish a system to monitor the incidental capture and killing of cetaceans, but there are no specific requirements on reporting attached to this requirement and in practice regular, detailed reporting formats have not been developed under the Habitats Directive (other than the general six-yearly implementation reports, provided under Article 17).

- **Under the Marine Strategy Framework Directive** (2008/56/EC; MSFD), Member States are required to establish a series of environmental targets and associated indicators for assessing the environmental status of marine waters and to establish a monitoring programme for continuous assessment and regular updating of targets. Within the work on implementing the MSFD (which is on-going), has been development of a common bycatch mortality indicator but this work has not yet been concluded due to a lack of agreed conservation objectives for cetaceans in European waters, complicated by possible overlap with initiatives taken in the development of the new Data Collection Regulation and the review of Reg. 812/2004. Several ASCOBANS/Member States have proposed a bycatch mortality indicator for their own waters.

- **Under the Cetacean Bycatch Regulation** (812/2004) Member States are to: (a) monitor and assess the effects of pinger use (in the fisheries concerned); (b) design and implement observer monitoring schemes for incidental catches of cetaceans in certain fisheries and

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4 And in the light of the information gathered, to take further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned (Art. 12(4)).
to collect scientific data on incidental catches of cetaceans; and (c) report annually on the implementation of the Regulation, including (among other things) estimates of the overall incidental catches of cetaceans in each of the fisheries concerned. Reporting under this Regulation is inconsistent and not fully carried out by every affected Member State.

- Closely linked to some of the provisions in Regulation 812/2004 are the data collection requirements under Council Regulation (EC) 199/2008 (the Data Collection Framework, or DCF). This Regulation requires Member States to set up coordinated programmes for collection, management and use of biological, technical, environmental and socio-economic data, on professional and - where appropriate – also on recreational fisheries. Ecosystem data should be included to allow for an estimation of the impact of fisheries on the marine ecosystem. There is currently no obligation on Member States under the DCF to collect information on the bycatch of protected species; nevertheless some member states do so. It would seem sensible that if an ecosystem based approach to fisheries management were to be implemented under DCF, then information on the bycatch of protected species should also be collected.

- It should be noted that – first – the DCF is currently being reformed and – second – it is widely considered to be an ineffective tool for monitoring cetacean bycatch. ICES reported in 2015 that observations in certain fisheries during 2011-2013 resulted in no records of marine mammal bycatch under the DCF, but when dedicated monitoring of these fisheries was applied bycatch of marine mammals was recorded. While ICES considered that the reasons for the differences was not entirely clear, and likely to be the result of a combination of factors, it concluded that the differences in reported bycatch events demonstrated that the DCF is not adequate for monitoring the bycatch of cetaceans (ICES 2015).

**Delivery of carcasses**

The delivery of carcasses of incidentally-caught cetaceans for the purposes of assessing the causes of mortality and health status of cetaceans is problematic from the legal perspective. First, under the Habitats Directive the keeping, transporting and exchanging of cetaceans taken from the wild is prohibited (Art. 12(2)). Most Member States have interpreted this as a requirement to discard cetaceans killed in incidental capture. Exemption from this rule can in general only be obtained on a case-by-case basis and in advance by means of a licence for specific purposes (including scientific research). These rules are replicated at the national level, and unlicensed possession of cetaceans is illegal in most EU Member States.

The Commission’s proposal on technical measures (COM(2016) 134) is consistent with this approach. Proposed Art. 12(1) prohibits the deliberate catching, retention on board, transhipment or landing of marine mammals (protected under the Habitats Directive) and only permits retention, transhipment or landing of species caught as bycatch where it is necessary to secure assistance for the recovery of the individual animals and provided that
the competent national authorities concerned have been fully informed in advance (proposed Art. 12(3)).

Moreover, derogating from this approach is difficult because these rules have a basis in international agreements (e.g. Convention on the Conservation of European Wildlife and Natural Habitats, Art. 6; specific issues may also arise under the Convention on International Trade in Endangered Species). In addition, from a policy perspective it is likely to be difficult to introduce a derogation for one group of protected species, the implication of which is to remove some of the safeguards built-in to the licensing system.

As a result of these rules, there is in general no practice of offering incentives to the fishing industry to land bycaught cetaceans. The only possibility has been to apply research funding to specific projects.
Part B | ASCOBANS Parties

The following section provides a synopsis of the main rules concerning sanctions for breaching fisheries regulations relating to bycatch, requirements on monitoring of bycatch and rules or schemes providing incentives to deliver carcasses. It should be recalled that, at least for countries which are EU Member States, the technical regulations are determined at the European level and are directly applicable. Therefore, Member States have sanctioning systems which are directed towards enforcing CFP rules, but do not include substantive fisheries rules at the national level.

Belgium

In Belgium, sea fishing falls within the exclusive competence of the Flemish Region, under the 1994 cooperation agreement between the Federal authorities, the Communities and the Regions, while environmental / conservation matters are dealt with at the Federal level.

Belgium has adopted several laws, decrees and ministerial decisions on the management of fisheries, the main ones being the Law on Sea Fisheries in Territorial Waters (Wet betreffende de zeevisserij in de territoriale zee), the Decree on Agriculture and Fisheries Policy (Decreet betreffende het landbouw-en visserijbeleid), which implements the Common Fisheries Policy, and Decision of the Flemish Government on the Implementation of a Point System for Serious Infringements in Sea Fisheries (Besluit van de Vlaamse Regering).

Fisheries infringements in Belgium are predominantly governed by criminal law. Section 2(1) of the Decree on Agriculture and Fisheries Policy specifically deals with breaches of fisheries (CFP) regulations, which are liable to prosecution and may be sanctioned with a minimum imprisonment of fifteen days up to a maximum of five years and / or to a fine ranging from 100 EUR to 50,000 EUR. In the case of a repeat infringement within three years the maximum penalties may be doubled.

In general, subsidiary legislation does not create any technical regulations related to cetacean bycatch beyond those in the CFP, although the Flemish Government implemented a new decision in 2015 to prohibit the recreational use of different types of gill and trammel nets on the beach as a protective measure for marine mammals in the intertidal zone. (The rules are in part an answer to a European Commission infringement procedure concerning the adequate protection of harbour porpoises under the Habitats Directive).
Belgium does not have any dedicated observer programme for monitoring the bycatch of marine mammals\(^5\), and relies on DCF monitoring, which has not provided any data on cetacean bycatch. All incidental capture or killing of Habitats Directive Annex IV species has to be notified, however.

An informal scheme requesting that fishermen land any marine mammal bycatch to facilitate scientific study has been in operation for some years (European Commission 2003).

**Denmark**

In Denmark, fisheries legislation is limited to the Fisheries Act (*Fiskeriloven*) and the Order on the Regulation of Fisheries 2014 – 2020 (*Bekendtgørelse om regulering af fiskeriet i 2014-2020*), the latter comprising the main EU technical regulations and other technicalities such as tracking, vessel categories or fishing areas. No specific obligations concerning cetacean bycatch, beyond EU regulations, are included within Danish law.

The offences listed in §130 of the Fisheries Act are punishable by a fine. The law does not specify minimum or maximum fines, instead, they are calculated according to the value of the fish caught as well as the value of the fishing gear used. The local police authorities are responsible for issuing fines. Imprisonment up to one year and six months is possible where the offence was committed with the intent of unjust enrichment (§130(7) para. 3). In some cases, the possibility of an out-of-court settlement exists (§133(1)). This option is subject to the following conditions: i) the violation may not lead to a more severe penalty than a fine, ii) the offender pleads guilty to the offence and iii) the fine must be paid on time. A point system has been implemented for both the master of the fishing vessel and the license holder under §§39a and 39b of the Fisheries Act. In practice the illegally used gear or illegally taken catches or the value thereof are seized.

There are no systematic control systems in place that would monitor the number of Annex IV species killed accidentally. However, the Danish authorities have drawn up an action plan to reduce the incidental capture of harbour porpoises.

In the context of pilot projects designed to meet the so-called EU landing obligation (new bycatch rules being introduced in European fisheries between 2015-2019, which prohibit the discarding of controlled fish stocks) Denmark has been actively involved in developing electronic monitoring programmes, some of which including monitoring of marine mammal bycatch. These projects used closed-circuit television (CCTV) onboard cameras in different parts of the Baltic and were reported to give more reliable marine mammal bycatch results than logbook data since by-catch which has already dropped out of the net before the net coming onboard were also registered (Kindt-Larsen et al. 2012; HELCOM 2015)

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\(^5\) Belgium has no monitoring obligation under Reg. 812/2004, since it does not have fishing vessels which are subject to the requirements.
Finland

Finland has recently undergone amendments to its fisheries laws, including amendments affecting the classification of the sanctioning system. The main fisheries laws are currently the Fishing Act 1982/286 (Kalastuslaki), the Fishing Decree 1982/1116 (Kalastusasetus) and the recently revised Law on the Common Fisheries Policy, System of Sanctions and Monitoring 1188/2014 (Laki yhteisen kalastuspolitiikan seuraamusjärjestelmästä ja valvonnasta) (hereafter, 2014 CFP and Sanctions Law).

Prior to the adoption of the 2014 CFP and Sanctions Law, fisheries infringements could only be sanctioned criminally. As a consequence, even minor offences had to be transferred to the court for prosecution with the consequence that in the majority of these cases, the charges were waived (Vilhunen, National Control Strategy for Fisheries in Finland, 2006). As a result of the recent amendments, the Agency for Rural Affairs may now issue administrative sanctions for offences in breach of the Act pursuant to §49 and §51 of the Finnish Implementing Act. The fine for a violation of the former may, depending on the act committed, range from 100 EUR to 5,000 EUR for a natural person, respectively 10,000 EUR for a legal person or from 300 EUR to 25,000 EUR for a natural person, respectively 50,000 EUR for a legal person (§50, 2014 CFP and Sanctions Law). Serious violations are subject to a fine of at least 2,000 EUR with a maximum of 5,000 EUR for natural persons and 10,000 EUR for legal persons (ibid., §52). In addition to that, the Agency will allocate the respective points under the penalty system to either the vessel master or license holder for the serious infringement (ibid., §§60-62).

The possibility of criminal prosecution instead of the application of an administrative fee also exists. After an infringement has been detected, the Agency of Rural Affairs will examine the adequacy of an administrative fine or whether a transfer to the prosecution is more appropriate, taking into account factors such as the severity and harm of the breach as well as the possible fine which could be issued (ibid., §57). In certain cases, an administrative penalty is excluded, for example, where the offender has committed an infringement for which he has been previously sanctioned (ibid.). If an infringement is prosecuted by the court, Chapter 14 of the Fishing Act in conjunction with Chapter 48 §2 of the Finnish Criminal Code (Rikoslaki) is applicable. A criminal conviction, however, may solely result in the imposition of a fine (see Chapter 14 of the Fishing Act).

For vessels, gear and catch related to the commission of an offence, the Court can order confiscation. Also revocation of the fishing licence is possible, as well as recovery of financial benefits received by the offender but these are rarely used.

Monitoring only takes place both within the EU DCF and under Reg. 812/2004. In addition, a harbour porpoise sighting campaign (started in 2001) provides information on sightings by

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private citizens. It is aimed at sightings and provided so far no information on harbour porpoise by-catch.

There are no legal or policy provisions concerning incentives to deliver cetacean carcasses for research purposes.

**Germany**

Germany applies predominantly administrative sanctions to violations of its fisheries laws. The Sea Fishing Act (*Seefischereigesetz*), the Sea Fishing Regulation (*Seefischereiverordnung*) and the Sea Fishing Fines Regulation (*Seefischerei-Bußgeldverordnung*) are important for the purpose of this discussion.7

Under §25 of the Sea Fishing Fines Regulation, the Federal Office of Agriculture and Food (*Bundesanstalt für Landwirtschaft und Ernährung*) is, pursuant to §9 of the Fishing Act of the Sea Fishing Fines Regulation, authorized to impose monetary fines on offenders of the fisheries laws. The fisheries laws all contain provisions which, if violated, will result in the imposition of an administrative sanction. The maximum fine for an infringement is 100,000 EUR or 50,000 EUR respectively, depending on the provision breached (Sea Fishing Act, §18(4)). A criminal conviction which may lead to imprisonment of up to one year is solely possible where a fishing ban was purposely ignored or where the offender purposely breaches §18(2)(1.), §18(2)(3.), §18(3)(1.)-(3.) or §18(3)(6.)-(7.) provided that that the offence was motivated by acquisitiveness (ibid. §19(1)). Where the offender repetitively breaches §18(1), §18(2)(1.), §18(2)(3.)-(3.), §18(3)(1.)-(3.) or §18(3)(6.)-(7.) or §18(3)(6.)-(7.), he will also be subject to criminal prosecution (ibid. §19(2)). A point system for serious infringements has been implemented for vessel masters and license holders pursuant to §13 Sea Fishing Act in conjunction with §16 Sea Fishing Regulation.

Monitoring is carried out both within EU data collection framework (DCF) and with respect to EU regulation 812/2004 (in both cases, under the auspices of the Johann Heinrich von Thünen Institute in Hamburg). Due to a very low coverage in the fishery metiers mainly responsible for harbour porpoise under Reg. 812/2004 monitoring requirements, and the opportunistic nature of DCF monitoring of by-catch, the results of these monitoring programmes are not considered meaningful with respect to marine mammal by-catch (HELCOM 2015).

There are no legal or policy provisions concerning incentives to deliver cetacean carcasses for research purposes.

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Lithuania

Lithuania employs a strictly administrative sanction system, *i.e.* fisheries infringements are not subject to criminal law. The sanctions themselves are not laid down in the Law on Fisheries (Žuvininkystės įstatymas) but rather in articles 872 – 877 of the Code of Administrative Offences (Administracinių teisės pažeidimų kodeksas). Pursuant to these provisions, the Fisheries Service under the Ministry of Agriculture is empowered to issue monetary fines, whereby the severity depends on the breach committed. For the majority of these articles, the possibility to revoke the offender’s fishing license for a period of time is linked to the fine (See art. 87(3) –(7) Lithuanian Code of Administrative Offences). In the case of an infringement on the transport, storage, processing, selling, buying and marketing of fish (products) the rights are extended to the confiscation of these products.

Lithuania has introduced the point system for serious infringements for vessel masters as well as license holders which are allocated by the Minister of Agriculture or an institution authorized by it.  

Gear and catch can be also confiscated through an administrative procedure.

Netherlands

Under the Dutch system, fisheries laws violations are treated as criminal offences. As opposed to other systems applying criminal law, the Netherlands subdivide certain crimes into economic crimes, including fisheries infringements. The elements of an economic crime, however, are not laid down in the provisions of the Act on Economic Crimes (Wet op de economische delicten). Often, the formal (environmental) law does not contain a description of the criminal behaviour either but is to be found in ministerial regulations. The applicable sanctions, on the other hand, are within the provisions of the Act on Economic Crimes.

The Act makes a distinction between serious and non-serious infringements of EU regulations which consequently has effect on the classification of the violation and the relevant sanction. Serious infringements, in addition to other infringements of the Fisheries Act (Visserijwet) listed under art. 1a (1°) of the Act on Economic Crimes, are generally classified misdemeanours punishable by detention up to one year, community service or a fine of 4th category which is equivalent to 16,750 EUR.  

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8 See Art. 57(11)(8) in conjunction with Art. 59 (1) Lithuanian Law on Fisheries (license holder), Art. 61 in conjunction with Art. 87(10), Lithuanian Code of Administrative Offences (vessel masters).

9 See Art. 1a(1°) and Art. 1a(3°), Dutch Act on Economic Crimes (Wet op de economische delicten), WED, 22.06.1950.

10 See Art. 23 (4) Dutch Penal Code (Wetboek van Strafrecht), 03.03.1881 (maximum fines are updated every two years) and Art. 2(1) Act on Economic Crime.
If, however, the act was committed intentionally, it is classified a felony under Art. 2(1) of the Act on Economic Crimes; for which imprisonment up to six years, community service or a fine of the 5th category, equivalent to 67,000 EUR, is possible.

In addition, the Netherlands has introduced the penalty point system for vessel masters and license holders; the department Uitvoering Visserijregelingen (VIR) allocates points for serious infringements.\(^{11}\)

**Poland**

Poland has recently amended its Marine Fisheries Act (*Ustawa o rybolówstwie morskim*). The new Act introduces a point system for vessel masters and license holders guilty of infringing the fisheries laws (Article 79) and provides for fines to be administratively applied. Article 125 specifically deals with infringements of the CFP. Pursuant to this article, the owner of a fishing vessel with an overall length equal to or greater than ten meters may be subject to a minimum fine of 500 PLN (approx. 120 EUR) and a maximum not exceeding fifty times the salary. In the case of a vessel with an overall length less than ten meters, the owner may be fined a minimum of 100 PLN (approx. 24 EUR) and a maximum not exceeding ten times the salary. Where an offender has breached the landing obligation under article 15 of the CFP, he shall be held liable to a minimum fine of 2,000 PLN (approx. 480 EUR) and a maximum not exceeding ten times the salary (Art. 124(3)(a)).

Bycatch monitoring has been problematic in Poland for a number of years.\(^{12}\) The National Marine Fisheries Research Institute (MIR) in Gdynia (under the auspices of the Ministry of the Agriculture and Rural Development) is responsible for Monitoring within EU data collection framework (DCF) and with respect to Reg. 812/2004. So far, neither programme has contributed to knowledge about marine mammal by-catch. It has been suggested that Reg. 812/2004 focuses on the wrong fleet segment and needs to be revised and take the regional situation of fisheries into account.

There are no specific regulations on landing carcasses, and no formal scheme for providing incentives to deliver carcasses. However, the possibility has received some attention in Poland. In the view of some Polish marine research centres, monitoring causes of death could be improved by including further carcass delivery by fishermen but cooperation between fishermen and certain scientific institutions seems to be very difficult or impossible due to prevailing doubts and reservations regarding the way scientists may use the data or against the fishermen (ASCOBANS 2015). It has also been suggested that fishermen can (as an


\(^{12}\) It is understood that a new fishery law was planned in 2015, requiring the reporting of by-catch by law but information could not be obtained on this law.
incentive) receive compensation of 1,000 Zloty (about 250 Euros) in future for gear damage and handling when delivering a carcass (ibid.).

Sweden

Sweden applies a predominantly criminal system to the violation of its fisheries laws (§§37 – 50 Fisheries Act (Fiskelag), 1993: 787, 10.06.1993.) The district court has the discretion to either impose a monetary fine or imprisonment on the offender. It is worth noting that the provisions on the criminal sanctions specifically state a minor offence shall not be punishable. The Swedish Agency for Marine and Water Management (Havsoch vattenmyndigheten), however, is in addition to that authorized to impose administrative monetary fines ranging between 1,000 SEK (approx. 100 EUR) and 500,000 SEK (approx. 52,000 EUR) (see §50(a) in conjunction with §40 Fisheries Act).

The point system for serious infringements has been introduced for vessel masters and license holders under §§51 ff. of the Fisheries Act (Fiskelag).

A Court can decide on forfeit of catch and gear, following the commission of an offence. Vessels can also be confiscated in order to prevent further violations, although this is very rarely exercised.

Regulation 812/2004 is implemented, but there is formally no additional monitoring procedure, and – as with other Member States – Sweden considers the DCF programme does not produce meaningful estimates with regards to bycatch because bycatch of marine mammals is not included (HELCOM 2015).

No other formal monitoring mechanism exists. The Swedish Museum of Natural History (a government agency) collects stranded porpoises that are sent in to the museum, although how useful its programme is in determining by-catch estimates is subject to conjecture. A research project on monitoring using onboard cameras was not successful due to acceptance problems (ibid.). Electronic monitoring in DCMAP is considered in Sweden to have more potential for monitoring marine mammal bycatch, and electronic monitoring seems to be feasible with regards to size of the vessels and financial feasibility, at least on the west coast where vessels are larger (ibid).

United Kingdom

The legal framework in the UK is somewhat complicated, due to the fact that under devolution agreements fisheries is a devolved area, meaning that separate rules apply for

13 If offence was committed in the EEZ, the district court whose jurisdiction is nearest to the place where the crime was committed or the district court in whose jurisdiction the port is located where the suspect arrives with his ship is competent.
England and Wales; Scotland; and Northern Ireland, although in practice the rules are broadly consistent in each jurisdiction.

Fisheries infringements in the UK are classified as criminal offences. Pursuant to section 4 of the Fisheries Act 1981, the monetary penalties range from 1,000 GBP (approx. 1,150 EUR) to a maximum of 50,000 GBP (approx. 57,500 EUR), depending on the violation.\textsuperscript{14} However, regulations adopted under each devolved jurisdiction also provide for the possibility of financial administrative penalties (FAPs) as an alternative to criminal prosecution.\textsuperscript{15} UK-wide guidance is followed on the application of FAPs; in making the decision to impose a FAP, the authorised officer will take the following factors into consideration: the severity of the infringement; the previous infringement history; other offences detected at the same time as the offence; the value and volume of the catch, and whether the fisheries species is subject to a stock recovery measure.\textsuperscript{16}

Depending on these factors, a penalty can range from 250 GBP (approx. 280 EUR) to 10,000 GBP in England and Wales\textsuperscript{17}; 2,000 GBP (2,300 EUR) in Scotland\textsuperscript{18}; and 4,000 GBP (4,600 EUR) in Northern Ireland. The offences have been divided into different categories based on the severity of the infringement.

The point system for serious infringements for license holders has been introduced to most parts of the UK, although consultations are on-going on establishing a point system for vessel masters.

A dedicated cetacean bycatch monitoring programme is in place and operated by the Sea Mammal Research Unit (SMRU). Fisheries research laboratories operating fisheries observer programmes in the UK also provide data which are included in our assessment of cetacean

\textsuperscript{14} In England, the Marine Management Organisation (MMO) functions as a public prosecutor under the supervision of the Attorney General. The Welsh Government Marine Enforcement Officers are empowered to investigate and take appropriate enforcement action, including prosecution, for fisheries infringement that are subject to the Welsh jurisdiction. In Northern Ireland, fisheries offences are prosecuted by the Public Service, whereas in Scotland Marine Scotland refers detected infringements to the Crown Office and Procurator Fiscal Service for criminal prosecution.


bycatch. Whilst the UK observer scheme relies upon good collaborative links with industry, fisheries regulations have been enacted in England and Scotland to ensure that there is also a legal obligation for skippers and owners to allow observers on board when asked to do so. There is also an obligation under the DCF (in Northern Ireland) for offshore vessels to accommodate scientific observers when requested to do so and an active observer programme is run by AFBI.
Part C | ASCOBANS Non-Party Range States

In general, the position in the other Range States follows a similar approach to that in the ASCOBANS member countries, at least for those Range States which are also EU Member States. The following is a brief review.

Estonia

Under the Estonian Fisheries Act *(Kalapüügiseadus)*, offences listed under Arts. 231 – 235 and Art. 237 are prosecuted as misdemeanours to which the Criminal Code *(Väärteomenetluse seadustik)* is applicable. The courts, however, are able to delegate their right to investigate and sanction misdemeanours to administrative authorities (in practice, police authorities and the Environmental Inspectorate), with these sanctioning powers are limited to issuing warnings and fines of up to 300 units (approx. 1,200 EUR) for natural persons respectively up to 3,200 EUR if the violation was committed by a legal person. Estonia also applies an administrative points system for fisheries licence holders (Art. 136 (4)11 in conjunction with Arts. 202 and 244 of the Fisheries Act).

Confiscation can be ordered by a Court or an extra-judicial body under the provision of the Criminal Code (Art. 83).

Estonia (Ministry of Agriculture) implements a monitoring programme in accordance with Regulation 812/2004; no additional legislation is in place. Other marine mammal by-catch monitoring programmes such as stranding networks do not exist. The monitoring programme is not considered to produce useful results (HELCOM 2015) and it is considered they could be improved through a platform providing exchange or co-operation between the fishery sector and nature conservation. There appears to be no formal or informal system providing incentives for delivering carcasses.

Ireland

Under the Irish system, criminal law is exclusively applicable to fisheries infringements (section 28, Sea-Fisheries and Maritime Jurisdiction Act 2006) although sanctions are limited to monetary fines (imprisonment is not an option). The fines vary depending on the violation as well as the size of the vessel. For technical gear offences, the maximum fines range from


20 Art. 23(8)(2)(1) and Art. 23(8)(2)(2) in conjunction with Arts. 23(1) – 23(5) and Art. 23(7) Estonian Fisheries Act. A fine unit is the base amount of a fine and is equal to four euros: Art. 47(1) Estonian Penal Code.
20,000 EUR (for sea-fishing boats of less than 12 metres in length) to 80,000 EUR (for sea-fishing boats of more than 18 metres in length) (see Tables 1 and 2 under s. 28).

Whereas administrative sanctions do not currently exist, a proposal for a bill to amend the Sea-Fisheries and Maritime Jurisdiction Act 2006 to introduce fixed penalty notices for minor offences has been introduced. If adopted, these notices would however continue to be governed by criminal proceedings, rather than to constitute administrative penalties.

Several regulations have been adopted to implement EU framework laws, including The Sea-Fisheries (Community Control System) Regulations 2012 and The European Union (Common Fisheries Policy) (Point System) Regulations 2014.

The system for the allocation of points is also noteworthy since according to section 5(1) of the Point System Regulation, the administrative authority concerned (the Sea Fisheries Protection Authority) is responsible for the allocation of the points after it has decided on the seriousness of the infringement. However, as breaches of fisheries laws are tried in court, the Authority is empowered to take a decision on the classification of the offence before the case has been transferred to the court.

**Latvia**

The Nature Conservation Agency (*Dabas aizsardzības pārvalde*) is the responsible authority for imposing sanctions on fisheries matters, which are administrative under the Latvian legal system (section 19(21) Fishery Law (Zvejniecības likums), 12.04.1995). A violation of any fishing regulation may lead to the imposition of a monetary fine pursuant to Section 80 of the Administrative Violations Code (*Administratīvo pārkāpumu kodekss*, No. 51, 20.12.1984).

Implementing the Fishery Law, there are three fishing regulations, which impose fines for breaches of EU technical regulations. The level of fines range from 200 LVL (approx. 280 EUR) to 500 LVL (approx. 700 EUR) for natural persons and 200 LVL to 3,000 LVL (approx. 4,200 EUR) for legal persons, respectively (s. 80 Latvian Administrative Violations Code).

There is no categorization of fisheries offences (as to seriousness) indicating the levels of fines to be applied — any unlawful action is subject to the previously mentioned fines. In 2014,

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21 Regulation No. 675 on the use of illegal fishing gear and money and unlawfully used unmarked fishing net order of destruction (*Nelikumīgi izmantoto aizliegto zvejas rīku un līdzekļu un nelikumīgi izmantoto nemarķēto zvejas tīklu iznīcināšanas kārtība*), 144 (3302), 06.09.2005; Regulation No. 296 regarding Commercial Fishing in Territorial Waters and the Economic Zone (*Noteikumi par rūpniecisko zveju teritoriālajos ūdeņos un ekonomiskās zonas ūdeņos*), 72 (3648), 02.05.2007; Regulation No. 503 on the landing and control of fish trade and transport facilities, warehouses and industrial premises (*Noteikumi par zivju izkraušanas kontroli un zivju tirdzniecības un transporta objektu, noliktavu un ražošanas telpu pār baudi*), 90 (4076), 02.06.2009.
Latvia introduced the point system for vessel masters and license holders.²² The responsible authority for the allocation and deletion of points is the State Environmental Service.

Norway

Under section 60 of the Norwegian Marine Resources Act, any person that wilfully or through negligence contravenes fisheries rules (“serious infringements”) is liable to fines or to a term of imprisonment not exceeding one year.

The Fisheries Ministry may impose coercive or infringement fines (respectively, sections 58 and 59). Coercive fines are designed to ensure compliance with provisions made in or under the Act and is a continuous fine that becomes effective from a specified deadline. A coercive fine may be collected through a sales organisation by deducting the amount from payments for catches. Section 59 infringement fines may be imposed by the Ministry on any person that wilfully or through negligence contravenes fisheries rules. An infringement fine may be imposed as a fixed penalty or the amount may be fixed in each case. Such factors as the profit or potential profit the person responsible has made through the contravention, how serious the contravention was, and the extra costs of control measures and processing the case may be taken into account in determining the amount of the fine. An infringement fine may also be collected through a sales organisation by deducting the amount from payment for catches.

In addition to fines, catch, gear, objects, property, facilities or vessels that were used in the contravention may be confiscated (section 65).

There appear to be no specific provisions on cetacean bycatch monitoring in Norway, nor formal schemes for delivery of carcasses.

Portugal

The Portuguese fisheries legal system is currently undergoing a detailed review and update, and at present their appears to be a discrepancy between legal practice and the specific wording of (somewhat outdated) legislation, which makes analysis difficult. Thus the main Act is the Portuguese Fisheries Act (Decreto-Lei No. 278/87), which established the legal framework governing fishing and marine culture activities in Portuguese territorial waters and has been amended by Decree-Law No. 383/98 amending Decree-Law No. 278/87 of 27 November 1998. The most important secondary legislation based on the Fisheries Act is Decreto Regulamentar No. 43/87. Pursuant to article 23 of Decree 383, the General Inspectorate for Fisheries (Inspecção-Geral das Pescas) is responsible for issuing administrative fines. However, this authority does not exist any longer. In practice, the

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²² Regulation No. 808 on the penalty point system for fishing license holders and fishing captains pursuant to the Common Fisheries Policy (Kārtība, kādā zvejas licences turētājiem un zvejas kuģu kapteinēm tiek piemērota Eiropas Savienības tiesību aktos par kopējās zivsaimniecības politiku noteiktā soda punktu sistēma), 257 (5317), 23.12.2014.
General Directorate of Natural Resources, Safety and Maritime Services (Direção Geral de Recursos Naturais, Segurança e Serviços Marítimos) (DGRM) has taken over that task. In addition to that, the monetary fines applicable to an offence are still calculated under the legislation in Portuguese escudos instead of Euros.

**Russia**

The main rules on fisheries are set out in the Federal Law on Fisheries and Conservation of Aquatic Biological Resources (No. 166-FZ of 2004) (О рыболовстве и сохранении водных биологических ресурсов Федеральный закон Российской Федерации), while nature conservation rules are set out in Federal Law of the Russian Federation on Wildlife (No. 52-FZ of 1995). Fines for fisheries offences are included, however, within the Criminal Code of the Russian Federation; these fines were recently increased in July 2016 (Federal Law of July 3, 2016 N 330-FZ "On Amendments to Article 256 of the Criminal Code of the Russian Federation"). Under the Code, as amended, (Art. 256) the illegal extraction of marine mammals is punishable with a fine from 300-500,000 rubles or the salary or other income for the period from two to three years, or correctional labor for up to two years, or imprisonment for the same term. It is not clear from the various legislation, whether this would apply to incidental (or just deliberate) capture.

In the case of an infringement, the gear used is also subject to confiscation under both the Fisheries (Article 54) and Wildlife (Article 59) Laws and under the Fisheries Law (Article 37) a fishing licence may be suspended or withdrawn.

There are no specific legal requirements for recording bycatch of cetaceans; similar to the DCF monitoring in EU countries, the main interest of the Federal fisheries monitoring programme is in non-target fish species or undersized fish.

There is no system, formal or informal, providing incentives for the delivery of carcasses.

**Spain**

The Marine Fisheries Act (Ley de Pesca Marítima del Estado) and the Royal Decrees 747/2008 and 114/2013 apply for the purpose of determining sanctions for fisheries infringements in Spain. The first Decree is primarily concerned with administrative sanctions, while the latter

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23 As amended in both cases by Federal Law No. 57-FZ amending Federal Law of the Russian Federation on Wildlife (No. 52-FZ of 1995) and Federal Law No. 166-FZ on fisheries and conservation of aquatic biological resources.

24 Spanish Marine Fisheries Act (Ley 3/2001, de 26 de marzo, de Pesca Maritima del Estado), 26.03.2001 Royal Decree 747/2008, of May 9, amending the Regulation on the disciplinary system in the field of maritime fishing in offshore waters (Real Decreto 747/2008 de 9 de mayo, por el que se establece el Reglamento del regimen sancionador en materia de pesca maritima en aguas exteriores), 09.05.2008 Royal Decree 114/2013, of 15 February, which creates and regulates the National Register of grave breaches under the Common Fisheries Policy, the rules for applying the points system and the
provides for the penalty points system for vessel masters and license holders. Under Article 107 of the Marine Fisheries Act, however, different branches of government have jurisdiction depending on the seriousness of the offence – local government bodies in the case of minor offences, the Director General of Fisheries, in the case of serious offenses, the Secretary General of Marine Fisheries, in the case of very serious offenses if the amount of the fine does not exceed 150,000 EUR and the Minister of Agriculture, Fisheries and Food, where an offense is classified as very serious if the amount of the fine exceeds 150,000 EUR. This means that enforcement policies and administrative sanctioning decisions can vary from jurisdiction to jurisdiction and across branches of government.

amounts of the penalties, updating Law 3/2001 of 26 March, the State Maritime Fisheries (Real Decreto 114/2013, de 15 de febrero, por el que se crea y regula el registro nacional de infracciones graves a la política pesquera común, se establecen las normas de aplicación del sistema de puntos y se actualizan los importes de las sanciones previstas en la Ley 3/2001, de 26 de marzo, de Pesca Marítima del Estado), 15.02.2013.
Part D | International Practice

This section does not provide a general review of legislative practice in other countries on the general process for sanctioning bycatch offences (since such an analysis does not reveal any innovative practice), but highlights some key developments in selected countries, particularly with regard to electronic monitoring (EM) of protected species bycatch.

Australia

In Australia, electronic monitoring has been applied on a trial basis to support a number of other MCS tools in various fisheries for a number of years. The Australian Fisheries Management Authority (AFMA) considers that EM shows great potential in being able to prove fishing in closed areas from an evidentiary perspective (AFMA 2015). When boats are detected inside such areas, for example, VMS and the GPS logger within the EM unit can be corroborated to demonstrate that the boat was inside the closure. Sensors on the EM system which detect fishing activity (usually hydraulic pressure and rotation sensors) indicate that the fishing gear is being used, and the CCTV footage shows the fishing activity occurring. Compliance with reporting requirements can be checked by comparing EM and logbook data, and adherence to bycatch mitigation arrangements can also be verified using EM footage. AFMA has also observed that having EM on-board encourages fishermen to become more accurate in filling out their logbooks.

Canada

Electronic monitoring systems are already more than a decade in use in Canada complementing observer schemes and enforcement activities. The technology is well tested in practice and the technical reliability has been proven (IMCSN 2013). EM programs have successfully monitored fishing location, catch handling, bycatch, discards, enumeration, and protected–species interactions among other criteria. Recorded video and sensor data are stored on a removable hard drive that can be swapped out when the vessel is serviced so the fishing-activity data can be reviewed on shore. Traditionally, analog cameras were standard, but these did always record in a quality sufficient for evidentiary purposes in legal proceedings. Digital cameras are now increasingly used for their flexibility and high-definition output and are considered to be more reliable.

New Zealand

The Department of Conservation administers the Marine Mammals Protection Act 1978, which provides for the conservation, protection and management of marine mammals. A permit is required under the Act for anyone to 'take' a marine mammal. The definition of
'take' includes actions that harm, harass, injure and attract. The Act also provides for the establishment of marine mammal sanctuaries, within which activities known to harm particular marine mammal species can be restricted and strictly controlled by the Minister of Conservation. Additionally, with respect to fisheries interaction the Act establishes a requirement to report all events whereby a marine mammal is incidentally caught in the act of fishing.

Remote electronic monitoring has been utilised in pilot programmes to monitor protected species interactions. The pilot indicated the "tremendous potential" of REM for monitoring protected species catch occurrences, providing routine monitoring for mitigation practices (McElderry 2011) but also exposed some limitations. For example, not all fishing events could be recorded (overall image recording was complete for 83% of fishing events; usability for specific monitoring objectives varied from 0% for one objective to 73–97% for the remaining objectives). The project demonstrated the need to prioritise monitoring objectives to enable better configuration of the monitoring system, and also highlighted the value of industry involvement in project design and potentially significant cost savings of electronic monitoring over human observer programmes (McElderry 2011).
Legal Sanctions for Bycatch

The analysis of national sanctions for bycatch presents two major issues: first, the rules governing cetacean bycatch are limited, and appear insufficient; second (and related to the first), sanctions are variable across Range States, and their application may also be insufficient.

This study has been concerned primarily with the second issue (what are the sanctions) but it may be useful to make some comments on the first observation. Thus, as regards the first issue, in terms of the legal controls themselves, it may be noted that since the incidental taking of cetaceans is not itself unlawful, the legal controls rely on technical measures aimed at selective fishing practices. Most of these are not specific to cetaceans (e.g. gear regulations, closed seasons, closed areas), and the only technical regulations focused specifically on cetaceans are those in Regulation 812/2004. The frameworks provided by the Habitats Directive and the MSFD – while a useful approach – need to be translated into specific technical controls in the fisheries regulations.

This creates a situation where legal proceedings in relation to cetacean bycatch do not really occur – there are cases where proceedings have been brought under the habitats or fisheries legislation which is relevant to cetacean conservation, but none focused on cetacean bycatch. And Regulation 812/2004 does not appear to be extensively enforced, perhaps because of difficulties with the Regulation itself. Rules in Regulation 812/2004 on acoustic deterrent devices (ADD) aimed at avoiding cetacean bycatch have been considered to be formulated in some aspects too strictly (e.g. the required level of monitoring could not be achieved at all), and in other aspects too loosely to be fully effective (e.g. a large proportion of fleets does not need to deploy ADDs as mitigation measures).

As regards the second issue, it has been noted that legal proceedings are rarely if ever brought in relation specifically to cetacean bycatch.\(^{25}\) There may be various reasons for this, including difficulty in monitoring / detecting breaches of technical regulations that lead to cetacean bycatch, inadequate regulations, lack of priority and resources given to cetacean bycatch issues, among others. There is also considerable variance, however, in the sanctions that might be applied from country to country. Maximum fines for breaches of technical fisheries rules range from less than 5,000 EUR to over 100,000 EUR.\(^{26}\) Moreover, while most countries

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\(^{25}\) It is not possible to be definitive about this, as not all legal proceedings (particularly in the initial stages) are recorded and complete data is not available.

\(^{26}\) In practice, the picture is the same. In a recent European Commission consultation on fisheries control, it was observed that fines varied significantly across Member States. For example, in Sweden the average fine for fishing without a licence or other authorisation was EUR 367 while, in France, in the only reported
also provide for the confiscation of gear used in the commission of an offence, the extent to which these provisions are applied appears variable. Finally, while all countries have some administrative sanctions (e.g. licence suspension or withdrawal) only some have the possibility to apply administrative penalties, which can be more convenient in the case of technical infractions such as those in fishing operations.

**Reporting Obligations**

It appears to be almost universally accepted that the current EU monitoring framework (DCF), even when combined with the monitoring requirements under Regulation 812/2004, are inadequate in relation to cetacean bycatch. Not all fisheries are adequately covered and many issues, including design and sampling protocols, need to be modified or extended. In addition, several Member States do not fulfill their monitoring obligations under Regulation 812/2004 and reporting under that Regulation is also patchy. Improving the scope, content and reliability of bycatch reporting should therefore be considered a high priority. This would need to be taken up in the reform of the DCF, currently under consideration, through a specific regulation for monitoring and mitigating cetacean bycatches or through specific mechanisms within regional management plans for monitoring and mitigating cetacean bycatches.

There is considerable interest in using electronic monitoring (including CCTV) to support bycatch reporting. In this context, it should be noted that only a certain proportion (number of vessels) of the metiers would need to be covered by CCTV, as long as data on the total fishing effort and the spatio-temporal distribution of these metiers is known sufficiently (e.g. through electronic monitoring without CCTV) to raise the collected data. In this respect, harmonization of the fleet segments and effort measurements used for cetacean bycatch and fishing effort monitoring would greatly increase the probability that sampled bycatch rates reported by Member States could be raised to derive total bycatch estimates for the fleet segments.

**Delivery of carasses**

There are no formal (legal) requirements in place concerning delivery of carcasses for scientific research purposes. Moreover, there are some difficulties in such schemes. There may be inconsistencies with rules concerning protected species, both at the EU/national level and at the international level (for example, the Convention on International Trade in Endangered Species, which would require the provision of a scientific research permit).

Additionally, there are risks that offering incentives would risk undermining conservation controls, which prohibit the deliberate capture. Sufficient controls would therefore need to be in place to ensure that capture was not deliberate, and that incidentally caught animals capable of survival were still released into the sea.

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case, the fine was EUR 30,000. In Finland, the average fine for unauthorised fishing amounted to EUR 84 whereas the same breach attracted a fine of EUR 12,700 in Ireland.
Any approach to encouraging the delivery of carcasses for scientific research purposes should be designed within the existing framework, rather than try to derogate from it. An example of this approach would be to establish joint research institution-industry programmes – for example, as part of a regional conservation/management plan – under which vessels could be licensed (and compensated) for delivering carcasses.

Possible Developments

The overall conclusion from these assessments might be that the technical regulations on bycatch themselves, the capacity to enforce bycatch rules and the ability to monitor bycatch events (both for scientific and enforcement purposes) are all inadequate to the task of regulating bycatch. Rather, bycatch regulation “slips through the net”.

Some potential exists in current developments under the CFP towards regionalization and the prohibition of discards. Some environmental groups have argued that the discard prohibition should be widened to apply to all species that are caught unintentionally – commercial and non-commercial, including non-fish species, such as cetacean by-catch. All unwanted catches should be retained on board and landed, except for specimens of vulnerable species with a high chance of survival.

While an overall prohibition of this nature may be unnecessary, and disproportionately burdensome in many fisheries, there is a strong argument for replacing Regulation 812/2004 by regional technical measures tailored to particular fisheries. Thus, bycatch mitigation measures (and incentives for them) would be determined at the regional level, in consultation with the fishing industry. This might include a discard prohibition, but might alternatively or additionally include other technical measures. Monitoring and enforcement measures would also need to be agreed at the regional level.

This approach has been advocated in the context of the CFP landing obligation (Catchpole and Hedley, 2015) and could also be applied to cetacean bycatch. Moreover, it is consistent with the regional approach being advocated by the European Commission in its current proposals for reform of CFP technical regulations (European Commission 2016). Thus, the proposed new Regulation contains baseline standards on technical regulations but the Regulation anticipates that specific measures can be applied at the regional level. These baseline regulations apply until such times measures are put in place under regionalisation.

Within such regional plans, consideration should also be given to use of electronic monitoring, at least on certain vessels. Experience from pilot projects in Member States (related to the landing obligation) and from longer-term programmes in countries such as Canada, Australia and New Zealand suggest that electronic monitoring has various advantages – both as regards enforcement and monitoring. From a scientific perspective, selective use of electronic monitoring could significantly enhance the availability and reliability of bycatch data and estimations. At the same time, schemes allowing for the delivery of carcasses could be carefully monitored through electronic monitoring, to provide guarantees against misuse. Incentives could be offered to vessels participating in such schemes. Funds from the EMFF may be available as a funding source for such programmes.
References and Selected Reading

ASCOBANS 2015. ASCOBANS Expert Workshop on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch


ICES 2015. ICES Advice Northeast Atlantic and adjacent seas Published 15 April 2015 1.6.1.1 Bycatch of small cetaceans and other marine animals – Review of national reports under Council Regulation (EC) No. 812/2004 and other published documents


ICES, 2011. New information regarding the impact of fisheries on other components of the ecosystem, including small cetaceans and other marine mammals, seabirds, and habitats. Advice May 2011.


