

DRAFT

Recommendations of ASCOBANS on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch

These recommendations are based on those provided by the ASCOBANS Expert Workshop on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch (Bonn, Germany, 21-23 January 2015, see Annex 1), combined with the comments provided jointly by the ASCOBANS Working Groups on the North Sea Harbour Porpoise Conservation Plan, the Atlantic part of the Agreement Area, and on Bycatch (compiled on behalf of respondents by Peter Evans, see Annex 2) as well as from members of the Advisory Committee involved in the workshop.

These recommendations include three parts, which **underpin each other and should not be viewed independently**:

- 1. Reflections on the Way Forward Proposed by the Commission**
- 2. Proposed Strategy for Assessing and Managing Cetacean Bycatch in European Waters**
- 3. Specific Recommendations by Geographical Area within the Scope of ASCOBANS**
 - i. Baltic Sea**
 - ii. Western Baltic, Belt Sea and Kattegat**
 - iii. North Sea**
 - iv. North East Atlantic**

1. Reflections on the Way Forward Proposed by the Commission

The Commission favours incorporation of the monitoring requirements and mitigation measures under the Data Collection Framework (DCF) and the technical measures framework respectively, instead of having specific legislation on cetacean bycatch. The existing Regulation (EC) 812/2004 would then be repealed.

Possible advantages of this approach are that implementation of measures is more likely since cetacean bycatch monitoring would become part of a larger programme with potentially more funding opportunities. Regional management is flexible and may be more effectively dedicated to the fisheries of concern, relating to both the monitoring and mitigating of cetacean bycatch. Measures would therefore also be included in ecosystem-based management.

However, regarding monitoring, for this approach to have a chance of success for species such as cetaceans protected at the European level, the DCF requirements would need to be significantly revised in order to take full account of cetacean bycatch assessment needs in terms of target fleets and monitoring methods (e.g. the present DCF has less focus on set nets since they generate little discard, but this is the gear type posing the greatest risk to porpoises). Furthermore, a comprehensive annual report on the implementation of both the DCF and technical measures requirements, similar to the current Regulation (EC) 812/2004 annual reports, would still be necessary in order to provide an instrument facilitating synthesis and risk assessments.

The risk of an approach that uses only the DCF and the technical measures framework for cetacean bycatch monitoring and mitigation regulation is that these are frameworks historically focused on commercial fisheries and not on the conservation of protected species. Cetacean conservation needs might not receive the attention and funding required for effective assessment and appropriate management. There is therefore a risk of losing the focus on cetacean bycatch that the current regulation provides.

An alternative to the Commission's favoured way forward would be to develop a proposal for overarching legislation for the protection of cetaceans, more in line with the stated aim of the review required in Regulation (EC) 597/2014 (4). It would define conservation objectives, but would leave the detail on monitoring and mitigation requirements to be incorporated under the DCF and the technical measures respectively. In its position EP-PE_TC1-COD(2012)0216, the European Parliament stated that

In view of the requirement for Member States to take the necessary measures to establish a system of strict protection for cetaceans, in view of the shortcomings of Regulation (EC) No 812/2004 and its implementation, pointed out by the Commission in its Communication on cetacean incidental catches in fisheries¹ and by ICES in its related 2010 scientific advice, and in view of the lack of integration of Council Directive 92/43/EEC ("the Habitats Directive"), the Commission should, before the end of 2015, submit a legislative proposal for a coherent, overarching legislative framework for ensuring the effective protection of cetaceans from all threats.

Similar to the role of Regulation (EC) 812/2004, an improved new or amended regulation focusing specifically on cetacean conservation objectives, coupled with the incorporation of the monitoring requirements and mitigation measures under the DCF and the technical measures framework, would send a stronger political signal, while at the same time allowing for more effective and flexible regional management. It would also avoid the risks outlined

¹ COM(2009)0368

above of losing the necessary focus required for effective assessment and appropriate management of cetacean bycatch.

A regulation specific to cetacean conservation would be most effective in combination with incorporation of the mitigation and monitoring requirements under the DCF and the technical measures framework. In this option, the new/amended regulation would define the conservation objectives. This in turn would allow reference limits (which would depend and vary upon specific circumstances) to be set, and for general recommendations on how the obligations could be best addressed. The technical details of how to achieve these objectives would be left to the more flexible regional technical frameworks.

An overarching, specific regulation would clearly state the importance of taking into account the conservation of cetaceans, while allowing for more tuned regional management, leaving regional bodies to decide on adequately targeted monitoring and mitigation measures.

ASCOBANS Parties strongly believe that this combination of multiple instruments at different levels offers the best way of keeping a focus on cetacean conservation, while allowing a greater effectiveness by strengthening focus and flexibility in the response. It is therefore recommended as the best way forward.

2. Proposed Strategy for Assessing and Managing Cetacean Bycatch in European Waters

Member States should be required to demonstrate that their fisheries are not exceeding an agreed level of cetacean bycatch. In order to achieve this, a management framework procedure needs to be developed to define thresholds of 'Unacceptable Interactions' or 'bycatch limits' to help safeguard the favourable conservation status of European cetaceans in the long term. A management framework procedure based on robust thresholds should enable specified conservation objectives to be met by allowing the impact of cetacean bycatch within and across Member States to be more fully assessed and effectively managed.

Initial development of a management framework for small cetaceans has been undertaken as part of EU LIFE and government-funded projects. Within these projects, a Bycatch Limit Algorithm (BLA) approach was identified as a potentially suitable method to set limits on the bycatch of harbour porpoises and common dolphins in western European waters (SCANS-II 2008, CODA 2009), an approach that ICES also recommended to the European Commission in 2009.

In order to further develop the BLA approach, three key issues need to be resolved:

- 1) the need for policy-makers to define the conservation objectives for cetaceans to be used in the procedure;
- 2) the timeframe over which the procedure should be modelled to achieve the specified conservation objectives needs to be set; and
- 3) the delineation of the spatial areas to which the procedure is to be applied (i.e. appropriate management units) (ASCOBANS 2013).

Based on existing data on bycatch from observers, the main species of concern are the harbour porpoise, common dolphin, striped dolphin and bottlenose dolphin (EC-COM 2011). However, other species are also known to be bycaught; these include species within the remit of ASCOBANS (white-beaked dolphin, Atlantic white-sided dolphin and Risso's dolphin) and large cetaceans (notably minke whale and humpback whale). A time-series of bycatch estimates and population abundance estimates, with their associated uncertainties, are incorporated into the Bycatch Limit Algorithm approach. However, there are currently a number of issues with bycatch monitoring in EU waters, mainly related to the consistency and quality of data arising from national monitoring programmes which has resulted in significant data gaps due to uneven and/or insufficient sampling in many fisheries. For example, monitoring of bycatch, if carried out at all, is often undertaken using different methodologies and to variable standards by different Member States. Bycatch monitoring is also not necessarily coordinated at the scale of cetacean population/management units, which makes assessing the impact of bycatch difficult at a population level. This would be improved by better coordination and cooperation between Member States. Furthermore, many fisheries thought to have significant bycatch levels also fall outside the scope of Regulation (EC) 812/2004, although some Member States already monitor these fisheries under the requirements of the Habitats Directive.

A time series of abundance estimates is not currently available for the common dolphin or striped dolphin or for some harbour porpoise and bottlenose dolphin management units (as defined by ICES 2014). If the SCANS-III survey takes place in 2016, new abundance estimates should be available by 2017. Although it is not the lack of new abundance estimates that is holding up the implementation of the BLA, it seems at this point reasonable to wait for these new abundance estimates and to implement the BLA approach for setting bycatch limits in 2017.

Plan for implementation of a Management Framework Procedure for small cetaceans, with harbour porpoise, common dolphin, striped dolphin and bottlenose dolphin as priorities

Delivery date	Action required
2017	Parties to define conservation objectives for cetaceans and the time frame over which the procedure should be modelled to achieve the specified conservation objectives
2017	Agreement on the delineation of the spatial areas to which the procedure is to be applied (i.e. appropriate management units). This process could be supported by using the BLA approach
2017	Collation of bycatch data and production of bycatch estimates at the level of a cetacean species management unit
2017	Initial assessment/identification of “medium-to-high risk” fisheries where bycatch monitoring should be focused
2017	Bycatch limits for cetacean species to be produced as per management unit
To be determined	Annual bycatch limits for cetacean species per management unit to be split between relevant Member States using an agreed protocol within Regional Agreements.
	<p>If Member States’ annual estimates for cetacean species bycatch exceed the allocated national bycatch limits then they should be required to introduce appropriate mitigation measures² to bring bycatch below the national limit (Approach 1).</p> <p>If Member States comply with Approach 1, until the point of its full implementation, mitigation measures (adapted from those described under Regulation (EC) 812/2004) should remain in place with trammel nets included; except in those fisheries with bycatch already demonstrated to be negligible (see under the regional recommendations, for the list).</p> <p>Other fisheries could be added to this list once sufficient monitoring (with adequate statistical power) has been undertaken over an appropriate time period. Background monitoring in the framework of the DCF should be continued in all “low-risk” fisheries to provide data to assess any possible future changes in bycatch rates.</p>

² An appropriate mitigation measure is understood as a measure with a proven ability to reduce bycatch of the relevant species in the setting of a commercial fishery, i.e., the device *significantly reduces* (>80%) bycatch with a *high level of confidence* (>95%), and only if the experiment has been conducted with a *rigorous design*, as defined by the ICES Report of the Workshop on Bycatch of Cetaceans and other Protected Species (ICES 2013, page 19)

	<p>If Approach 1 is not acceptable</p> <p>or</p> <p>if limits are not set and/or an agreed way to split limits between Member States is not found within a defined time frame:</p> <p>ASCOBANS recommends a Precautionary Approach whereby appropriate mitigation measures should be applied in all set-net fisheries irrespective of gear type, as well as pelagic trawl fisheries targeting tuna, bass and hake and fisheries using very high vertical opening (VHVO) trawls, this irrespective of vessel size or geographic area; but exemptions should be made for those fisheries with demonstrated negligible (rate and/or cumulative) bycatch (see under regional recommendations for required mitigation and monitoring measures, as well as exempted fisheries) (Approach 2).</p>
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References

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3. Specific Recommendations by Geographical Area within the Scope of ASCOBANS

i. Baltic Sea (ICES areas 24-32)

1 – Summary of main concerns, based on present knowledge

- **Species:** A single one - harbour porpoise, the population of which is depleted (with currently 447 individuals in the Baltic Proper).
- **Gear types:** Only net fisheries are of concern with regard to harbour porpoises.
- **Reliability of fishing effort data:** Fishing effort data are incomplete as smaller vessels are not required to report, and there are many small boats, especially in area 24.
- **Data on bycatch rate:** Some bycatch information, but no reliable bycatch rates.
- **Mitigation in place:** The degree of compliance to using pingers in area 24 for gillnetters >12 metres is unknown, but likely to be very low.

2 – Conservation objective and strategy

From a conservation perspective, one needs to focus on the smallest population; i.e. even in the mixed area (roughly around Bornholm, where both Western Baltic and Baltic harbour porpoise populations may mix), the bycatch mortality should be close to zero.

The conservation objective in the Baltic remains bycatch as close to zero as possible.

Monitoring should continue to establish the trend in abundance. CPODs should continue to be used for national abundance monitoring for an estimate of the relative level of bycatch.

Measures have to be set regionally, in some cases nationally, and have to be fishery specific.

Gillnet effort has decreased in several countries since Regulation (EC) 812/2004 came into effect; driftnets were also banned by this regulation. Alternative gear is under development for cod fisheries. For other target species, such as herring, it is already being implemented in the northern Baltic.

a - Mitigation strategy

Pingers, alternative fishing gear and time-area closures³ should be used, as appropriate, and any mitigation measure should be independent of vessel size. Focus should be placed on high-risk areas. The prioritization should be updated/revised as more information becomes available.

Permission to fish with high risk gear in areas of high harbour porpoise density and high fishing effort should be made dependent on applying mitigation methods.

³ Time area closures will only be useful/efficient if it is demonstrated that the bycatch is higher inside the target areas than outside. Otherwise the fishing effort will simply be displaced from the target area and this will not reduce bycatch.

Incentives for using mitigation measures and alternative gear should be introduced, with financial support for implementing them. Eco-labelling should also focus on bycatch risk and mitigation.

Efficient enforcement of any regulation needs to be ensured.

b – Monitoring strategy

The objective of the monitoring should be to estimate the total bycatch from a specific population.

The focus should be on set-net fisheries, not on pelagic trawling. All vessel sizes should be monitored and the highest priority should be given to high-risk gear and high-risk areas. High-risk areas are those combining high fishing effort, high-risk gear and the presence of porpoises.

The monitoring level should be sufficient to show no negative impact.

Monitoring methods should be chosen dependent on situation, and must be proven to be effective and reliable.

c – Strategy for collecting data on fishing effort

Fishing effort data should be collected for all vessel sizes.

The parameters to be collected are net length, soak time (where these parameters are not available, days at sea should be collected at the very minimum), thickness of twine, mesh size, target species and position of net.

Fishing effort data should be used for targeting monitoring, by overlaying them with the results of the SAMBAH project and other available harbour porpoise distribution data, thus facilitating the identification of the areas with the highest bycatch risk.

Overarching Recommendation

ASCOBANS recommends that one of the targets of EU financial support aiming at the reduction of bycatch (e.g., through the European Maritime and Fisheries Fund) should be the Baltic Sea harbour porpoise population. Development and use of mitigation measures, such as alternative fishing methods that are ecologically sustainable, interactive pingers, pingers not audible to seals, alerting devices or gear-exchange schemes (switch-outs) aiming at reducing bycatch, should be the centre of particular financial efforts to guarantee the survival of harbour porpoises.

ii. Western Baltic, Belt Sea and Kattegat (ICES areas IIIaS, 22-23)

1 – Summary of main concerns, based on present knowledge

- **Species:** A single one - harbour porpoise, with no significant decrease in abundance between SCANS (1994) and Mini SCANS (2012).
- **Gear types:** Net fisheries are of concern with regard to harbour porpoise bycatch
- **Reliability of fishing effort data:** Fishing effort data are incomplete as vessels <10 metres (8 metres for Germany) do not have to report effort, although they constitute the bulk of the fleet.
- **Data on bycatch rate:** Very little monitoring is carried out and reliable estimates of bycatch rates are unavailable for most fisheries.
- **Mitigation in place:** The degree of compliance regarding the use of pingers for gillnetters >12 metres is unknown, but likely to be very low.

2 – Conservation strategy

With regard to bycatch and in the light of the present knowledge, a management framework is necessary for harbour porpoises in the Western Baltic, Belt Sea and Kattegat for ensuring a long-term favourable conservation status of the species.

Since this is a shared population, its conservation needs should be addressed at a regional level. Both monitoring and mitigation measures should be developed regionally with cooperation between the countries concerned, as appropriate.

Gillnet effort has decreased in several countries since Regulation (EC) 812/2004 came into effect; whilst driftnets were also banned by this regulation. Alternative gear is under development for cod fisheries.

a - Mitigation strategy

The same rules on mitigation should apply for recreational and commercial fisheries, especially in Special Areas of Conservation for which harbour porpoises form part of the selection criteria (hpSACs), where they should be included in the management plans.

The areas of most concern should be identified by means of bycatch risk analyses. Here mitigation measures such as pingers or alternative gear should be implemented as a priority.

In areas where the risk of bycatch is significant, appropriate mitigation measures⁴ should be put in place regardless of vessel size.

The efficient enforcement of any regulations should be ensured.

There should be incentives for using mitigation measures and ecologically sustainable alternative gear, as well as financial support for implementing these in the fisheries concerned. Eco-labelling schemes should be based on bycatch risk and mitigation.

⁴ An appropriate mitigation measure is understood as a measure with a proven ability to reduce bycatch of the relevant species in the setting of a commercial fishery, i.e., the device *significantly reduces* (>80%) bycatch with a *high level of confidence* (>95%), and only if the experiment has been conducted with a *rigorous design*, as defined by the ICES Report of the Workshop on Bycatch of Cetaceans and other Protected Species (ICES 2013, page 19)

b - Monitoring strategy

Reporting any cetacean bycatch should become mandatory in all fisheries, including recreational fisheries.

National programmes under the DCF, established to gather data from recreational fisheries, should also include data on porpoise bycatch.

Scientifically recognized, effective, monitoring methods should be chosen dependent on the situation (fleet size, fishing effort, bycatch rate etc.) with regional coordination as appropriate.

Monitoring efforts should focus on set-net fisheries, especially those known to have bycatch and those suspected to be a problem. Monitoring schemes should be adapted in the light of the results obtained and new developments in the fisheries.

The effectiveness of mitigation measures should also be monitored.

c – Strategy for collecting data on fishing effort

Fishing effort should be collected for all vessel sizes.

The parameters to be collected are net length, soak time (where these parameters are not available, days at sea should be collected at the very minimum), thickness of twine, mesh size, target species and position of net.

iii. North Sea and iv. North East Atlantic

1 – Summary of main concerns, based on present knowledge

1.1 North Sea (ICES areas IIIaN, IVabc, VIId)

- **Species:** A single one within the remit of ASCOBANS - harbour porpoise (two large cetaceans, minke whale and humpback whale are sometimes also bycaught in this region but as a result of entanglement in creel lines or ghost netting).
- **Gear types:** Only set-net fisheries are of concern with regard to harbour porpoise bycatch, in particular trammel nets (GTR) and set gillnets (GNS). As an example, in France, trammel nets targeting sole and monkfish account for 80% of reported bycatch.
Bycatch from coastal fisheries is more complicated to mitigate effectively, because these fisheries involve more boats, often using a wide variety of gear within one season.
- **Reliability of fishing effort data:** Fishing effort data are incomplete as vessels <10 metres do not have to report to the European Commission, even though they constitute over 70% of the fleet in most North Sea countries (the exceptions being the Netherlands and Belgium).
- **Data on bycatch rate:** There are no reliable estimates of current bycatch rates for any net fisheries.
- **Mitigation in place:** The degree of compliance regarding the use of pingers for gillnetters >12 metres is unknown and the long-term mitigating effect of the pingers has not been investigated.

1.2 North East Atlantic (ICES areas VI, VII excl. d, VIII, IX)

- **Species:** Four species - harbour porpoise, common dolphin, striped dolphin and bottlenose dolphin
Two 'populations' are singled out because of their specificity, which renders them more vulnerable. The Iberian (area VIIIc + IXa) harbour porpoise population is small and isolated. The distribution of bottlenose dolphins in waters of the continental shelf encompasses small resident groups that are isolated or genetically distinct, and coastal groups showing strong site fidelity.⁵
Five other species are known to be bycaught, with incidents likely to be underreported at present: three within the scope of ASCOBANS - white-beaked dolphin, Atlantic white-sided dolphin and Risso's dolphin; and two large cetaceans - minke whale and humpback whale.
- **Gear types:** Net fisheries, pelagic trawl fisheries targeting tuna, bass and hake and fisheries using very high vertical opening (VHVO) trawls are of concern in the North East Atlantic. For example in France, trammel nets (GTR) targeting sole and monkfish account for 80% of the bycatch.
Bycatch from coastal fisheries are is complicated to mitigate effectively, because these fisheries involve more boats, often using a wide variety of gear within one season.

⁵ ICES WGMME 2013

- **Reliability of fishing effort data:** Fishing effort data are incomplete as vessels <10 metres do not report in most countries, although they constitute over 70% of the fleet.
- **Data on bycatch rate:** Reliable estimates of bycatch rates are unavailable for most fisheries, apart from the pelagic trawl and set-net fisheries covered by Regulation (EC) 812/2004.
- **Mitigation in place:** The degree of compliance regarding the use of pingers for gillnetters >12 metres is unknown and the long-term mitigating effect of the pingers has not been extensively investigated.

2 – Conservation strategy

With regard to bycatch and in the light of present knowledge, development of a management framework is a priority for harbour porpoises in the North Sea, and for harbour porpoises and common, striped and bottlenose dolphins in the North East Atlantic, for ensuring a favourable conservation status of these four species in the long term.

ASCOBANS advises that the best way forward is to develop a management framework, with Member States being required to show that they contribute to the commonly defined conservation objectives for cetaceans, and that their fisheries do not exceed agreed bycatch limits (see part 2 of the recommendations above).

This implies that - 1) common conservation objectives have been agreed by EU Member States, - 2) robust thresholds for unacceptable interactions/limits to bycatch have been determined for the four species and for the different management units (see under point 5.2 for details on procedures), and - 3) the relevant Member States have agreed on a protocol within the relevant Regional Agreements on how these bycatch limits would be allocated and reviewed.

Member States will then have to conduct bycatch monitoring that is reliable enough (reliability criteria being set at an EU level) to show whether the fisheries exceed the determined bycatch limits. If they do, then Member States will be required to introduce mitigation measures to bring bycatch below their allocated limit. The choice of mitigation measure will be left to the Member States. If they are below but close to the threshold, supplementary monitoring will be required to continue assessing the risk. If they are well below, no mitigation measures will be required. In fisheries with a low level of bycatch or where mitigation measures have been implemented and their efficiency demonstrated, a background level of monitoring should be carried out for assessing trends.

ASCOBANS advises taking the Precautionary Approach if within a defined time-frame, Member States cannot agree upon setting bycatch limits and/or a way for allocating the limits between them. The Precautionary Approach would entail implementing mandatory mitigation measures and monitoring obligations based on, but modified from, Regulation (EC) 812/2004 and would require that a robust enforcement strategy with penalties should be introduced.

The implementation of mitigation measures is being deferred by three years to give Member States the possibility of demonstrating a zero/negligible bycatch in some fleet segments, which will then be exempted from mandatory mitigation measures.

Mitigation measures and monitoring requirements, as modified from Regulation 812/2004, are listed below.

a - Mitigation strategy:

- All set nets are candidates for mitigation, including trammel nets (GTR) and driftnets (GND)
- It applies to all vessels, i.e. also vessels <12 metres in length
- The same definitions of net fisheries as in Regulation (EC) 812/2004 apply
- Considering the present state of knowledge, acoustic deterrent devices (ADDs) should be used as a mitigation measure, although (long- and short-term) fishery closures are an alternative approach, especially in MPAs. If a fishery closure is used, it should be applied to all vessel sizes and should also cover trammel nets and driftnets
- For an ADD to be approved, it should have a proven ability to reduce bycatch of the relevant species in the setting of a commercial fishery, i.e., the device *significantly reduces* (>80%) bycatch with a *high level of confidence* (>95%), and only if the experiment has been conducted with a *rigorous design*⁶
- Introduce in all areas and for all vessel lengths, mandatory mitigation measures for:
 - i) Mid water pair trawls (PTM), targeting hake, bass and tuna (but not those targeting anchovy)
 - ii) VHVO targeting hake
- Based on present knowledge, a derogation from mitigation measures is given to fleet segments with negligible cetacean bycatch, as listed below:
 - i) North Sea: all gear in the western part of area VIIId (west of 1°E), all deep water net fisheries (i.e. fishing deeper than 200m), all trawls (pelagic, bottom and VHVO), all set nets with mesh < 90mm.
 - ii) North East Atlantic: all gear in the eastern part of area VIle (east of 4°W), all deep water net fisheries (i.e. fishing deeper than 200m), all set nets with mesh < 90mm, wreck fisheries in area VII (short net fleet / target species: pollock, ling), French spider crab fishery in area VIle
- Other fleet segments can be exempted, when/if a zero/negligible bycatch rate has been demonstrated by a reliable comprehensive test-monitoring programme to be complying to the following standards
 - i) Dedicated monitoring, using either dedicated observers or remote electronic monitoring
 - ii) Conducted over an appropriate time period, with at least two successive years/seasons for accounting for variability
 - iii) The level of coverage is high enough to produce a robust assessment (as determined by statisticians)
 - iv) For the exempted fisheries, new test-monitoring will be conducted every five years
- Mitigation measures should be strictly enforced
- Incentives should be introduced for implementing mitigation measures

⁶ as defined by the ICES Report of the Workshop on Bycatch of Cetaceans and other Protected Species (ICES 2013, page 19)

- Resources should be made available for investigating alternative mitigation methods and developing new fishing gear and methods.

b - Monitoring strategy:

- Fisheries for which no bycatch data/rates exist should be identified
- In net fisheries, the monitoring of potentially high-risk fisheries (high bycatch rate or/and high fishery effort) should be prioritised
- Bycatch monitoring is required for specific mid-water trawl fisheries and all VHVO-trawl fisheries. Background bycatch monitoring in the other trawl fisheries could be conducted under DCF
- Coastal and inshore fisheries should be prioritised
- The fleet segments exempt from mitigation measures should continue being monitored through the DCF or other existing programmes, as part of background monitoring
- If the bycatch rate appears to be increasing in these fisheries, a two-year test monitoring programme will again be required
- Incentives should be introduced for accepting dedicated observers and/or remote electronic monitoring (REM)
- The obligation of taking observers/REM on board should be inscribed in the fishing licence
- The level of monitoring should be sufficiently high to produce a robust assessment of protected species bycatch (as determined by statisticians)

c – Strategy for collecting data on fishing effort:

- Improved and standardised effort data are needed for all fisheries
- Effort data for vessels <10 metres, and for driftnets operating in coastal areas, should be collected and provided
- In polyvalent fisheries, in the absence of detailed effort data, gear usage could be inferred from the data provided by observers, as they can register the changes in gear
- Vessels >10 metres should report complete information on effort as defined under point 6.2 (position, length, height and soak time of the net used, target species, mesh size and precise gear type), while the level of detail asked of smaller vessels could be lower, aligned with the information reported by smaller vessels in Sweden⁷
- The collection of adequate effort data should be prioritised in the areas where the cetacean species of concern are present, and where a potential risk exists

⁷ In Sweden, smaller vessels report/summarise per month for every gear type and mesh size they use: position, effort* soak time (e.g. fishing 5 days with 100 metres of net will be reported as 500 metres), fish species and quantity. The position reported is the average position for each separate fishing effort for the whole month.