

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

The following recommendations are based on recommendations 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), consolidated 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. Outcomes of the *ASCOBANS Workshop on Further Development of Management Procedures for Defining the Threshold of 'Unacceptable Interactions' – Part I: Developing a Shared Understanding on the Use of Thresholds / Environmental Limits* (London, United Kingdom, 10 July 2015) have also been taken into account, with further refinements to the text made by the 22nd Advisory Committee Meeting (The Hague, Netherlands, 29 September - 1 October 2015). The recommendations reflect the status of discussions within ASCOBANS to date.

This document is submitted to the European Commission now in order to provide input to the review process required in Regulation (EC) 597/2014 (4). Discussions within ASCOBANS will continue up to and during the Meeting of Parties (MOP8) in 2016.

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**, underlining the need for an overarching legislation for the protection of cetaceans
2. **Proposed Strategy for Assessing and Managing Cetacean Bycatch in European Waters**, calling for a management framework defining the threshold of 'Unacceptable interactions' or 'bycatch limits' to help safeguard the favourable conservation status of European cetaceans in the long term, and drive toward the ASCOBANS overall aim of zero bycatch.
3. **ASCOBANS considerations on the need for a risk-based regional approach to the revision of Regulation 812/2004**, for example taking into account regional differences in species composition, types of fisheries present and the density and spatial distribution of cetaceans.

1. Reflections on the Way Forward Proposed by the Commission

The Commission favours incorporation of the monitoring requirements and mitigation measures under the new 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 mitigation of cetacean bycatch. Measures would therefore also be included within 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 of juvenile fish, 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 new 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, thus risking effective delivery of wider environmental protection aspects of the revised Common Fisheries Policy. 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 new 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 new 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 Member States coordinated in regional bodies to decide on adequately targeted monitoring and mitigation measures.

In addition, ASCOBANS Parties strongly believe that a coordinated reporting system within the new DCF (that caters for bycatch of non-target species such as marine mammals, seabirds, sea turtles and sharks) would be preferable. Most importantly, bearing in mind the need for consideration of regional differences, the recording system should be standardized for all countries so that the data and effort can be compared between countries.

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 environmental limit (as defined below) for cetacean bycatch and to demonstrate progressive reductions in bycatch in line with the strict protection measures required under the Habitats Directive and elsewhere. In order to achieve this, a management framework procedure needs to be developed to define thresholds of 'Unacceptable Interactions' or 'bycatch limits'. This will help safeguard the favourable conservation status of European cetaceans in the long term and drive progress toward meeting the ASCOBANS overall aim of zero bycatch (ASCOBANS Resolution 3.3 (2000)). A management framework procedure based on robust environmental limits/triggers 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. This requires information on cetacean population structure (to identify management units) and population size. Furthermore, it is important not only to be focused on setting a bycatch limit/trigger but also to focus on development of management actions/measures such as gear adjustments etc. in order to eliminate bycatch in areas where there is a problem. Actions should be focused in fisheries/areas where there is a bycatch problem and not automatically be applicable to all fisheries/areas, i.e. adopting a risk-based approach.

The management framework procedure would set both environmental limits and triggers based on bycatch and other anthropogenic removals. An environmental limit indicates a 'critical' or 'unacceptable' point in the environment that should not be exceeded. Above this limit, defined conservation objectives would not be achieved. In the case of ASCOBANS, its intermediate conservation objective is to *'to restore and/or maintain stocks/populations to 80% or more of their carrying capacity'*, and thus limits could be set to achieve this objective. As noted in ASCOBANS Resolution 3.3 (2000), its ultimate aim is to reduce bycatch to zero. Triggers are lower than bycatch limits and used to signal the need for certain kinds of management action, as well as acting as an indicator of direction of travel. For example, triggers could be established to indicate that a 'limit' was at risk of being reached or exceeded (as in fisheries) and thus result in corrective measures being taken to ensure the limit was never exceeded. Conversely, a trigger could be used to indicate the point at which bycatch dropped to a level of lesser concern thus allowing managers to re-direct some resources to areas where bycatch was of greater concern.

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 Potential Biological Removal rate (PBR) or similar algorithm, i.e. Catch Limit Algorithm (CLA)) 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, JNCC 2013), an approach that ICES also recommended to the European Commission in 2009.

In order to further develop the PBR (or similar algorithm, e.g. CLA 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 time frame 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 Catch 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 due to the focus only on vessel size and region, and not gear type/risk. However, some Member States do monitor these fisheries under the requirements of the Habitats Directive in order to collect relevant data at the relevant scale needed to make adequate bycatch estimates.

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 PBR (or similar algorithm, e.g. CLA), it seems at this point reasonable to wait for these new abundance estimates and to implement the PBR (or similar algorithm, e.g. CLA) approach for setting bycatch limits in 2017, bearing in mind that SCANS-III will not survey the Baltic but the SAMBAH Project (to determine porpoise abundance and distribution) is near completion and therefore can be acted upon sooner.

Proposed plan for implementation of a Management Framework Procedure for small cetaceans, with harbour porpoise, common dolphin, striped dolphin and bottlenose dolphin as priorities (aspiration to complete by 2017 in line with planned surveys, i.e. SCANS-III):

Actions required
1. Parties to define conservation objectives for cetaceans and the time frame over which the procedure should be modelled to achieve the specified conservation objectives.
2. 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 PBR (or a similar algorithm, e.g. CLA) approach.
3. Collation of bycatch data and production of bycatch estimates at the level of a cetacean species management unit.
4. Initial assessment/identification of “medium-to-high risk” fisheries where bycatch monitoring should be focused.

5. Environmental limits/triggers for cetacean species to be produced as per management unit and shared between relevant Member States using a protocol agreed by Member States within Regional Agreements.

Environmental limits are understood to indicate a 'critical' or 'unacceptable' point in the environment that should not be exceeded. Trigger points are understood to signal the need for certain kinds of management action and to indicate a direction of travel.

If Member States' annual estimates for cetacean species bycatch exceed the allocated national environmental limits/triggers then they should be required to introduce appropriate mitigation measures to bring bycatch below the national environmental limits/triggers (**Approach 1**).

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.

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 encouraged in all "low-risk" fisheries to provide data to assess any possible future changes in bycatch rates.

If new/updated environmental limits/triggers are not set and/or an agreed way to implement shared environmental limits/triggers between Member States is not found within a defined time frame, the 1.7% anthropogenic removal rate² should be maintained.

ASCOBANS further recommends a Precautionary Approach be adopted whereby appropriate mitigation measures are 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) bottom trawls, irrespective of vessel size or geographic area; but exemptions should be made for those fisheries with demonstrated negligible (rate and/or cumulative) bycatch bearing in mind regional differences (**Approach 2**).

² As defined by MOP 3: Resolution No. 3 on Incidental Take of Small Cetaceans (Bristol, UK, 26-28 July 2000). However, it was noted that this assumed no uncertainty in the estimates, was calculated specifically for the harbour porpoise, and underlined the intermediate precautionary objective to reduce bycatch to less than 1% of the best available population estimate.

3. ASCOBANS Comments on the Need for a Risk-based Regional Approach to the Revision of Regulation 812/2004

The following issues have been identified by ASCOBANS as requiring further consideration in light of the review of Regulation 812/2004.

Regional Perspective

Different regions present different risks to cetaceans depending upon the fishing practice (gear type, gear immersion time, target species) and sometimes vessel size, as well as upon which cetacean species occur and their conservation status. As an example, the Baltic Sea has only one species of cetacean inhabiting its waters but that species, the harbour porpoise, forms a genetically separate population that is considered critically endangered, whereas the North East Atlantic contains many species (e.g. common dolphin and striped dolphin) at varying conservation status.

ASCOBANS has therefore developed advice on the basis of four regions: 1) Baltic Sea; 2) Western Baltic, Belt Sea, and Kattegat; 3) North Sea; and 4) North East Atlantic.

Mitigation of Bycatch

Effective, regionally appropriate, mitigation should be required by Member States where bycatch issues/risks are identified (e.g. within the technical conservation regulations). This may include pingers, alternative fishing gear and time-area closures³, as appropriate. Where a bycatch concern has been identified, appropriate mitigation should be implemented as a priority.

Assessment and Monitoring of Bycatch

In order to mitigate against bycatch, one must first identify the risk, and that cannot be done without appropriate monitoring. This should be an EU requirement for Member States if the data collection is to be effective. It should comprise dedicated observer monitoring programmes in medium-to-high risk fisheries, and, ideally, baseline surveillance in those fisheries that existing data suggest pose a low risk of bycatch (in case conditions change). Bycatch estimates are currently inaccurate not only due to insufficient sampling effort (i.e. observer coverage, vessel size, gear type), but also the difficulty of extrapolation to fleet level based solely on days at sea. In order to improve bycatch estimation, there should be more comprehensive sampling effort (by dedicated observer programmes, remote electronic monitoring or some other means, covering the appropriate types of fishing gear and vessel sizes), and the following parameters should be included in the new Data Collection Framework (DCF):

- Fishing gear/activity at the appropriate level
- Target species
- Immersion duration of gear (soak time for set nets)
- Net dimensions (total length of set nets, aperture of trawl for those fisheries known to cause bycatch)

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.

- Days at sea with location (at an appropriate spatial resolution for the region/fishery)
- Mitigation devices (presence/absence, type, setting interval)
- Cetacean species bycaught (number and distance from the nearest mitigation device where applied)

Several of these parameters can be derived automatically if electronic monitoring is used, making the recording of effort less burdensome and more accurate, bearing in mind that a dedicated observer monitoring programme is required in those fisheries that pose a medium-to-high risk of protected species bycatch.

A risk-based approach to monitoring (and mitigation) should be encouraged to ensure the best use of available resources.

References

- CODA. 2009. Cetacean Offshore Distribution and Abundance in the European Atlantic (CO-DA). 43pp without appendices; 164pp. with appendices.
- EC-COM. 2011. Communication from the Commission to the European Parliament and the Council on the implementation of certain provisions of Council Regulation (EC) No 812/2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98. Brussels, 21.9.2011 COM(2011) 578 final. 10pp.
- ICES. 2013. Report of the Workshop on Bycatch of Cetaceans and other Protected Species (WKBYC), ICES CM 2013/ACOM:36. 55pp.
- ICES. 2014. OSPAR requests on implementation of MSFD for marine mammals. 1.6.6.1 Special request, May 2014. ICES Advice 2014, Book 1, 19pp.
- JNCC. 2013. Societal decisions required for the determination of safe bycatch limits for harbour porpoise, common dolphin and bottlenose dolphin. ASCOBANS AC20/Doc.3.1.2 (P).
- SCANS-II. 2008. Small cetaceans in the European Atlantic and North Sea (SCANS II). Final report to the European Commission under contract LIFE04NAT/GB/000245.

Bibliography

- ASCOBANS. 2015a. Report of the ASCOBANS Expert Workshop on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch.
AC22_Inf_4.1.a_Report_ExpertWorkshop_EUBycatchLegislation.pdf
- ASCOBANS. 2015b. Working Group Comments on the Report of the ASCOBANS Expert Workshop on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch.
AC22_Inf_4.1.b_WGComments_EUBycatchLegislation.pdf
- ASCOBANS. 2015c. Report of the Workshop on Further Development of Management Procedures for Defining the Threshold of 'Unacceptable Interactions' – Part I: Developing a Shared Understanding on the Use of Thresholds / Environmental Limits.
AC22_Inf_4.1.c_WS_UnacceptableInteractions_I_2015_Report.pdf
- EC-COM. 2009. Cetacean incidental catches in Fisheries: Report on the implementation of certain provisions of Council Regulation (EC) No 812/2004 and on a scientific assessment of the effects of using in particular gillnets, trammel nets and entangling nets on cetaceans in the Baltic Sea as requested through Council Regulation (EC) No 2187/2005. COM (2009) 368 final.
- ICES. 2010. EC request on cetacean bycatch regulation 812/2004, item 1. ICES Advice 2010 Book1, section 1.5.1.3, Special Request Advice, May 2010.
- ICES; 2010. Report of the workshop to evaluate aspects of EC regulation 812/2004 (WKREV812), 28-29 Sept 2010, Copenhagen, Denmark, 67pp.
- ICES. 2013. Request from EU concerning monitoring of bycatch of cetaceans and other protected species. Special Request Advice, April 2013, version 2, 17/12/2013. ICES Advice 2013, Book 1, section 1.5.1.1
- ICES. 2013. Request from EU concerning monitoring of bycatch of cetaceans and other protected species. ICES Advice section 1.5.1.1, April 2013.
- ICES. 2015. Bycatch of small cetaceans and other marine animals – review of national reports under council regulation (EC) n°812/2004 and other published documents. ICES Advice 2015, section 1.6.1.1, p1-4.
- ICES WGBYC. 2015. Report of the Working Group on Bycatch of Protected Species (WGBYC 2015). ICES CM 2015/ACOM: 26.
- ICES WGMME. 2015. Report of the Report of the Working Group on Marine Mammal Ecology (WGMME). ICES CM 2015/ACOM: 25.

STECF. 2010. Scientific, Technical and Economic Committee for Fisheries STECF - 35th plenary meeting report of the (PLEN-10-03) Section 5.5.

STECF. 2015. Plenary meeting 6-10 July 2015, Varese, section 6.9. Review of regulation (EC) 812/2004 on incidental catches of cetaceans in fisheries, pp.115-119.