

## Report

### ASCOBANS Workshop on the 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

## 1. Introduction and Background

### *Welcoming Remarks*

- 1.1. The Chair, Nigel Gooding (United Kingdom) welcomed participants to the workshop on behalf of the UK Department for the Environment, Food, and Rural Affairs (Defra), noting a good mix of managers, policy advisers, scientists and NGOs. He stressed the importance for managers of clearly understanding the impacts of human activities on the marine environment and how the establishment of environmental limits based on agreed conservation objectives could provide clear reference levels on which management decisions could be based.
- 1.2. The Chair recognized that the development of environmental limits was a sensitive issue and that the workshop represented an important opportunity to come together for constructive dialogue to help move the debate forward. He then stressed that the UK Government remained fully supportive of the ASCOBANS aim of zero bycatch and continued to seek out ways of bringing bycatch levels down to their lowest possible levels. He stressed that the UK Government considered that environmental limits should be used as indicators to help target specific and appropriate conservation action when and where it was needed.

### *Aims of the Workshop*

- 1.3. The Agenda (Annex 2) and Terms of Reference (Annex 3) set out the aims of the Workshop. These could be briefly summarized as:
  - Providing a platform for an exchange of views and information between scientists, policy makers, managers, and other interested parties on work to define 'unacceptable interactions' and the development of thresholds/environmental limits for bycatch;
  - Aiding the development of a common understanding by ASCOBANS Parties on how thresholds/environmental limits might best be described/defined; and
  - Informing consideration of if, where and when thresholds/environmental limits might be used, flagging up key issues, concerns, and implications for meeting ASCOBANS conservation objectives, including uncertainty and data limitations.
- 1.4. In order to achieve this, the workshop sought to draw conclusions on two main questions:
  - In meeting its objectives, would it be helpful for ASCOBANS to establish limits/thresholds for bycatch and why?
  - If ASCOBANS adopted limits/thresholds for bycatch, how should they be applied in the framework of delivering on ASCOBANS objectives?

## 2. Presentations

- 2.1 To facilitate discussion, contextual presentations were provided by Heidrun Frisch (ASCOBANS Secretariat), Mark Tasker (JNCC), Anja Gadgard Boye (Danish AgriFish

- Agency), and Mark Simmonds (HSI). Copies of the available slides can be found at <http://www.ascobans.org/en/meeting/WS-Unacceptable-Interactions-Part-I>.
- 2.2 Heidrun Frisch provided policy context by drawing the workshop's attention to the key relevant and extant Resolutions (Res.3.3 (2000), Res5.5 (2006)). She highlighted that the intermediate conservation objective under ASCOBANS remained '*to restore and/or maintain stocks/populations to 80% or more of their carrying capacity*', and the ultimate aim was to reach zero bycatch, as repeated in several resolutions and carried through to the three harbour porpoise action plans (Jastarnia, Baltic, and North Sea). She stressed that the figure of 1.7% was for harbour porpoises only and reflected total anthropogenic removals and that the Meeting of the Parties in 2000 (MOP3) had concluded that an anthropogenic removal rate of more than 1.7% of the population had to be considered unacceptable. It was also noted that in a CMS context, discussions had progressed beyond absolute numbers and now needed to encompass 'cultural' considerations i.e. the consequences of removing individuals on social structure.
- 2.3 Mark Tasker provided an overview of how environmental limits were already being used beyond ASCOBANS, in particular under the IUCN Red List, Marine Strategy Framework Directive (MSFD), Regulation 812/2004 on bycatch, the International Whaling Commission (IWC), the US Marine Mammal Protection Act (MMPA), the process used to set total allowable catches for the Canadian seal hunt, and in advice from ICES. He noted that establishing environmental limits could be valuable in allowing for progress towards addressing a problem to be tracked and could also provide an important indication of whether measures are effective. He suggested that whilst determining an actual 'number' was done by scientists what that number represented had to be a societal decision.
- 2.4 Anja Gadgard Boye provided an overview of the ways in which environmental limits were used within Denmark, explaining that one of their key areas of work at the moment was implementing monitoring to show whether there was a bycatch problem. Environmental limits were noted as being important steps towards achieving zero bycatch, meaning they had to be understandable and achievable within a realistic time frame to help managers implement appropriate bycatch mitigation measures. The need for improved population estimates, better bycatch data, and a consideration of whether marine protected areas were the best approach to protecting highly mobile species was also highlighted. It was noted that any revision of the 1.7% figure for harbour porpoise should be based on scientific evidence.
- 2.5 Mark Simmonds concluded the presentations by providing an overview of some of the main concerns that needed to be addressed. Language was flagged as a crucial factor and that getting this right was important. He suggested that the key question faced was not which model should be used i.e. Catch Limit Algorithm (CLA), Potential Biological Removal (PBR), but rather if this approach was appropriate more generally. Issues that needed to be considered further included:
- Would a "MMPA/PBR/thresholds"-type approach work in the EU;
  - What were the likely costs of a risk-assessment-type approach; and
  - Could we account for lack of data (e.g. population structure, abundance & distribution trends, life history changes, etc.), the impacts of other human sectors and cumulative impacts.
- 2.6 In addition he highlighted a number of related ethical, practical, political, and legal questions, including:
- Would this constitute acceptance of a sustainable removal rate in the EU for cetaceans and does this have implications for other protected marine wildlife;

- Does a risk-assessment-type approach raise ethical issues (noting the severe welfare implications for cetaceans of a death in nets);
- Did we have the scientific infrastructure and funds to support a risk-assessment-type approach with all its necessary elements;
  - Could the money be better spent on other more practical conservation actions;
  - Was the approach focused on the correct 'unit to conserve';
  - Would resources be available for adequate enforcement of mitigation actions;
  - How were chronic and cumulative impacts taken into account;
  - Would this approach meet national, EU, and international obligations and commitments;
- 2.7 An overview of the US model was provided (Marine Mammal Protection Act (MMPA)) where a legally underpinned approach using PBR with a number of layers of mandated oversight had been adopted. It was noted that, whilst there had been little independent review of the MMPA, it was reported as largely effective as a framework, but with problems relating to effective implementation.

### 3. Workshop Conclusions

*Thresholds? Environmental limits? Triggers? What do they mean for ASCOBANS?*

- 3.1 The issue of how to refer to environmental limits was discussed at some length. It was agreed not to use the term 'threshold' but there was no clear agreement as to whether 'trigger' or 'environmental limit' was more appropriate. This appeared to be largely dependent on context, driven primarily by how the 'bycatch figure' being proposed was intended to be used. However, it was recognized that both 'trigger' and 'limit' were terms clearly understood in fisheries and care was needed to ensure language aligned as closely as was appropriate to avoid creating unnecessary confusion.
- 3.2 It was **broadly agreed** that the term 'environmental limit' could be used to indicate a 'critical' or 'unacceptable' point in the environment that should not be exceeded. There was an expectation that if a 'bycatch limit' were to be exceeded, it would result in the introduction of more immediate and stronger measures such as spatial and temporal avoidance.
- 3.3 'Triggers' were considered as potentially sitting below environmental 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.
- 3.4 Some attendees felt that the term 'limit' brought with it unhelpful connotations that anything below it could be accepted. It was suggested that only using 'triggers' accompanied by a clear explanation of the action that would be necessary when different 'triggers' were reached would be more understandable to a wider audience.
- 3.5 Despite no clear agreement on the most appropriate language to use, it was concluded that environmental limits/triggers should ultimately be considered as tools to help identify and/or prioritize where urgent/critical management action was needed. The workshop further **recommended** that in order for environmental limits/triggers to be effective an explanatory framework should accompany them, providing clear guidance

on how they should be used to identify issues and target measures, including what action was necessary even when environmental limits/triggers had not been reached. Ultimately it was agreed that clarity was necessary to ensure the establishment of environmental limits/triggers resulted in positive action and continued to stimulate current efforts by Member States to reduce bycatch to its lowest possible levels, and ultimately zero.

### Key Conclusions and Recommendations

- 1) The term 'environmental limit' would best be used to indicate a 'critical' or 'unacceptable' point in the environment that should not be exceeded.
- 2) The term 'trigger' would best be used to signal the need for different types of management action that may need to be taken before an 'environmental limit' is reached i.e. 'triggering' urgent action when approaching an 'environmental limit', or 'triggering' the re-allocation of some resources to more urgent areas once bycatch drops below a certain point.
- 3) Guidance should be developed to accompany any environmental limit/trigger to ensure clarity on its interpretation and application i.e. what measures would it 'trigger'.

*Given ASCOBANS is a conservation Treaty, is it appropriate/helpful to establish environmental limits/triggers and, if so, do we still need the overarching aim of zero bycatch?*

- 3.6 Aside from being enshrined within ASCOBANS, the workshop **recommended** that the aim of zero bycatch should remain in place. Whilst there was recognition that it was aspirational in its nature, it was **agreed** that it provided important political pressure to maintain a downward trajectory in levels of bycatch. It was also recognized that, whilst having an overarching aim of zero bycatch was important, managers needed realistic intermediate 'targets' or 'stepping stones' (i.e. environmental limits/triggers) in order to ensure they could continue to drive positive action.
- 3.7 It was highlighted that precautionary/interim objectives such as the ASCOBANS annual removal rate of 1.7% were required given the principle had been agreed by the Parties and set out in Resolutions. Some noted that, in essence, these were environmental limits/triggers by another name so they could be considered as being required by the ASCOBANS Agreement. However, even without this interpretation the workshop **agreed** that it was generally appropriate and helpful to establish environmental limits/triggers in the context of driving action towards meeting the ASCOBANS aim of reducing bycatch to zero. It was also stressed that defining how they were to be used is of paramount importance and so the workshop re-emphasised the point made under paragraph 3.5 that it would be necessary to clearly define what action was expected once any proposed environmental limit/trigger was reached.
- 3.8 The workshop **agreed** that environmental limits/triggers comprised an important component of wider management approaches and represented a straightforward way to provide managers with clear advice. It was also noted that they did not need to be regularly renegotiated which provided important continuity and helped managers efficiently allocate resources. However, caution was expressed that their value and use were particularly dependent on the manager's situation, the geographic area, and the species in question. It was also noted that they required clear and detailed Conservation Objectives to be developed with sufficient input from stakeholders to ensure societal views were fairly reflected.
- 3.9 The workshop noted that it would take time to develop appropriate and robust environmental limits/triggers as a 'one-size fits all' approach might not be appropriate

for all species. Whilst it would be desirable to use 'proxies', in reality an environmental limit/trigger for one species/population might not be directly applicable to another which brought with it certain resource and time burdens. With this in mind, the workshop **agreed** on the importance of the development process for environment limits/triggers not hindering the implementation of effective measures to reduce bycatch in the interim.

- 3.10 Consideration was also given to how other groups within and outside of the Convention on Migratory Species (CMS) dealt with similar issues. It was noted that, within CMS, discussions on how to define 'removal limits' had been largely confined to species that were exploited and had not been an approach considered for any strictly protected species. However, it was noted that the Agreement on the International Dolphin Conservation Programme (AIDCP), under the auspices of the Inter-American Tropical Tuna Commission (IATTC), had a legally binding objective to reduce bycatch gradually to levels approaching zero through the setting of annual bycatch limits.
- 3.11 A different example was provided by the approach taken under the Agreement on the Conservation of Albatrosses and Petrels (ACAP). Environmental limits/triggers were not used within the Agreement but rather the focus was on identifying and then tackling the top priorities/issues. The agreement did not express a desire to achieve zero bycatch (although it was considered implicit) and it was believed that this had helped engage managers by providing realistic goals, subsequently stimulating effective mitigation and resulting in significant reductions in seabird bycatch levels. The workshop agreed there might be merit in giving further consideration to the ACAP model and **recommended** this be taken into account by the second workshop.

#### Key Conclusions and Recommendations

- 4) The ASCOBANS aim of achieving zero bycatch is important in ensuring pressure is kept up to maintain a downward trajectory in bycatch levels and should therefore remain in place.
- 5) Environmental limits/triggers are valuable in helping to meet ASCOBANS aims and in providing advice to managers. They should be used as tools to help identify and/or prioritise where urgent/critical management action is needed.
- 6) The time taken to develop environmental limits/triggers should not hinder the implementation of effective measures to reduce bycatch in the interim.

*Is the currently agreed maximum annual removal rate of 1.7% / bycatch rate of 1% of the population size in that year still considered sufficient to meet the ASCOBANS objective?*

- 3.12 The workshop was not intended to provide a detailed consideration of whether the current ASCOBANS 'trigger' figure for annual removals remained acceptable. However, it was acknowledged that the current figure of 1.7% was only appropriate for a non-depleted harbour porpoise population, and that there remained uncertainty due to data gaps and assumptions made on some of the input parameters i.e. life history. For severely depleted populations such as the Baltic harbour porpoise, zero bycatch was more appropriate in order to ensure recovery. To be meaningful, the model used – or any other one – would have to be populated with parameters relevant to each species or population under consideration.
- 3.13 It was acknowledged that the maximum annual by-catch rate of 1.7% was intended to achieve the ASCOBANS objective of '*restoring and/or maintaining stocks/populations to 80% or more of their carrying capacity*' and ultimately represented a step towards achieving the overarching aim of zero bycatch. It was noted that the figure of "80% of

carrying capacity over a long time horizon” was a Conservation Objective and represented the only widely recognised and accepted figure. Careful consideration should therefore be given before changing something that already had significant political and societal acceptance within the EU, NGOs and other stakeholders.

- 3.14 The workshop **agreed** that there was merit in a ‘generic’ bycatch figure but that there was a need to look at developing more species-specific estimates which closely aligned with meeting other obligations (e.g. the Habitats Directive). There was **broad agreement** that the current generic figure would benefit from some re-evaluation and the provision of greater clarity on how it had been derived in order that it could be robustly defended.
- 3.15 The workshop **recommended** that more detailed discussions surrounding the appropriateness of the current maximum annual removal rate of 1.7% in relation to the Conservation Objective of reaching 80% of carrying capacity should be taken forward during the second workshop on ‘Unacceptable Interactions’. In particular the workshop **recommended** developing scenarios for all anthropogenic removals that showed how environmental limits/triggers might change if the Conservation Objective and/or time period (i.e. achieved 50%/80% of the time) were to change. There also needed to be clarity on the degree of uncertainty that was considered acceptable and how the level of uncertainty was affected by changes in the different parameters.
- 3.16 There was a suggestion that, instead of developing a figure for maximum annual bycatch, it might be more appropriate to invest in the development of a model that allowed for specific aims/targets to be input in order to test the effectiveness of different management scenarios i.e. in order to help identify what measures would reduce bycatch by 20%. Whilst being more complex, this might have greater value than developing an arbitrary figure for an annual maximum bycatch rate.

#### Key Conclusions and Recommendations

- 7) There is merit in having a ‘generic’ bycatch figure but more species specific estimates are warranted.
- 8) The current ‘environmental limit’ of 1.7% for total anthropogenic removals should be treated as a critical point in the environment that should not be exceeded. The figure would benefit from re-evaluation and provision of greater clarity on how it was derived.

*‘Unacceptable Interactions’. Does this mean there is an ‘acceptable interaction’?*

- 3.17 Concerns were raised that using the term ‘unacceptable’ with regard to levels of bycatch inferred that there would be a level of bycatch considered acceptable. Participants recognized that that there was a risk that using this language in association with the maximum annual removal rate of 1.7% could lead to the misconception that anything below it was considered ‘acceptable’. It was **agreed** this was not the intention and that care should be exercised in the future use of the term ‘unacceptable’.

#### Key Conclusions and Recommendations

- 9) Using the term ‘unacceptable’ as a reference to bycatch levels above the 1.7% limit does not indicate that levels below this are considered ‘acceptable’ and that no further measures are warranted.

*What is meant by long- and short-term? Over what time period should discussions apply?*

- 3.18 It was recognized that some clarification within ASCOBANS would be helpful on what was meant by short- and long-term in order to frame objectives. It was noted that a time frame for achieving the maximum annual removal rate of 1.7% had not been clearly agreed but it was broadly considered as being a long-term objective. It was also highlighted that the underlying modelling undertaken within IWC and ASCOBANS had defined long-term carrying capacity as being over a 100-year period as this was the shortest time period it was practical to model. It was also noted that whilst the IUCN and the MMPA had defined 'long-term' as 100 years, work conducted by the SCANS II and CODA projects had used a 200-year period.
- 3.19 The workshop **agreed** that the time frame over which scenarios were generated should be largely dependent on the species' characteristics such as generation times, desired timescale for a management response, population/species status (i.e. depleted/non-depleted populations), and degree of certainty required (uncertainty would increase over time). The workshop **recommended** that the second workshop in the series should take these factors into account when developing scenarios for consideration.

*Interpretation of language - common terms are not necessarily common!*

- 3.20 It was **agreed** by all that care was needed when using language associated with defining environmental limits/triggers to avoid misunderstandings, especially in instances where different interpretations might exist between different communities i.e. modellers, fisheries, conservationists etc. It was acknowledged that despite there being shared agreement on the ultimate aim of reducing bycatch to zero, differing interpretations can and have resulted in problems. The importance of getting the language right early was also stressed as this could help avoid problems in the future. The workshop **recommended** that a legal view of the language and broad definitions be sought in order to help avoid potential difficult litigation issues in the future.
- 3.21 It was **recommended** that a simple guide to models and modelling terminology be produced to help inform future discussions and minimise misunderstandings. In particular this should provide clarity on what the models could do, how they could and could not be used, and how they worked.
- 3.22 It was also **recommended** that the following terms be further discussed and definitions for use within ASCOBANS and future development of environmental limits/triggers be proposed:
- Unacceptable interactions
  - Environmental Limits
  - Triggers
  - Targets
  - Sustainable removal
  - Thresholds

### Key Conclusions and Recommendations

- 10) Different interpretations of language exist between different communities i.e. modellers, fisheries, conservation, so caution must be exercised to avoid misunderstandings. A legal view should be sought of the language and broad definitions being used to avoid potential future issues.
- 11) A simple guide to models and modelling terminology should be produced to help inform future discussions and minimise misunderstandings, providing clarity on what models can do, how they can and cannot be used, and how they work.
- 12) The following terms should be further defined for agreement and use within ASCOBANS:
  - Unacceptable interactions
  - Environmental Limits
  - Triggers
  - Targets
  - Sustainable removal
  - Thresholds

#### *Which approach is right for ASCOBANS? PBR? CLA? Something else?*

- 3.23 The workshop was presented with information on how the US Marine Mammal Protection Act (MMPA) worked in practice, in particular how the PBR approach was used to trigger practical management actions automatically through the establishment of 'take reduction teams'. There was recognition that the US approach provided a potentially useful template for considering a risk-based approach in the EU. The workshop therefore **recommended** that the second workshop in the series allocate some time for careful consideration of the US model, in particular giving consideration to whether there were any lessons to learn.
- 3.24 The workshop also **agreed** that there was benefit in assessing other instances where the PBR approach had been implemented, in particular within Scotland (where it was being used for seals), and Wales (where it was being used in the renewable energy consenting process). Given the highly mobile nature of cetaceans, there was recognition of the risks of different management bodies establishing different 'anthropogenic removal limits' and so the importance of close coordination and wider discussion was stressed. The workshop **recommended** these other relevant examples also be considered further by the second workshop in this series.
- 3.25 It was further **recommended** that work be undertaken separately to provide a more detailed consideration of specific practical, ethical, political or legal implications should a PBR (or similar algorithm, i.e. CLA) approach be adopted. Points requiring greater elaboration might include: How much would it cost? What data were needed and when was it likely to be available? Could it work in the EU and if so what oversight arrangements could be put in place given the current framework? Would it meet the requirements of ASCOBANS or other obligations i.e. Habitats Directive? Should we be subjecting highly protected species to 'removal limits'? The workshop **recommended** that consideration be given by the steering group for the second workshop in this series as to whether it could address these or other related questions or how these issues might be addressed otherwise.
- 3.26 The issue of the cost of developing this approach was illustrated as a particular concern. There was **broad agreement** that a far clearer understanding of the full costs associated with developing and adopting a PBR (or similar algorithm) approach was needed in order that managers could understand whether resources would be better

- allocated to practical conservation activities. However, it was also noted that there was also significant value in having a way to determine whether the right management action was being focussed in the right place.
- 3.27 It was also noted that there were many other regulations/agreements which potentially had an interest in developing a PBR (or similar algorithm) approach, as was reflected in a request of the European Commission to ICES (see [ICES Advice 1.5.1.1](#) Special request, Advice April 2013), i.e. the Common Fisheries Policy (CFP), Habitats Directive, Regulation 812/2004, Marine Strategy Framework Directive (MSFD), ACCOBAMS etc. It was recognized that ASCOBANS did not cover all EU Member States and that there was a strong need for a consistent approach across the whole of the EU. The workshop therefore **recommended** that a clearer and more strategic understanding should be developed to clarify the role of ASCOBANS in light of these other interests for consideration by Parties.
- 3.28 It was noted that ensuring the modelling framework was correct was perhaps more important in the first instance than agreeing appropriate management units. Once the model was correct the ensuing process would be iterative in nature. However, it was noted that good data were needed to reduce uncertainty and ensure the subsequent advice for managers was not overly precautionary.
- 3.29 How an appropriate consideration of cumulative and chronic impacts was incorporated into a PBR (or similar algorithm) approach, including how to take into account all anthropogenic removals was raised. The question of whether this could be taken even further to include cultural/social aspects and increased susceptibility to bycatch resulting from age, sex etc. was also raised. The workshop **recommended** these considerations be discussed further in the second workshop in this series.
- 3.30 The workshop **agreed** that, in light of its discussions on the PBR approach, there would be merit in the steering group for the second workshop re-considering its intended scope and outcomes to ensure they remained appropriate. It was noted that the second workshop was not a modelling workshop and so needed to ensure a focus on available data and development of scenarios in order that these could be provided to modellers for testing at a later stage.

### Key Conclusions and Recommendations

- 13) A more detailed consideration should be provided for specific practical, ethical, political or legal implications of a PBR (or similar algorithm, i.e. CLA) approach for decision makers. This should include, but not be limited to, a consideration of: how much it would cost; what data are needed and likelihood of availability; whether it would work in the EU; what oversight arrangements would be appropriate and possible; would it meet obligations under ASCOBANS and elsewhere i.e. Habitats Directive; should highly protected species be subject to 'removal limits'?
- 14) A clear strategy should be developed for the role ASCOBANS should play in ensuring consistency in the development of a PBR (or similar algorithm) approach across Europe in light of other obligations (i.e. the Common Fisheries Policy (CFP), Habitats Directive, Regulation 812/2004, Marine Strategy Framework Directive (MSFD), ACCOBAMS, etc.).

## 4. Chairs closing statement

- 4.1. The Chair thanked everyone for attending and for the hugely constructive dialogue. He re-emphasized the fact this was a sensitive issue and highlighted the importance of regularly revisiting the discussion in order to maintain an open and transparent

dialogue and to provide a means of 'sense-checking'. He welcomed the set of principles that had been agreed at the workshop, recognising these would help keep the discussion moving forwards. Finally he highlighted the importance of keeping in mind the need to agree a practical and pragmatic approach to addressing the issue of cetacean bycatch.

## 5. Next steps

- 5.1. It was agreed that a record of the key conclusions from the workshop would be circulated at the earliest opportunity, along with proposed overarching principles relating to the use of environmental limits/triggers drawn from the discussions (Annex 1). These would be circulated to workshop attendees for agreement before being submitted for information to the second workshop in September 2015<sup>1</sup> and finally to ASCOBANS Parties for endorsement.
- 5.2. A number of questions/points of clarification were identified for the second workshop. It should;
  - Give consideration to the appropriateness of, and lessons learnt from, other approaches adopted under other legislation/agreements, including the Agreement on the Conservation of Albatrosses and Petrels (ACAP);
  - Give consideration to instances where the Potential Biological Removal (PBR) approach had already been implemented, including the US Marine Mammal Protection Act (MMPA), within Scotland (where it was being used for seals), and Wales (where it was being used in the renewable energy consenting process);
  - Further discuss the continued appropriateness of the current maximum annual removal rate of 1.7% and the ASCOBANS objective of 'restoring and/or maintaining stocks/populations to 80% or more of their carrying capacity over a long time horizon';
  - Develop scenarios that illustrated how environmental limits/triggers might change if the Conservation Objective and/or time period over which it was achieved (i.e. achieved 50%/80% of the time) changed and how this subsequently affected uncertainty;
  - Consider the most appropriate timescale(s) when developing scenarios, taking into account species characteristics, desired timescale for a management response, population/species status (i.e. depleted/non-depleted populations), and degree of certainty required;
  - Provide a more detailed explanation for decision-makers of the practical implications of adopting a PBR (or similar algorithm, i.e. CLA) approach, including but not limited to: how much it would cost in practice (e.g. field and lab work costs); what data were needed and likelihood of availability; whether it would work in the EU; what oversight arrangements would be appropriate and possible; would it meet obligations under ASCOBANS and elsewhere i.e. Habitats Directive.

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<sup>1</sup> Subsequently postponed. For details, please refer to AC22/Doc.4.1.c.

## **Annex 1**

### **Proposed shared ASCOBANS principles on the use of environmental limits/triggers**

#### ***Environmental limits and triggers for bycatch should be:***

1. *considered as intermediate steps to help drive progress towards achieving the ASCOBANS aim of zero bycatch;*
2. *based on clearly defined conservation objectives which reflect broad societal views and have been developed and agreed with managers, scientists and stakeholders;*
3. *used as a tool to help make decisions on the conservation and sustainable use of the marine environment and balance competing priorities;*
4. *developed to take into account total anthropogenic removals;*
5. *used to indicate a 'critical' or 'unacceptable' point in the environment that should not be exceeded without endorsing that any removals are 'acceptable';*
6. *used to 'trigger' more urgent and stronger management action where levels of bycatch have been identified as being of a high level of concern (e.g. likely to lead to population extinction or which will fail to meet conservation objectives);*
7. *used to prioritize the targeting of effective management measures, ensuring the investment of effort/financial resources into reducing, or quantifying more precisely, bycatch levels is proportionate to the scale of the problem i.e. different management responses may be appropriate for fisheries with close to zero bycatch, with levels close to but below the environmental limit/trigger, and for those above;*
8. *'tuned' to help managers determine whether conservation objectives are being achieved and to target management measures effectively;*
9. *accompanied by a clear guidance on how they should be applied and interpreted, including clarity on the nature of appropriate management action.*

#### ***Environmental limits and triggers for bycatch should not:***

10. *be interpreted as limits for acceptable removals;*
11. *be interpreted as targets which, once met, would signal no further efforts are necessary to reduce bycatch;*
12. *be interpreted in such a way that the zone between zero bycatch and such 'levels' becomes one of inactivity (in other words, efforts should still be made to address bycatch below such levels);*
13. *replace the overall aim of reducing bycatch (and other anthropogenic removals) to zero.*

## Annex 2

### **Background**

The aim of the workshop is to:

- Provide a platform for an exchange of views and information between scientists, policy makers, and other interested parties on work to define 'unacceptable interactions' and the development of thresholds/environmental limits for bycatch;
- Aid the development of a common understanding by ASCOBANS Parties on how, thresholds/environmental limits might best be described/defined; and
- Inform consideration of if, where and when thresholds/environmental limits might be used, flagging up key issues, concerns, and implications for meeting ASCOBANS conservation objectives, including uncertainty and data limitations.

In order to achieve this, the workshop will seek to provide a view on the following questions:

- 1. *In meeting its objectives, would it be helpful for ASCOBANS to establish limits/thresholds for bycatch and why?***
- 2. *If ASCOBANS adopts limits/thresholds for bycatch, how should they be applied in the framework of delivering on ASCOBANS objectives?***

### **Draft Agenda**

0. Coffee (9:15am)
- 1. Introduction and Background (9:30)**
  - 1.1. Welcoming Remarks
  - 1.2. Round Table
  - 1.3. Chair's Introduction
- 2. Presentations (10:00)**
  - 2.1. Policy context – ASCOBANS (Heidrun Frisch, ASCOBANS Secretariat)
  - 2.2. The concept - Thresholds of unacceptable interactions (Mark Tasker, JNCC)
  - 2.3. Other related considerations in cetacean conservation

*Lunch break (12:00-13:00)*
- 3. Discussion**
- 4. Next Steps**
- 5. Close of the Meeting**

### Annex 3

## **Terms of Reference for the ASCOBANS Workshop on the 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**

#### **Background**

1. At its second Meeting of the Parties in 1997, ASCOBANS agreed a Resolution on the incidental bycatch of cetaceans. This outlined that the general aim of ASCOBANS 'should be to minimize (i.e. to ultimately reduce to zero) anthropogenic removals'.
2. Work has, for some time, been underway in a number of fora to address the definition of 'unacceptable interactions' and to give greater consideration to if and how thresholds/environmental limits for bycatch could be determined and used. This has included discussions within ASCOBANS, ICES, and the European Cetacean Society (ECS).
3. In 2013, the European Commission requested that ICES 'propose effective ways to define limits or threshold reference points to bycatch that could be incorporated into management targets under the reformed CFP. Limits or threshold reference points should take account of uncertainty in existing bycatch estimates, should allow current conservation goals to be met, and should enable managers to identify fisheries that require further monitoring, and those where mitigation measures are most urgently required.' The ICES response was 'ICES has reviewed the existing procedures to establish limits and reference points (CLA, PBR and 1.7%) several times in the past decade .... In all cases it was found that the choice of the most appropriate procedure depended on choices by managers in defining precisely the conservation objectives. These objectives essentially describe a societally-chosen balance between exploitation of resources and conservation of protected species. The most appropriate way of working is therefore jointly between managers and scientists to explore and define conservation objectives. Further than that, the choice of the most appropriate procedure to be adopted to achieve the conservation or management goal should be driven by the availability of suitable data.'
4. However, there is concern over the intent and interpretation of this matter, including how thresholds/environmental limits are defined, agreed, and ultimately deployed in managing and protecting cetaceans. This has included questions over their legal, societal, political and practical trajectory, as well as animal welfare aspects. This concern was voiced at the last two meetings of the ASCOBANS Advisory Committee and Parties agreed that, it would be beneficial to promote a greater shared understanding and, to this end, Defra offered to host a meeting to help facilitate this.

#### **Meeting Aims**

5. The meeting is intended to provide an opportunity for a transparent dialogue on current plans for progressing work on defining 'unacceptable interactions'. This should also provide an opportunity to explore how thresholds/environmental limits for bycatch may work in practice to ensure Favourable Conservation Status (including from a policy perspective), and facilitate the identification of any wider implications for ASCOBANS Parties to consider, potentially including societal acceptance or opposition to any thresholds/environmental limits.

6. This meeting is not intended to take decisions on, or define, thresholds /environmental limits beyond which population declines are inferred. These discussions will form the basis of the planned ASCOBANS Workshop on 'Further Development of Management Procedures for Defining the Threshold of 'Unacceptable Interactions' / Removals of Concern'.
7. The explicit aims of this meeting are to:
  - Provide a platform for an exchange of views and information between scientists, policy makers, and other interested parties on work to define 'unacceptable interactions' and the development of thresholds/environmental limits for bycatch;
  - Aid the development of a common understanding by ASCOBANS Parties on how, thresholds/environmental limits might best be described/defined; and
  - Inform consideration of if, where and when thresholds/environmental limits might be used, flagging up key issues, concerns, and implications for meeting ASCOBANS conservation objectives, including uncertainty and data limitations.

### **Attendees**

8. This meeting is a product of the ASCOBANS Advisory Committee and Parties should be invited to send representatives that can contribute to discussions. Concerned NGOs and other appropriate experts should also be encouraged to attend, along with relevant agencies as appropriate.

**Annex 4**

**List of Participants**

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organization</b>	<b>Country</b>
Ms	Sarah	Baulch	Environmental Investigation Agency (EIA)	United Kingdom
Mr	Chris	Butler-Stroud	Whale and Dolphin Conservation	United Kingdom
Ms	Sarah	Dolman	Whale and Dolphin Conservation	United Kingdom
Mr	Greg	Donovan	International Whaling Commission	United Kingdom
Dr	Peter	Evans	Sea Watch Foundation	United Kingdom
Ms	Heidrun	Frisch	ASCOBANS Secretariat	Germany
Dr	Anja	Gadgard Boye	Danish AgriFish Agency, Copenhagen	Denmark
Mr	Nigel	Gooding	Defra	United Kingdom
Ms	Katarzyna	Kaminska	Ministry of Agriculture and Rural Development	Poland
Mr	Al	Kingston	University of St Andrews	United Kingdom
Mr	Sven	Koschinski		Germany
Mr	Finn	Larsen	Danish Institute of Aquatic Resources	Denmark
Mr	Stephen	Marsh	British Divers Marine Life Rescue	United Kingdom
Ms	Nicola	Molloy	Defra	United Kingdom
Dr	Sinead	Murphy		Ireland
Mr	Jamie	Rendell	Defra	United Kingdom
Dr	Emma	Rundall	Defra	United Kingdom
Ms	Meike	Scheidat	IMARES WUR	Netherlands
Mr	Mark	Simmonds	Humane Society International	United Kingdom
Dr	Thomas	Stringell	Natural Resources Wales	United Kingdom
Ms	Justyna	Szumlicz	Ministry of Agriculture and Rural Development	Poland
Mr	Mark	Tasker	Joint Nature Conservation Committee	United Kingdom

by phone

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