

Agenda Item 6.1.2

Further Implementation of the Agreement

Species Action Plans

Development of a Conservation Plan for  
Common Dolphins

Document 6.1.2.a

**Development of a Conservation Plan  
for Common Dolphins**

**Action Requested**

- Take note
- Give guidance

Submitted by

Advisory Committee



**NOTE:  
DELEGATES ARE KINDLY REMINDED  
TO BRING THEIR OWN COPIES OF DOCUMENTS TO THE MEETING**

## **Secretariat's Note**

This document has been developed by the steering group for the development of a Conservation Plan for the Common Dolphin established by the 22<sup>nd</sup> Meeting of the Advisory Committee to accompany the Draft Resolution contained in MOP8/Doc.6.1.2.b.

## Development of a Conservation Plan for Common Dolphins

### Introduction

1. The common dolphin is one of the most numerous cetacean species in the eastern North Atlantic and, like other cetacean species, plays a key functional role within the ecosystem as a top predator. However, the most recent assessment (2013) of the conservation status of the eastern North Atlantic population under Article 17 of the Habitats Directive was “Unfavourable-Inadequate”. This was due to an estimated two-thirds of the European Atlantic population being considered to be in an unfavourable condition although their range and the majority of their habitat was considered in a favourable condition<sup>1</sup>. Bycatch was highlighted as the greatest anthropogenic threat to this species. Other pressures in the region include pollution and underwater noise; although there are major knowledge gaps in the extent of their effects (Murphy et al. 2013).

2. In recent years, various conservation and management practices have been employed, including the identification of a provisional management unit and implementation of national observer bycatch programmes and bycatch mitigation measures under Council Regulation (EC) No. 812/2004. Regulation 812/2004 has been poorly implemented by some Member States and consequently there is still a lack of data on contemporary incidental capture rates in a number of fisheries and inadequate sampling (Murphy et al. 2013). In 2016, ICES advised that the most recent review of national reports under Regulation 812/2004 (from the year 2014) suggests that bycatches of common dolphins may be unsustainable (ICES Advice 2016). A degree of uncertainty in the assessment was due to ambiguities in recording fishing effort, biases and unrepresentative sampling by gear type, and a lack of statutory reporting from some major fishing nations.

3. Population status of cetaceans can be assessed through estimating temporal trends in abundance; though due to the types of data and the species in question there are inherent issues with this process. A recent study assessing data from 38 disparate sources, which undertook surveys throughout north-western European waters over a 17 year period, reported that a very large reduction in common dolphin population size (>50%) would have to occur between (4-10 year) reporting periods before it could be detected statistically with a power of 80% (Paxton et al. 2016). Therefore, other supplementary population monitoring approaches, such as use of data obtained from stranding programmes, are essential. As well as understanding the causes of change which is fundamental for designing and implementing conservation and management measures (Murphy et al. 2013).

4. Collection of data and samples through national stranding programmes has enabled assessments of life-history parameters, dietary requirements, and the effect of other stressors such pollutants (see Murphy et al. 2013 and references therein). However, in order to improve the conservation status of the eastern North Atlantic population a number of key actions are required. These include the implementation of a conservation plan, finalisation of a management framework procedure, and coordination among Member States bycatch monitoring programmes for assessment of the population bycatch rate. In addition, there is a need for a re-assessment of the management unit, monitoring of population status through frequent large and small-scale surveys, changes in demographic characteristics, and a continued assessment of the independent and interactive effects of multiple stressors. Above all, improvement of the conservation status is hindered by a lack of overarching legislation for cetaceans in European waters that ensures the effective protection of cetaceans from all threats (ASCOBANS 2015).

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<sup>1</sup> <http://bd.eionet.europa.eu>

## **Draft Outline of a Future Conservation Plan**

5. The following recommendations are fundamental for effective conservation and management of the eastern North Atlantic population, taking into account the latest knowledge of population structure, status, distribution, and major threats.

### **Recommendation 1. Implementation of a Conservation Plan: Co-ordinator and Steering Committee**

- There is a need to ensure cooperation between all stakeholders including national governments in the NE Atlantic, European Commission, intergovernmental bodies including ACCOBAMS, ICES and OSPAR, ACs and other relevant bodies such as NGOs, universities and other institutes, and appropriate stakeholder representatives.
- Member States should harmonise their national efforts, including allocation of funding, for successful implementation of the Conservation Plan.

### **Recommendation 2. Assessment of Management Unit status**

- More genetic samples from common dolphins are needed, particularly from offshore waters (beyond the shelf break), as this has hindered a thorough assessment of the range boundary and any subdivisions of the eastern North Atlantic population.
- Due to the relatively low genetic variation within the eastern North Atlantic population, ecological markers/tracers showing an integration of tens of years (i.e., a few generations), deriving from strategic sampling approaches, should be explored.

### **Recommendation 3. Finalise a management framework procedure**

- A management framework procedure producing robust (bycatch) triggers (signalling a need for more urgent and stronger management action) and anthropogenic removal (bycatch/environmental) limits (i.e. 'critical' or 'unacceptable' point) should enable specified conservation objectives to be met by allowing the impact of anthropogenic removal within and across Member States to be more fully assessed and effectively managed (ASCOBANS 2015).

### **Recommendation 4. Assessment of bycatch at the level of the population**

- For ICES to adequately estimate common dolphin overall mortality in fishing gear in the eastern North Atlantic requires identification of all gear types and fisheries of concern, i.e. high and medium risk fisheries, and an improvement in the reliability of bycatch estimates for those fisheries through improved sampling.
- For this assessment, coordination is needed among Member State bycatch monitoring programmes, with the production of a standardised protocol.

### **Recommendation 5. Mitigation of bycatch**

- Appropriate mitigation strategies should be selected for high- and medium-risk fisheries. For all mitigation approaches, monitoring the implementation and collection of data to assess efficacy is required.
- Effective mitigation of bycatch requires the continued evaluation of the processes and factors that influence bycatch rates (ASCOBANS 2015).

### **Recommendation 6. Monitor population/management unit status**

- Broad-scale synoptic abundance surveys (with sufficient power to detect trends) should be conducted at appropriate intervals in order to estimate trends in abundance and areas of occupancy/distribution within range (seasonal and long-term changes). Continued collection of high quality sightings data, with increased spatial and temporal coverage, is required for enhancing the ability to detect trends (Paxton et al. 2016).

**Recommendation 7. Monitor health and nutritional status, reproductive parameters, pollutant burdens, and causes of mortality**

- Other parameters for monitoring the status of the population/management unit, including the use of indicators, should be employed, bearing in mind that these will require establishment of common protocols among Member States, and ongoing collection of samples and data from stranding and bycatch monitoring programmes.

**Recommendation 8. Investigate the effects of anthropogenic noise on common dolphins**

- Continue to review of the effects of anthropogenic noise on common dolphins, including an evaluation of the population level consequences of disturbance.

**Next Steps**

6. A draft resolution on Conservation of Common Dolphins is being presented to MOP8 for its consideration. It proposes that the Advisory Committee be delegated the responsibility to adopt a conservation plan for this species, if possible at its 23<sup>rd</sup> Meeting (2017).

7. The Steering Group for the development of the draft conservation plan consists of Simon Berrow, Greg Donovan, Peter Evans, Sami Hassani, Sinéad Murphy, Fiona Read, Eunice Pinn, Marina Sequeira and Mark Simmonds. Anyone else interested in participating in this work should please inform the Secretariat as soon as possible.

**References**

ASCOBANS. 2015. ASCOBANS Recommendations on the Requirements of Legislation to Address Monitoring and Mitigation of Small Cetacean Bycatch. 10 pp. [http://www.ascobans.org/sites/default/files/basic\\_page\\_documents/ASCOBANS\\_Recommendations\\_EUBycatchLegislation\\_Final.pdf](http://www.ascobans.org/sites/default/files/basic_page_documents/ASCOBANS_Recommendations_EUBycatchLegislation_Final.pdf)

ICES Advice. 2016. Bycatch of small cetaceans and other marine animals – review of national reports under Council Regulation (EC) No. 812/2004 and other information. ICES Special Request Advice Northeast Atlantic and adjacent seas ecoregions. ICES Advice 2016, Book 1. 6pp. [http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/Protected\\_species\\_bycatch.pdf](http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/Protected_species_bycatch.pdf).

Murphy, S., E. H. Pinn, and P. D. Jepson. 2013. The short-beaked common dolphin (*Delphinus delphis*) in the North-eastern Atlantic: distribution, ecology, management and conservation status. Pages 193-280 in R. N. Hughes, D. J. Hughes, and I. P. Smith, editors. Oceanography and Marine Biology: An Annual Review, Volume 51. CRC Press. [http://www.ascobans.org/sites/default/files/document/AC22\\_Inf\\_3.1\\_CommonDolphin.pdf](http://www.ascobans.org/sites/default/files/document/AC22_Inf_3.1_CommonDolphin.pdf)

Paxton, C. G. M., L. Scott-Hayward, M. Mackenzie, E. Rexstad, and L. Thomas. 2016. Revised Phase III Data Analysis of Joint Cetacean Protocol Data Resources. JNCC Report & Advisory Note No: 517. 208pp. [http://jncc.defra.gov.uk/pdf/Report\\_517\\_web.pdf](http://jncc.defra.gov.uk/pdf/Report_517_web.pdf)