

Agenda Item 9

Cooperation with other Bodies

Cooperation and Joint Initiatives with CMS

Document Inf.9.3.b/Rev.1

**Readdressing the CMS Listing of
Species in the ASCOBANS Region**

Action Requested

- Take note

Submitted by

Read et.al



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

Secretariat's Note

The Rules of Procedure adopted at the ASCOBANS 8th Meeting of Parties remain in force until and unless an amendment is called for and adopted.

Readdressing the CMS listing of species in the ASCOBANS region

Fiona L. Read¹, Peter G.H. Evans², Nicola Hodgins¹, Mark P. Simmonds³, Ida Carlén⁴, Sarah J. Dolman¹

¹Whale and Dolphin Conservation (WDC), Brookfield House, 38 St Paul Street,
Wiltshire, SN15 1LJ, UK

²School of Ocean Sciences, Bangor University, Menai Bridge, Anglesey, LL59 5AB,
UK

³Humane Society International, c/o HSI-UK, 5 Underwood Street, London, NW1
7LY, UK

⁴Coalition Clean Baltic, Östra Ågatan 53, 75322 Uppsala, Sweden

Summary

Within Europe there are various Conventions and legislation that set out general provisions for the protection and conservation of migratory species such as cetaceans. The focus of the present report is on the North East Atlantic, the North Sea and the Baltic Sea, and the main conventions and legislation and how they are assessed are outlined in Annex I.

We presented this paper (Information Document: AC24/Inf.9.3.b)¹ to the 24th Meeting of the Advisory Committee of ASCOBANS as an initial step towards making the current CMS Appendix listings of the main cetacean species in the ASCOBANS range accurate. We outlined the reasoning below and requested the changes proposed in Table 12 were considered by ASCOBANS Parties. Subsequent to this, we requested that ASCOBANS submit the proposed changes for consideration at the 20th CMS Conference of the Parties in India in 2020.

¹ <https://www.ascobans.org/en/document/cms-listing-species-ascobans-region>

We proposed that:

- (1) The Baltic Proper harbour porpoise population is included in Appendix I as well as Appendix II of CMS
- (2) The Iberian harbour porpoise be listed as a separate population
- (3) The Iberian harbour porpoise population is included in Appendix I as well as Appendix II of CMS
- (4) The range of the following species is extended to include the Northeast Atlantic on CMS Appendix II:
 - Harbour porpoise
 - Long-finned pilot whale
 - Short-beaked common dolphin
 - White-beaked dolphin
 - Atlantic white-sided dolphin
 - Common bottlenose dolphin
 - Risso's dolphin
- (5) Based on the lack of data concerning their distribution, abundance, and status in the Eastern North Atlantic, add to Appendix II of CMS:
 - Striped dolphin
 - Cuvier's beaked whale
 - Sowerby's beaked whale

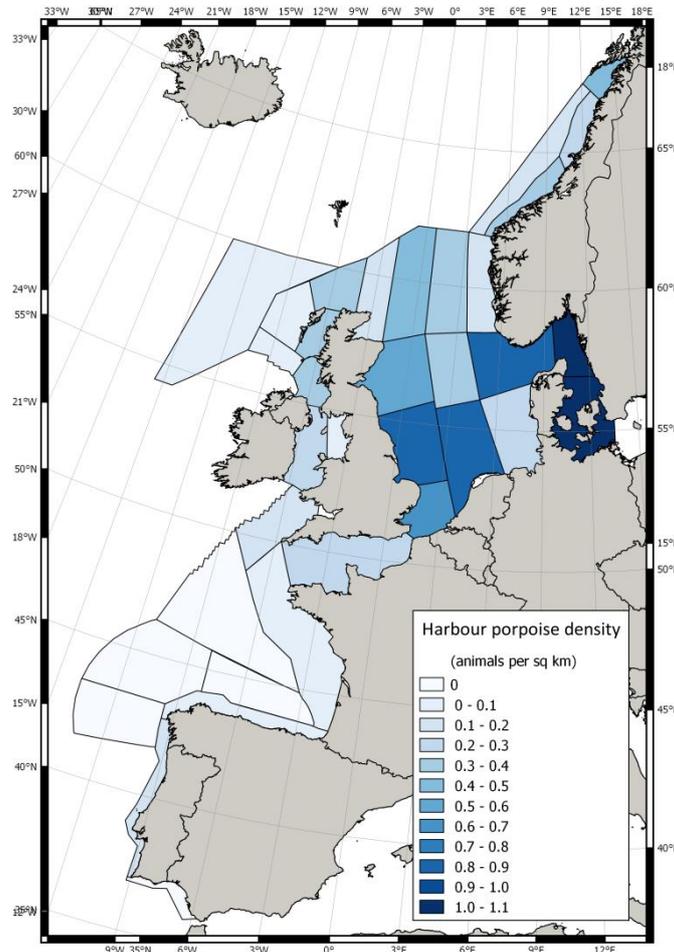
Relevant species

Harbour porpoise (*Phocoena phocoena*) – Marine Atlantic & Iberian population

Harbour porpoises are widely distributed over the continental shelf of the Eastern North Atlantic, including the North and Baltic Seas (Figure 1). Their distribution is mainly confined to shelf waters although sightings also occur in deeper waters offshore (Reid *et al.*, 2003).

Harbour porpoise are an Annex II listed species in the EU Habitats Directive which requires the designation of Special Areas of Conservation (SACs). Only the Baltic and North Sea populations of harbour porpoise are covered by CMS Appendix II. Therefore, harbour porpoises within designated and proposed SACs along the west coast of the UK, Northern Ireland, the Republic of Ireland and France are presently not included under Appendix II.

Figure 1. Harbour porpoise density from the SCANS III survey in 2016



The main threat to harbour porpoise is bycatch in fisheries which have been well documented in the North Sea and North East Atlantic (e.g., Carlström and Berggren, 1997; Tregenza *et al.*, 1997; Northridge and Hammond, 1999; Vinther and Larsen, 2004; Goetz *et al.*, 2014). For example, in the UK gillnet fisheries alone it was estimated that around 1500 harbour porpoise were bycaught in 2016 (Northridge *et al.*, 2017). Other threats to harbour porpoise include chemical pollution, underwater noise (e.g., marine renewable developments and explosive detonations) and climate change.

The conservation status of harbour porpoise for Europe is currently categorised as 'Vulnerable' in the Red List of threatened species (IUCN 2007)² and harbour porpoise is on OSPARs threatened and endangered list³, although considered to be 'Least Concern' for the ASCOBANS region⁴. Member States within the EU that reported on the conservation status for harbour porpoise in the Marine Atlantic for Article 17 reported significantly differently. Belgium, Germany, Spain, the Netherlands and Portugal all reported 'Unfavourable-Inadequate', France and Sweden reported 'Unfavourable-Bad' and Denmark, Ireland and the UK reported 'Favourable' in the reporting period between 2007-2012. Despite the varied responses, the overall conservation status for the Marine Atlantic by the EU is 'Favourable' (Table 1). Harbour porpoise was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas⁵.

It should be noted that the Iberian harbour porpoise population is considered to be genetically isolated from the rest of the European East Atlantic harbour porpoises (Fontaine *et al.*, 2007; 2010) and a new ecotype, *Phocoena phocoena meridionalis*, was proposed for Iberian harbour porpoises (Fontaine *et al.*, 2014). Although Alfonsi *et al.* (2012) found evidence of admixing of the Iberian and Celtic Sea Populations in the Bay of Biscay. The ICES Working Group on Marine Mammal Ecology (ICES WGMME) recommended treating the Iberian porpoise as a separate management unit and strongly advised immediate action by the Spanish and Portuguese governments to monitor and ensure the conservation of the Iberian porpoise population (ICES, 2009). The population is small, SCANS III estimated around 2900 individuals (CV=0.32) (SCANS III, 2017) and is listed as 'Vulnerable' in the Red Book of Portuguese Vertebrates (Cabral *et al.*, 2005). Along the Iberian Peninsula there is a high level of

² <http://www.iucnredlist.org/details/17027/1>

³ <https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats>

⁴ <http://www.ascobans.org/en/species/phocoena-phocoena>

⁵ <https://www.cms.int/en/document/harbour-porpoise-phocoena-phocoena-baltic-and-north-sea-populations>

harbour porpoise bycatch (e.g., López *et al.*, 2003; Vingada *et al.*, 2011; Goetz *et al.*, 2014; Read, 2016) and this is most likely unsustainable for the population (Read, 2016). Spain and Portugal both reported ‘Unfavourable-Inadequate’ for Article 17 in 2013 for the period 2007-2012. In the future, the Iberian harbour porpoise population should be included as a separate population by the IUCN and listed on the CMS in Appendix I and II.

Table 1. Member States’ conservation status for Article 17 reporting of harbour porpoise in the Marine Atlantic⁶

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Belgium	Unfavourable-Inadequate	Unfavourable-Bad
Germany	Unfavourable-Inadequate	Unfavourable-Inadequate
Denmark	Favourable	Unfavourable-Bad
Spain	Unfavourable-Inadequate	Unknown
France	Unfavourable-Bad	Unknown
Ireland	Favourable	Favourable
Netherlands	Unfavourable-Inadequate	Unfavourable-Bad
Portugal	Unfavourable-Inadequate	Unfavourable-Inadequate
Sweden	Unfavourable-Bad	Unfavourable-Bad
UK	Favourable	Favourable
EU	Favourable	Unfavourable-Inadequate

Justification for amendment of Appendix II and Iberian porpoise listing on Appendix I and II

The current status of harbour porpoise in Appendix II of CMS only covers populations in the North and Baltic Seas and is not a true representation of the species range. Furthermore, the current limited range excludes some of the areas with high rates of fisheries bycatch. We propose that the range for harbour porpoise in CMS Appendix II is extended to include the Northeast Atlantic, and that the Iberian harbour porpoise is listed as a separate population and listed on the CMS in Appendix I and II.

Harbour porpoise (*Phocoena phocoena*) – Baltic Sea (‘Baltic Proper’)

⁶<https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Phocoena+phocoena®ion=MATL>

Harbour porpoise is the only cetacean considered to be resident in the Baltic Sea. In the Baltic Proper, harbour porpoise have been classified as a distinct population based on analysis of various lines of evidence including genetics, morphometrics, and telemetry studies (*e.g.*, Wiemann *et al.*, 2010; Galatius *et al.* 2012; Sveegaard *et al.*, 2015) and are referred to as 'Baltic Proper harbour porpoise'.

Harbour porpoise were abundant in the Baltic Sea until the 1960s when the population started to decline and has not recovered. The most recent population estimate is around 500 individuals (SAMBAH, 2016).

The main threat to harbour porpoise in the Baltic Proper is bycatch in set-gillnets (*e.g.*, Skora and Kuklik, 2003; Vinther and Larsen, 2004). However, habitat degradation, chemical pollution and underwater noise are also important threats to the porpoise population.

Between 2011-2013, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden collaborated on the Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise project (SAMBAH, www.sambah.org) that surveyed the distribution and abundance of harbour porpoises in the Baltic Sea. Results of the study show clear spatial and seasonal distribution of the Baltic Proper harbour porpoise, on which management measures should be based, such as the immediate designation of Marine Protected Areas (Carlèn *et al.*, 2018).

The conservation status of harbour porpoise for the Marine Baltic is currently categorised as 'Critically Endangered' in the Red List of threatened species (IUCN 2008)⁷, by HELCOM⁸ and by ASCOBANS⁹. Member States within the EU that reported on the conservation status for harbour porpoise in the Marine Baltic for Article 17 all reported 'Unfavourable-Bad' with the exception of Latvia that reported 'Unknown'. The overall conservation status for the Marine Baltic by the EU is 'Unfavourable-Bad' (Table 2). As mentioned for the Marine Atlantic, harbour porpoise was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas.

⁷ <http://www.iucnredlist.org/details/17031/0>

⁸ <http://www.helcom.fi/Red%20List%20Species%20Information%20Sheet/HELCOM%20Red%20List%20Phocoena%20phocoena.pdf>

⁹ <http://www.ascobans.org/en/species/phocoena-phocoena>

Table 2. Member States' conservation status for Article 17 reporting of harbour porpoise in the Baltic Sea¹⁰

REGION: Marine Baltic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Germany	Unfavourable-Bad	Unfavourable-Bad
Denmark	Unfavourable-Bad	Unfavourable-Bad
Poland	Unfavourable-Bad	Unfavourable-Bad
Sweden	Unfavourable-Bad	Unfavourable-Bad
Finland	NA	NA
Latvia	Unknown	Unfavourable-Bad
EU	Unfavourable-Bad	Unfavourable-Bad

Justification for inclusion in Appendix I as well as Appendix II

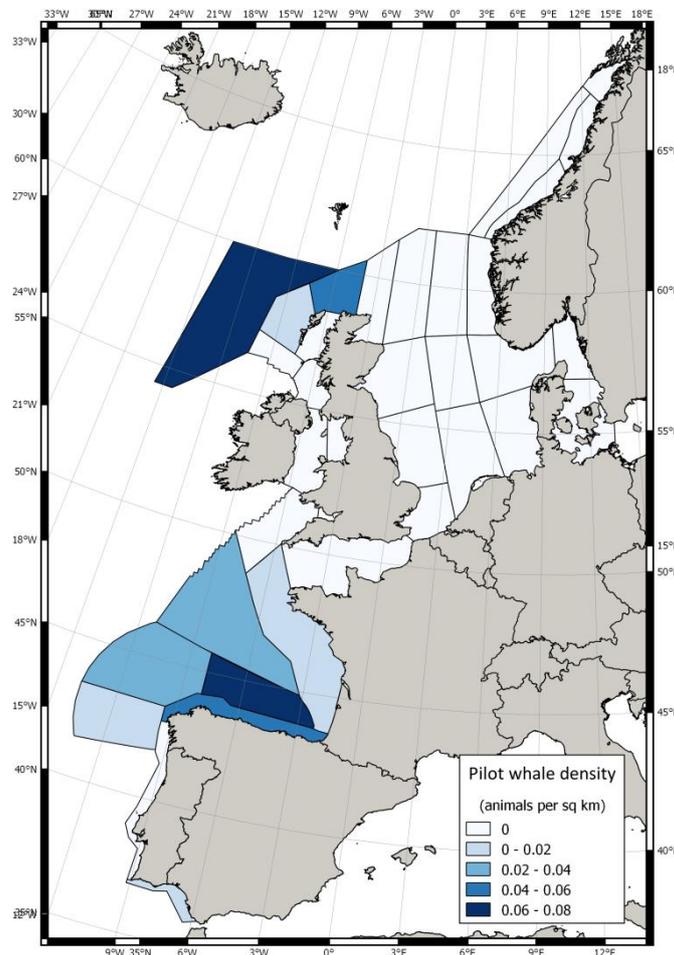
As stated in Annex 1 under the section of CMS, Appendix I of CMS is for species that have been assessed as being in danger of extinction throughout a significant portion of their range, and Range States are required to strictly protect them. Harbour porpoise in the Baltic have been classified by the IUCN as being 'Critically Endangered' and the status of the population is well recognised by Range States and some collaborative effort to understand the population has been initiated. However, recovery of the population will require long-term commitment and collaborative efforts for all Range States as well as other stakeholders such as fishers. We propose that the Baltic Proper harbour porpoise population is included in Appendix I as well as Appendix II of CMS.

¹⁰<https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Phocoena+phocoena®ion=MBAL>

Long-finned pilot whale (*Globicephala melas*)

Long-finned pilot whales are an oceanic species that generally frequent deep waters near the continental shelf in the temperate and sub-Arctic regions of the North Atlantic, and in the Southern Ocean (Reyes, 1991; Reid *et al.*, 2003). Long-finned pilot whales are observed most frequently in the Bay of Biscay, off the North-West Iberian Peninsula and off northern and west Scotland and western Ireland (*e.g.*, Evans *et al.*, 2003; Reid *et al.*, 2003; CODA, 2009; Fernández *et al.*, 2013; SCANS III, 2017). Pilot whale density from the SCANS III survey in 2016, is shown in Figure 2. Whilst long-finned pilot whale sightings are reported annually in the North Sea (Evans *et al.*, 2003; Boran *et al.*, 2008), they are rarely reported in the Baltic Sea.

Figure 2. Long-finned pilot whale density from the SCANS III survey in 2016



The main threats facing long-finned pilot whales in the Northeast Atlantic are bycatch, pollution, underwater noise, *e.g.*, military activities and the annual drive hunt in the Faroe Islands.

The conservation status of long-finned pilot whale in Europe is currently categorised as ‘Data Deficient’ in the Red List of threatened species (IUCN 2007)¹¹ and the ASCOBANS region¹². Member States within the EU that reported on the conservation status for Article 17 all reported ‘Unknown’ for 2001-2012, with the exception of Ireland which reported ‘Favourable’ between 2007-2012. The overall conservation status for the Marine Atlantic by the EU is ‘Unknown’ (Table 3). The long-finned pilot whale was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988¹³. However, the range was only for the populations of the Baltic and North Seas which as noted above is the area where the species is rarely found.

Table 3. Member States’ conservation status for Article 17 reporting of long-finned pilot whale¹⁴

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unknown	Unknown
France	Unknown	Unknown
Ireland	Favourable	Unknown
Portugal	Unknown	Unknown
UK	Unknown	Unknown
EU	Unknown	Unknown

Justification for amendment of Appendix II

The current status of long-finned pilot whales in Appendix II of CMS only covering populations in the North and Baltic Seas is not a true representation of the species range. Therefore, we propose that the range of long-finned pilot whales for CMS Appendix II is extended to include the Northeast Atlantic.

¹¹ <http://www.iucnredlist.org/details/9250/1>

¹² <http://www.ascobans.org/en/species/globicephala-melas>

¹³ <https://www.cms.int/en/document/long-finned-pilot-whale-globicephala-melaena-baltic-and-north-sea-populations-now>

¹⁴ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Globicephala+melas®ion=MATL>

Short-beaked common dolphin (*Delphinus delphis*)

Short-beaked common dolphin (hereafter referred to as common dolphin) is one of the most abundant cetacean species in the North East Atlantic. Common dolphin distribution is strongly concentrated in the vicinity of the continental shelf but they do also occur far offshore (*e.g.*, Reid *et al.*, 2003; Cañadas *et al.*, 2009; SCANS III, 2017) (Figure 3). The shelf waters around the UK and Ireland were previously thought to be around the northernmost limit for common dolphins in the eastern North Atlantic, and sightings in the North Sea were uncommon (Reid *et al.*, 2003). However, there has been an increase in sightings in recent years off northern UK and Irish waters and the northern North Sea which has been linked to an increase in sea temperatures (*e.g.*, *e.g.*, Evans *et al.*, 2003; MacLeod *et al.*, 2005; Robinson *et al.*, 2015). Common dolphins are rarely observed in the Baltic Sea.

ASCOBANS has recently drafted a Species Action Plan for short-beaked common dolphins in the North East Atlantic and requested support from Range States (UK and France) and non-Range States (Ireland, Spain and Portugal) to collaborate and implement the plan¹⁵.

The main threat to common dolphins is bycatch in fisheries, and this has been well documented in the North East Atlantic (*e.g.*, *e.g.*, Kuiken *et al.*, 1994; Tregenza and Collet, 1998; Morizur *et al.*, 1999; Fernández-Contrera *et al.*, 2010; Goetz *et al.*, 2014; Mannocci *et al.*, 2012; Peltier *et al.*, 2014). Other potential threats to common dolphins include chemical pollution, underwater noise (*e.g.*, military activities) and climate change.

The conservation status of short-beaked common dolphin in Europe is currently categorised as 'Data Deficient' in the Red List of threatened species (IUCN 2007)¹⁶ although 'Least Concern' in the ASCOBANS region¹⁷. Spain and France reported 'Unfavourable-Bad', Portugal reported 'Unfavourable-Inadequate' whilst the UK and Ireland reported 'Favourable'. The overall conservation status for the Marine Atlantic by the EU is 'Unfavourable-Inadequate' (Table 4). Short-beaked common dolphin was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas¹⁸.

¹⁵ <http://www.ascobans.org/en/document/draft-species-action-plan-north-east-atlantic-common-dolphin>

¹⁶ <http://www.iucnredlist.org/details/6336/1>

¹⁷ <http://www.ascobans.org/en/species/delphinus-delphis>

¹⁸ <https://www.cms.int/en/document/common-dolphin-delphinus-delphis-baltic-and-north-sea-populations>

Figure 3. Common dolphin density from the SCANS III survey in 2016

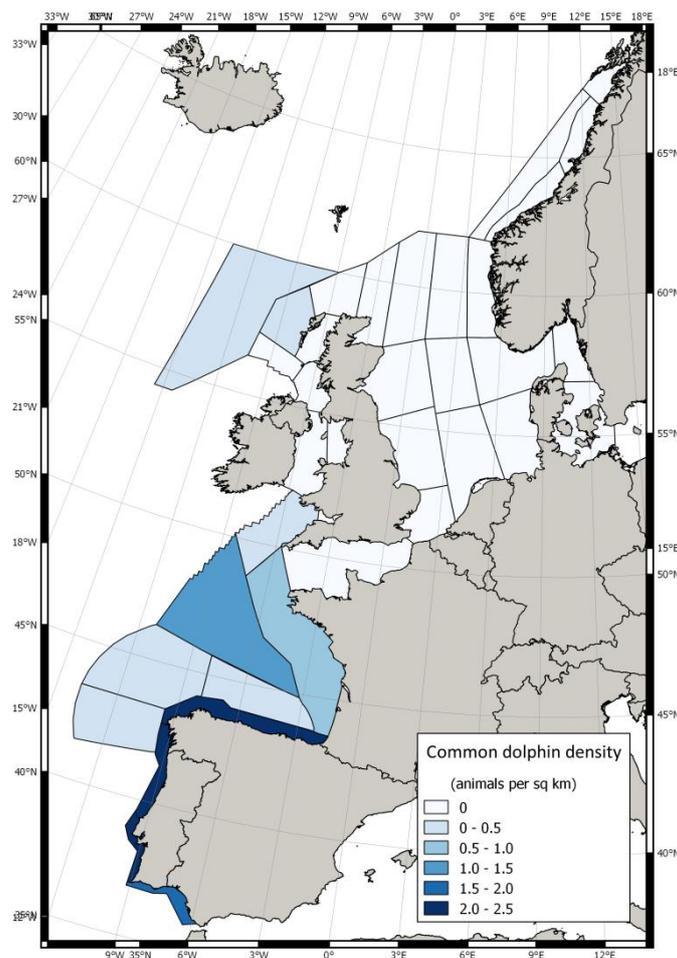


Table 4. Member States' conservation status for Article 17 reporting of short-beaked common dolphin¹⁹

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unfavourable-Bad	Unknown
France	Unfavourable-Bad	Unknown
Ireland	Favourable	Favourable
Portugal	Unfavourable-Inadequate	Favourable
UK	Favourable	Unknown
EU	Unfavourable-Inadequate	Unknown

Justification for amendment of Appendix II

The current status of short-beaked common dolphins in Appendix II of CMS only covers populations in the North and Baltic Seas and is not a true representation of the

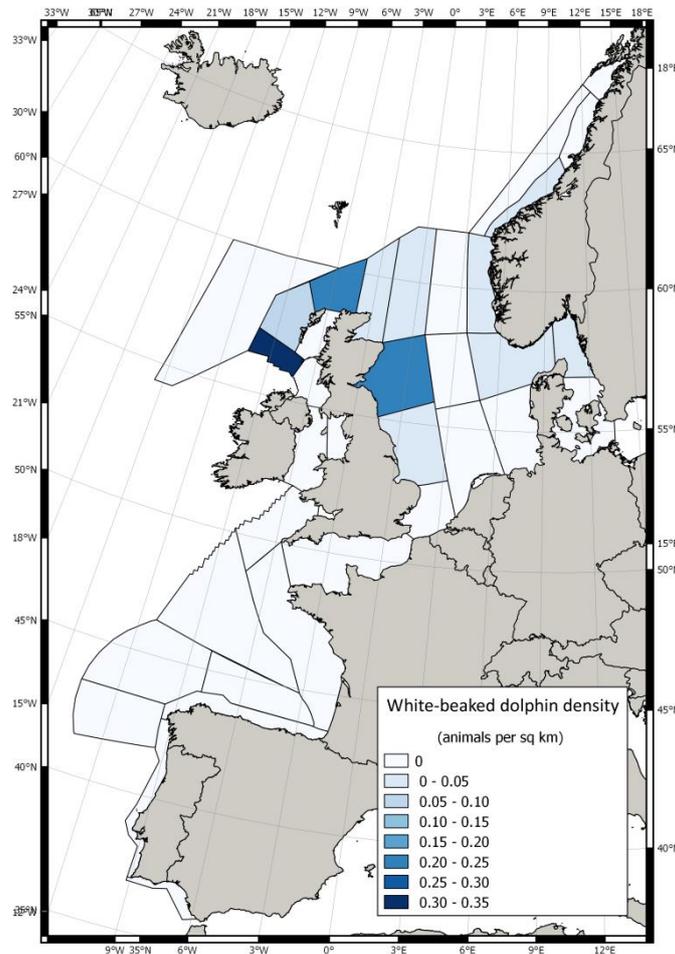
¹⁹https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Delp_hinus+delphis®ion=MATL

species range. Furthermore, the current limited range excludes the areas with the main anthropogenic threat (bycatch in fisheries) to the species. We propose that the range for common dolphins in CMS Appendix II is extended to include the Northeast Atlantic.

White-beaked dolphin (*Lagenorhynchus albirostris*)

White-beaked dolphin occurs in cold temperate and sub-Arctic waters and is frequently observed throughout the North Sea and the shelf waters of the North Atlantic but rarely further south than the UK (Northridge *et al.*, 1997; Kinze *et al.*, 1997; Reid *et al.*, 2003). In the UK, most white-beaked dolphin sightings are around Scotland and the east coast of England (Northridge *et al.*, 1995; Evans *et al.*, 2003; Reid *et al.*, 2003; Canning *et al.*, 2008) (Figure 4). A small population inhabits Lyme Bay and environs (Brereton *et al.*, 2016). However, Macleod *et al.* (2005) have suggested a decline in abundance and distribution on the west coast of Scotland and Ireland and linked this to climate change. On this basis, Lambert *et al.* (2014) predicted up to 80% loss of white-beaked dolphin habitat by 2089 due to climate change. Based on abundance estimates from SCANS, SCANS II and SCANS III, an annual decline of 5% with 80% power is detected for white-beaked dolphins in the North Sea (SCANS III, 2017).

Figure 4. White-beaked dolphin density from the SCANS III survey in 2016



The main threats to white-beaked dolphin may be climate change, underwater noise, chemical pollution, fisheries interactions. The directed hunts in the Faroe Islands are also of concern.

The conservation status of white-beaked dolphin is currently categorised as ‘Least Concern’ in the Red List of threatened species (IUCN 2007)²⁰ and in the ASCOBANS region²¹. Member States within the EU that reported on the conservation status of white-beaked dolphins for Article 17 reported either ‘Unknown’ or ‘Favourable’. The overall conservation status for the Marine Atlantic by the EU is ‘Favourable’ (Table 5) despite there not being a lot of information for the species in most Member States. In 2013, WDC submitted a comment on the UK’s assessment stating their concerns on the ‘Favourable’ conservation status. WDC stated that ‘the data are inadequately represented and white-beaked dolphin should be considered as ‘Unfavourable–Inadequate’’²². White-beaked dolphin was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas²³.

Table 5. Member States’ conservation status for Article 17 reporting of Atlantic white-beaked dolphin²⁴

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Denmark	Favourable	NA
France	Unknown	Unknown
Ireland	Favourable	Unknown
Germany	Unknown	NA
Netherlands	NA	Unknown
UK	Favourable	Favourable
EU	Favourable	Unknown

Justification for amendment of Appendix II

The current status of white-beaked dolphins in Appendix II of CMS only covers populations in the North and Baltic Seas which is not a true representation of the

²⁰ <http://www.iucnredlist.org/details/11142/1>

²¹ <http://www.ascobans.org/en/species/lagenorhynchus-albirostris>

²² https://uk.whales.org/sites/default/files/work/wdc_art_17_white_beaked_dolphin.pdf

²³ <https://www.cms.int/en/document/white-beaked-dolphin-lagenorhynchus-albirostris-baltic-and-north-sea-populations>

²⁴ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Lagenorhynchus+albirostris®ion=MATL>

species range. Therefore, we propose that the range for white-beaked dolphins in CMS Appendix II is extended to include the Northeast Atlantic.

Atlantic white-sided dolphin (*Lagenorhynchus acutus*)

Atlantic white-sided dolphins are found in cold temperate and subarctic waters of the North Atlantic Ocean and are most abundant along the deep-slope edge of continental shelves. Atlantic white-sided dolphins have a similar latitudinal range to white-beaked dolphins but their distribution is generally in deeper waters (Reid *et al.*, 2003). Atlantic white-sided dolphins occur from the Barents Sea to the UK and Ireland. The southern limit of their range in the northeast Atlantic is the Azores but in fact they are only occasionally found further south than the UK and Ireland (Northridge *et al.*, 1997; Evans and Smeenk, 2008). Atlantic white-sided dolphins are rare in the southern North Sea and the Baltic Sea.

The main potential threats for Atlantic white-sided dolphins are fisheries interactions, climate change, chemical pollution and the directed drive hunts in the Faroe Islands.

The conservation status of Atlantic white-sided dolphin in Europe is currently categorised as 'Least Concern' in the Red List of threatened species (IUCN 2007)²⁵ and in the ASCOBANS region²⁶. The majority of Member States within the EU that reported on the conservation status of Atlantic white-sided dolphins for Article 17 reported 'Favourable'. The overall conservation status for the Marine Atlantic by the EU is 'Favourable' (Table 6) despite most Member States only having very limited information about the species. Atlantic white-sided dolphin was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas²⁷.

Table 6. Member States' conservation status for Article 17 reporting of Atlantic white-sided dolphin²⁸

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
France	Unknown	Unknown
Ireland	Favourable	Favourable
UK	Favourable	Unknown
EU	Favourable	Unknown

Justification for amendment of Appendix II

²⁵ <http://www.iucnredlist.org/details/11141/1>

²⁶ <http://www.ascobans.org/en/species/lagenorhynchus-acutus>

²⁷ <https://www.cms.int/en/document/white-sided-dolphin-lagenorhynchus-acutus-baltic-and-north-sea-populations>

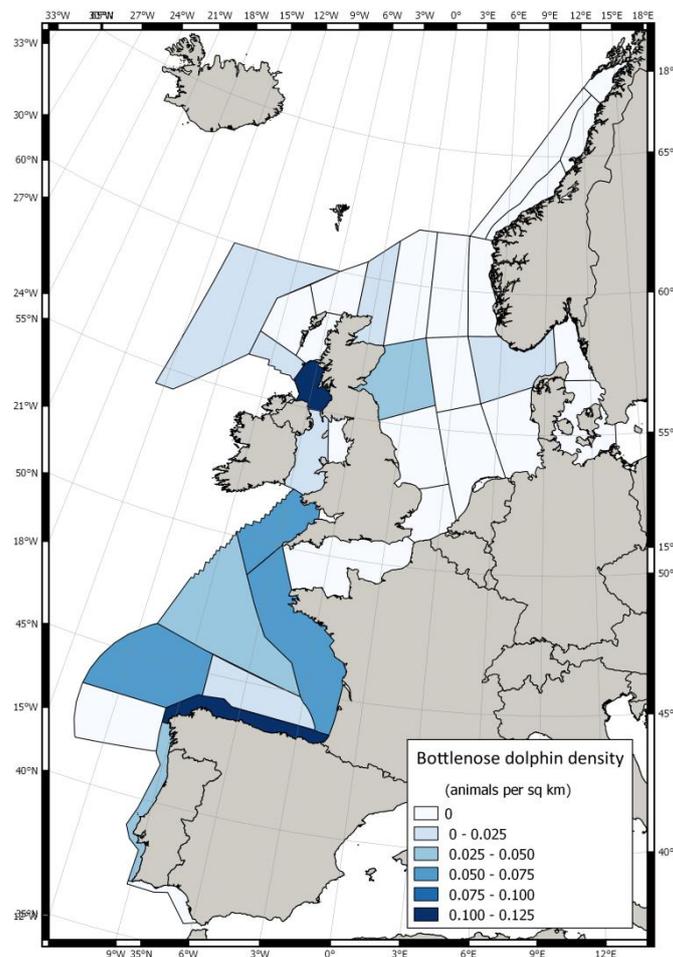
²⁸ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Lagenorhynchus+acutus®ion=MATL>

The current status of Atlantic white-sided dolphins in Appendix II of CMS only covers populations in the North and Baltic Seas and is not a true representation of the species range. Therefore, we propose that the range for Atlantic white-sided dolphins in CMS Appendix II is extended to include the Northeast Atlantic.

Common bottlenose dolphin (*Tursiops truncatus*)

Common bottlenose dolphins (hereafter called bottlenose dolphins) inhabit a wide range of habitats in the North East Atlantic and are found both offshore and in coastal and continental shelf waters (Reid *et al.*, 2003) (Figure 5). There is evidence to suggest that the coastal and offshore populations in the North East Atlantic may be distinct (see, for example, Oudejans *et al.*, 2015). Bottlenose dolphins are rarely observed in the Baltic Sea.

Figure 5. Bottlenose dolphin density from the SCANS III survey in 2016



Like harbour porpoise, bottlenose dolphins are listed in Annex II of the EU Habitats Directive, and Member States are therefore required to have designated Special Areas of Conservation for the species.

The main threats to bottlenose dolphins are fisheries interactions, chemical pollution, disturbance and habitat degradation due to anthropogenic activities such as tourism, shipping and marine renewable energy. They are also occasionally taken in drive hunts in the Faroe Islands.

The conservation status of bottlenose dolphin in Europe is listed as ‘Data Deficient’ in the Red List of threatened species (IUCN 2007)²⁹ although the status for the ASCOBANS region is ‘Least Concern’³⁰. The several Member States within the EU that reported on the conservation status of bottlenose dolphins for Article 17 reported ‘Favourable’ although France reported ‘Unfavourable-Inadequate’ and Spain reported ‘Unknown’, therefore the overall conservation status for the Marine Atlantic by the EU is ‘Unknown’ (Table 7). Bottlenose dolphin was included in Appendix II of the CMS after a request submitted by the Netherlands in 1991. However, the range was only for the populations of the Baltic and North Seas³¹.

Table 7. Member States’ conservation status for Article 17 reporting of bottlenose dolphin³²

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unknown	Unknown
France	Unfavourable-Inadequate	Unknown
Ireland	Favourable	Favourable
Portugal	Favourable	Favourable
UK	Favourable	Favourable
EU	Unknown	Favourable

Justification for amendment of Appendix II

The current status of bottlenose dolphins in Appendix II of CMS only covers populations in the North and Baltic Seas which is by no means a true representation of the species range. Limiting the range to populations of the North and Baltic Seas excludes the offshore populations and also many coastal populations with designated and proposed SACs, *e.g.*, Cardigan Bay and Pen Llŷn a’r Sarnau in Wales (UK), Lower River Shannon in the Republic of Ireland, Baie du Mont Saint Michel in France, and the Sado Estuary in Portugal (ICES, 2016). Therefore, we propose that the range for bottlenose dolphins in CMS Appendix II is extended to include the Northeast Atlantic.

²⁹ <http://www.iucnredlist.org/details/22563/1>

³⁰ <http://www.ascobans.org/en/species/tursiops-truncatus>

³¹ <https://www.cms.int/en/document/bottlenose-dolphin-tursiops-trucatus-baltic-and-north-sea-population>

³² <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Tursiops+truncatus®ion=MATL>

Risso's dolphin (*Grampus griseus*)

Risso's dolphin is a widely-distributed species, inhabiting the deep waters of the continental slope and outer shelf of the marine Atlantic, including the Bay of Biscay and off the Northwest Iberian Peninsula (Reid *et al.*, 2003 and references therein). Risso's dolphins have a strong seasonal distribution in waters around the UK, including off Shetland (Northern Isles of Scotland), Lewis (Western Isles of Scotland), Bardsey Island (North Wales) and the Isle of Man (Evans *et al.*, 2003; Reid *et al.*, 2003; de Boer *et al.*, 2013; Dolman *et al.*, 2013; Weir *et al.*, In Press). In early 2018, the Scottish Government announced plans for the development of a Marine Protected Area (MPA) for Risso's dolphins off North East Lewis (Scotland)^{33,34}. Risso's dolphins are mainly observed in the north-western North Sea and only have vagrant status in the Baltic Sea.

Main potential threats to Risso's dolphins in the Marine Atlantic include fisheries interactions, noise pollution (including from military activities) and occasional takes in the Faroe Islands.

The conservation status of Risso's dolphin in Europe is currently categorised as 'Data Deficient' in the Red List of threatened species (IUCN 2007)³⁵ although listed as 'Least Concern' in the ASCOBANS region³⁶. Member States within the EU that reported on the conservation status of Risso's dolphins for Article 17 all reported 'Unknown' for the two reporting periods between 2001-2012. Therefore, the overall conservation status for the Marine Atlantic by the EU is 'Unknown' (Table 8) based on the lack of evidence. Risso's dolphin was included in Appendix II of the CMS after a request submitted by the Netherlands in 1988. However, the range was only for the populations of the Baltic and North Seas³⁷.

³³ <https://uk.whales.org/news/2018/01/scottish-government-proposes-new-protected-areas-for-marine-life-including-whales-and>

³⁴ <https://www.nature.scot/sites/default/files/2017-11/Marine%20Protected%20Area%20-%20Data%20confidence%20assessment%20-%20North-east%20Lewis%20MPA%20proposal.pdf>

³⁵ <http://www.iucnredlist.org/details/9461/1>

³⁶ <http://www.ascobans.org/en/species/grampus-griseus>

³⁷ <https://www.cms.int/en/document/rissos-dolphin-grampus-griseus-baltic-and-north-sea-populations>

Table 8. Member States' conservation status for Article 17 reporting of Risso's dolphin³⁸

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unknown	NA
France	Unknown	Unknown
Ireland	Unknown	Unknown
Portugal	Unknown	Unknown
UK	Unknown	Unknown
EU	Unknown	Unknown

Justification for amendment of Appendix II

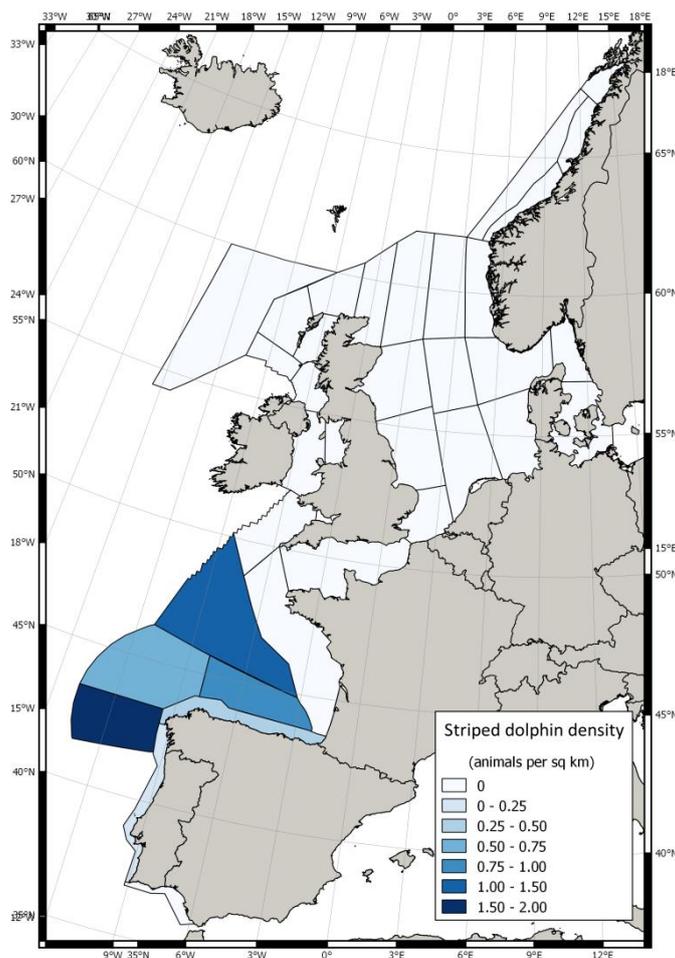
The current status of Risso's dolphin in Appendix II of CMS only covers populations in the North and Baltic Seas which is by no means a true representation of the species' range. Therefore, we propose that the range of Risso's dolphin is extended in Appendix II of the CMS to include the Northeast Atlantic.

³⁸<https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Grampus+griseus®ion=MATL>

Striped dolphin (*Stenella coeruleoalba*)

Striped dolphins in the Eastern North Atlantic occur mainly in waters offshore from the Northwest Iberian Peninsula and in the Bay of Biscay (*e.g.*, Reid *et al.*, 2003; Walker, 2005; Goetz *et al.*, 2015; SCANS III, 2017) (Figure 6). There are some records of striped dolphins further north mainly off south-west Britain and Ireland (Evans *et al.*, 2003; Reid *et al.*, 2003).

Figure 6. Striped dolphin density from the SCANS III survey in 2016



The main threat to striped dolphins in the Marine Atlantic is fisheries interactions (*e.g.*, Aguilar, 2002; ICES WGBYC, 2015). However, there is limited information on current levels of bycatch for Member States.

Striped dolphin in the Eastern North Atlantic is currently not listed on the CMS Appendices. The Red List of threatened species (IUCN 2007) list striped dolphin in Europe as 'Data Deficient'³⁹ although the ASCOBANS region is listed as 'Least

³⁹ <http://www.iucnredlist.org/details/20731/1>

Concern⁴⁰. Striped dolphins in the Eastern Tropical Pacific population and the Mediterranean population are listed on Appendix II since 2001 and 2005 following requests from Pakistan and Monaco, respectively^{41,42}. Member States within the EU that reported on the conservation status of striped dolphins in the Marine Atlantic for the two Article 17 periods between 2001-2012 all reported 'Unknown', with the exception of Ireland which reported 'Favourable' between 2007-2012 and Portugal which reported 'Favourable' in 2001-2006, but 'Unfavourable-Inadequate' in 2007-2012. The overall conservation status for the Marine Atlantic by the EU is 'Unknown' (Table 9).

Table 9. Member States' conservation status for Article 17 reporting of striped dolphin⁴³

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unknown	Unknown
France	Unknown	Unknown
Ireland	Favourable	Unknown
Portugal	Unfavourable-Inadequate	Favourable
UK	Unknown	NA
EU	Unknown	Unknown

Justification for amendment of Appendix II

The lack of data for striped dolphins and the EU conservation status listing as 'Unknown' emphasizes the need for striped dolphins in the North East Atlantic to be included in Appendix II of the CMS.

⁴⁰ <http://www.ascobans.org/en/species/stenella-coeruleoalba>

⁴¹ <https://www.cms.int/en/document/striped-dolphin-stenella-coeruleoalba-eastern-tropical-pacific-population>

⁴² <https://www.cms.int/en/document/striped-dolphin-stenella-coeruleoalba-mediterranean-population-instead-western>

⁴³ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Stenella+coeruleoalba®ion=MATL>

Cuvier's beaked whale (*Ziphius cavirostris*)

Cuvier's beaked whales in the Eastern North Atlantic occur mainly in deep waters off the Iberian Peninsula and in the Bay of Biscay (*e.g.*, Castells and Mayo, 2001; Reid *et al.*, 2003) and in recent years as far north as off north-west Scotland (Evans *et al.*, 2003; SCANS III, 2017).

The main threats to Cuvier's beaked whales in the Marine Atlantic are the impacts of underwater noise due to anthropogenic activities such as military exercises and oil and gas exploration, *e.g.*, seismic surveys, and the ingestion of macro-plastics.

Cuvier's beaked whale in the Eastern North Atlantic is currently not listed on the CMS Appendices. The Mediterranean population of Cuvier's beaked whales is listed on Appendix I since 2014, following a request from the European Union and its 28 Member States⁴⁴. The conservation status of Cuvier's beaked whale in Europe is currently categorised as 'Data Deficient' in the Red List of threatened species (IUCN 2007)⁴⁵ and in the ASCOBANS region⁴⁶. Member States within the EU that reported on the conservation status of Cuvier's beaked whale in the Marine Atlantic for the two Article 17 periods between 2001-2012 all reported 'Unknown', with the exception of the UK which did not report on the species between 2001-2006. The overall conservation status for the Marine Atlantic by the EU is 'Unknown' (Table 10).

Table 10. Member States' conservation status for Article 17 reporting of Cuvier's beaked whale⁴⁷

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
Spain	Unknown	Unknown
France	Unknown	Unknown
Ireland	Unknown	Unknown
Portugal	Unknown	Unknown
UK	Unknown	NA
EU	Unknown	Unknown

⁴⁴ <https://www.cms.int/en/document/cuiviers-beaked-whale-ziphius-cavirostris-mediterranean-subpopulation-appendix-i>

⁴⁵ <http://www.iucnredlist.org/details/23211/1>

⁴⁶ <http://www.ascobans.org/en/species/ziphius-cavirostris>

⁴⁷ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Ziphius+cavirostris®ion=MATL>

Justification for amendment of Appendix II

The lack of data for Cuvier's beaked whales and the EU conservation status listing as 'Unknown' emphasizes the need for Cuvier's beaked whales in the North East Atlantic to be included in Appendix II of the CMS.

Sowerby's beaked whale (*Mesoplodon bidens*)

Sowerby's beaked whales in the Eastern North Atlantic have the most northerly distribution of all the species of *Mesoplodon* in the Atlantic and occur mainly in deeper waters offshore beyond the continental shelf off North West Ireland, North and West Scotland (Reid *et al.*, 2003 and references therein).

The main threats to Sowerby's beaked whales in the Marine Atlantic are the impact of underwater noise due to anthropogenic activities such as military exercises and oil and gas exploration, *e.g.*, seismic surveys, and the ingestion of macro-plastics.

Sowerby's beaked whale in the Eastern North Atlantic is currently not listed on the CMS Appendices. The conservation status of Sowerby's beaked whale in Europe is currently categorised as 'Data Deficient' in the Red List of threatened species (IUCN 2007)⁴⁸ and in the ASCOBANS region⁴⁹. Member States within the EU that reported on the conservation status of Sowerby's beaked whale in the Marine Atlantic for the Article 17 period between 2007-2012 all reported 'Unknown'. In the period of 2001-2006 Ireland was the only Member State to submit a report. The overall conservation status for the Marine Atlantic by the EU is 'Unknown' (Table 11).

Table 11. Member States' conservation status for Article 17 reporting of Sowerby's beaked whale⁵⁰

REGION: Marine Atlantic		
Member State	Conservation status 2007-2012	Conservation status 2001-2006
France	Unknown	NA
Ireland	Unknown	Unknown
UK	Unknown	NA
EU	Unknown	Unknown

Justification for amendment of Appendix II

The lack of data for Sowerby's beaked whale and the EU conservation status listing as 'Unknown' emphasises the need for the species in the North East Atlantic to be included in Appendix II of the CMS.

⁴⁸ <http://www.iucnredlist.org/details/13241/1>

⁴⁹ <http://www.ascobans.org/en/species/mesoplodon-bidens>

⁵⁰ <https://bd.eionet.europa.eu/article17/reports2012/species/summary/?period=3&group=Mammals&subject=Mesoplodon+bidens®ion=MATL>

Next steps

The CMS Appendices listing for the species addressed in this report have not been addressed since when they were added to the Appendices in 1988 and 1991. Furthermore, the range of ASCOBANS was expanded in 2008, whereas the range of the species was not expanded. As a result, the ranges of most species listed do not represent the area covered by the ASCOBANS or ACCOBAMS Agreements nor the range of the species. Further, evidence identifies that both the Baltic Proper and Iberian harbour porpoise populations should be included in Appendix I. The Iberian harbour porpoise population should also be included in Appendix II.

Every six years, Member States are required to report on the conservation status of all habitats and species of community interest to the European Commission under Article 17 of the Habitats Directive. For all species covered in this report, reporting of Member States for Article 17 exceeds the range of the species defined in Appendix II of CMS.

Based on the CMS webpage, Appendices I and II of the Convention may be amended at any meeting of the Conference of Parties by any Contracting Party submitting a proposal in the standard format required.

We present this paper to the 24th Meeting of the Advisory Committee of ASCOBANS as an initial step for the main species in the ASCOBANS range to be re-addressed and the changes proposed in Table 12 to be considered by ASCOBANS Parties. Subsequently, ASCOBANS Parties are requested to obtain the appropriate approvals within the European Union and submit the proposed changes for consideration at the 20th CMS Conference of the Parties in India in 2020.

Table 12. Overview of current conservation status of relevant species with the proposed changes for CMS listing and ASCOBANS status

COMMON NAME	SCIENTIFIC NAME	EU CONSERVATION STATUS	IUCN-STATUS (EUROPE)	IUCN- STATUS ASCOBANS REGION	CMS Appendix	CURRENT CMS POPULATIONS	PROPOSE CHANGE TO RANGE	PROPOSE CHANGE TO STATUS
Harbour porpoise	<i>Phocoena phocoena</i>	Unfavourable-Inadequate	Critically endangered	Critically endangered	App. II since 1988	North and Baltic Sea	Change range to 'Baltic Proper'	Include Baltic porpoise in Appendix I
Harbour porpoise	<i>Phocoena phocoena</i>	Favourable	Vulnerable	Least concern	App. II since 1988	North and Baltic Sea	Change range to 'North Sea and Northeast Atlantic'	
Harbour porpoise	<i>Phocoena phocoena</i> (proposed name <i>Phocoena phocoena meridionalis</i>)	Favourable	NA	Least concern	NA	NA	Add as a separate Iberian population	Include Iberian porpoise in Appendix I and II
Long-finned pilot whale	<i>Globicephala melas</i>	Unknown	Data Deficient	Data Deficient	App. II since 1988	North and Baltic Sea	Extend range to include Northeast Atlantic	
Short-beaked common dolphin	<i>Delphinus delphis</i>	Unfavourable-Inadequate	Data Deficient	Least Concern	App. II since 1988	North and Baltic Sea	Extend range to include Northeast Atlantic	
White-beaked dolphin	<i>Lagenorhynchus albirostris</i>	Favourable	Least Concern	Least Concern	App. II since 1988	North and Baltic Sea	Extend range to include Northeast Atlantic	
Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>	Favourable	Least Concern	Least Concern	App. II since 1988	North and Baltic Sea	Extend range to include Northeast Atlantic	
Common bottlenose dolphin	<i>Tursiops truncatus</i>	Unknown	Data Deficient	Least Concern	App. II since 1991	North and Baltic Sea	Extend range to include Northeast Atlantic	
Risso's dolphin	<i>Grampus griseus</i>	Unknown	Data Deficient	Data Deficient	App. II since 1988	North and Baltic Sea	Extend range to include Northeast Atlantic	
Striped dolphin	<i>Stenella coeruleoalba</i>	Unknown	Data Deficient	Least Concern	NE Atlantic population not on list	Not on CMS list	Add to list - range to include NE Atlantic	Add to CMS Appendix II - 'Data Deficient'

Table 12 continued.

COMMON NAME	SCIENTIFIC NAME	EU CONSERVATION STATUS	IUCN-STATUS (EUROPE)	IUCN- STATUS ASCOBANS REGION	CMS Appendix	CURRENT CMS POPULATIONS	PROPOSE CHANGE TO RANGE	PROPOSE CHANGE TO STATUS
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Unknown	Data Deficient	Data Deficient	NE Atlantic population not on list	Not on CMS list	Add to list - range to include NE Atlantic	Add to CMS Appendix II - 'Data Deficient'
Sowerby's beaked whale	<i>Mesoplodon bidens</i>	Unknown	Data Deficient	Data Deficient	NE Atlantic population not on list	Not on CMS list	Add to list - range to include NE Atlantic	Add to CMS Appendix II - 'Data Deficient'

Acknowledgements

We are very grateful to Phil Hammond (Sea Mammal Research Unit, St. Andrews) for permitting us to use the figures and data from SCANS III and to the ASCOBANS Secretariat and Advisory Committee Parties and other members for their advice and support.

References

Aguilar, A., 2002. Acciones para la conservación del delfín mular. GRUMM- Grup d'estudi i conservació de mamífers marins. Departamento de Biología Animal. Universidad de Barcelona. 179 pp.

Alfonsi, E., Hassani, S., Carpentier, F-G., Le Clec'h, J-Y., Dabin, W., Van Canneyt, O., Fontaine, M.C. and Jung, J-L. 2012 A European melting pot of harbour porpoise in the French Atlantic Coasts inferred from mitochondrial and nuclear data. *PLoS ONE* 7: e44425. DOI:10.1371/journal.pone.0044425.t001.

Boran, J., Evans, P.G.H. and Martin, A.R. 2008. Long-finned pilot whale *Globicephala melas*. pp. 735-738. In: Mammals of the British Isles. Harris, S. and Yalden, D.W. (eds). Handbook. 4th Edition. The Mammal Society, Southampton. 800 pp.

Brereton, T., Kitching, M., Davies, R., McNie, F. and Walker, R. 2016. Photo-identification Analysis of White-beaked Dolphins off South west and North east England 2007-2014. Report for Natural England, number EPR03082. 30 pp.

Cabral, J., Almeida, J., Almeida, P., Dellinger, T., Ferrand, A., Oliveira, M., Palmeirim, J., Queiroz, A.I., Rogado, L. and Santos-Reis, M. (editors). 2005. Livro Vermelho dos Vertebrados de Portugal Instituto da Conservação da Natureza e Biodiversidade. Lisbon. 660 pp. In Portuguese.

Canning, S.J., Santos, M.B., Reid, R.J., Evans P.G.H., Sabin, R.C., Bailey, N. and Pierce, G.J. 2008. Seasonal distribution of white-beaked dolphins (*Lagenorhynchus albirostris*) in UK waters with new information on diet and habitat use. *Journal of the Marine Biological Association of the United Kingdom* 88: 1159–1166.

Cañadas, A., Donovan, G. P., Desportes, G. and Borchers, D. L. 2009. A short review of the distribution of short beaked common dolphins (*Delphinus delphis*) in the central and eastern North Atlantic with an abundance estimate for part of this area. North Atlantic Sightings Surveys. *NAMMCO Scientific Publications* 7: 201-220.

Carlèn, I., Thomas, L., Carlström, J., Amundin, M., Teilmann, J., Tregenza, N., Tougaard, J., Koblitz, J.C., Sveegaard, S., Wennerberg, D., Loisa, O., Dähne, M., Brundiers, K., Kosecka, M., Anker Kyhn, L., Tiberi Ljungqvist, C., Pawliczka, I., Koza, R., Arciszewski, B., Galatius, A., Martin Jabbusch, M., Laaksonlaita, J., Niemi, J.,

Lyytinen, S., Gallus, A., Benke H., Blankett, P., Skóra, K.E. and Acevedo-Gutiérrez, A. 2018. Basin-scale distribution of harbour porpoises in the Baltic Sea provides basis for effective conservation actions. *Biological Conservation* 226: 42–53.

Carlisle, A., Coles, P., Cresswell, G., Diamond, J., Gorman, L., Kinley, C., Rondel, G., Sellwood, D., Telfer, M. and Walker, D. 2001. A report on the whales, dolphins and porpoises of the Bay of Biscay and English Channel 1999. *Orca* 1: 5-53.

Carlström, J. and Berggren, P. 1997. Bycatch rates of harbour porpoises (*Phocoena phocoena*) in Swedish bottom set gillnet fisheries obtained from independent observers. In: Evans P.G.H. (ed.) European Research on Cetaceans - 10:24. Proceedings of the 10th Annual Conference of the European Cetacean Society, Lisbon, 11-13 March 1996, ECS, Kiel.

Castells, A. and Mayo, M. 1992. The Cuvier's beaked whale (*Ziphius cavirostris*) in the Iberian Peninsula. *European Research on Cetaceans* 13: 180.

CODA. 2009. Cetacean Offshore Distribution and Abundance. Final report. Available from SMRU, Gatty Marine Laboratory, University of St Andrews, St Andrews, Fife, KY16 8LB, UK. 43 pp.

http://biology.st-andrews.ac.uk/coda/documents/CODA_Final_Report_11-2-09.pdf

de Boer, M.N., Clark, J., Leopold, M.F., Simmonds, M.P. and Reijnders, P.J.H. 2013. Photo-identification methods reveal seasonal and long-term site-fidelity of Risso's Dolphins (*Grampus griseus*) in shallow waters (Cardigan Bay, Wales). *Open Journal of Marine Science* 3: 66-75. DOI: 10.4236/ojms.2013.32A007.

Dolman S.J. and Hodgins N.K. 2013. Land and boat-based observations of Risso's dolphins off NE Isle of Lewis, Scotland. In: Chen I., Hartman K., Simmonds M., Wittich A. and Wright A.J. (eds). *Grampus griseus* 200th anniversary: Risso's dolphins in the contemporary world. Report from the European Cetacean Society Conference Workshop, 26th European Cetacean Society Conference, Galway, Ireland, 23–29 March 2012. European Cetacean Society Special Publication Series No. 54, pp 44–53.

Evans, P.G.H. and Smeenk, C. 2008. White-beaked dolphin *Lagenorhynchus albirostris*. pp. 724-727. In: Mammals of the British Isles. Harris, S. and Yalden, D.W. (eds). Handbook. 4th Edition. The Mammal Society, Southampton. 800 pp.

Evans, P.G.H., Anderwald, P. and Baines, M.E. 2003. UK Cetacean Status Review Report to English Nature and the Countryside Council for Wales. Sea Watch Foundation, Oxford. 160 pp.

Fernández, R. MacLeod, C.D., Pierce, G.J., Covelo, P., Lope, A., Torres-Palenzuela, J., Valavanis, V. and Santos, M.B. 2013. Inter-specific and seasonal comparison of the niches occupied by small cetaceans off north-west Iberia. *Continental Shelf Research* 64: 88-98. DOI: 10.1016/j.csr.2013.05.008.

Fernández Contreras, M.M., Cardona, L., Lockyer, C.H. and Aguilar, A. 2010. Incidental bycatch of short-beaked common dolphins (*Delphinus delphis*) by pair trawlers off Spain. *ICES Journal of Marine Science* 67: 1732–1738.

Fontaine, M.C., Baird, S.J., Piry, S., Ray, N., Tolley, K.A., Duke, S., Burkun, A.Jr., Ferreira, M., Jauniaux, T., Llavona, A., Ozturk, B., Ozturk, A.A., Ridoux, V., Rogan, E., Sequeira, M., Siebert, U., Vikingsson, G.A., Bouquegneau, J.M. and Michaux, J.R. 2007. Rise of oceanographic barriers in continuous populations of a cetacean: the genetic structure of harbour porpoises in Old World waters. *BMC Biology* 5: 1-16.

Fontaine, M.C., Tolley, K.A., Michaux, J.R., Birkun, A., Ferreira, M., Jauniaux, T., Llavona, Á., Öztürk, B., Oztürk, A.A., Ridoux, V., Rogan, E., Sequeira, M., Bouquegneau, J.M. and Baird, S.J.E. 2010. Genetic and historic evidence for climate-driven population fragmentation in a top cetacean predator: the harbour porpoise in European water. *Proceedings of the Royal Society B: Biological Sciences* 277: 2829–2837.

Fontaine, M.C., Roland, K., Calves, I., Austerlitz, F., Palstra, F.P., Tolley, K.A., Ryan, S., Ferreira, M., Jauniaux, T., Llavona, Á., Öztürk, B., Oztürk, A.A., Ridoux, V., Rogan, E., Sequeira, M., Siebert, U., Vikingsson, G.A., Borrell, A., Michaux, J.R. and Aguilar, A. 2014. Postglacial climate changes and rise of three ecotypes of harbor porpoises (*Phocoena phocoena*) in western Palearctic waters. *Molecular Ecology* 23: 3306–3321.

Galatius, A., Kinze, C.C. and Teilmann, J. 2012. Population structure of harbour porpoises in the Baltic region: evidence of separation based on geometric morphometric comparisons. *Journal of the Marine Biological Association UK* 92: 1669–1676. DOI:10.1017/S0025315412000513.

Goetz, S., Read, F.L., Santos M.B., Pita, C. and Pierce, G.J. 2014. Cetacean-fishery interactions in Galicia (NW Spain): results and management implications of a face-to-face interview survey of local fishers. *ICES Journal of Marine Science* 71: 604-617.

Goetz, S., Read, F.L., Ferreira, M., Portela, J., Santos, M.B., Vingada, J., Siebert, U., Marçalo, A., Santos, J., Araujo, H., Monteiro, S., Caldas, M., Riera, M. and Pierce, G.J. 2015. Cetacean occurrence, habitat preferences and potential for cetacean-fishery interactions in Iberian Atlantic waters: results from a cooperative research involving local stakeholders. *Aquatic Conservation: Marine and Freshwater Ecosystems* 25: 138-154. 2015. DOI: 10.1002/aqc.2481.

ICES Advisory Committee. 2009. ICES Working Group on Marine Mammal Ecology (WGMME) Report. February 2-6 2009, Vigo, Spain. ICES CM 2009/ACOM:21. 129 pp. http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2009/WGMME/wgmme_final_2009.pdf

ICES WGBYC. 2015. Report of the Working Group on Bycatch of Protected Species (WGBYC), 2-6 February 2015, Copenhagen, Denmark. ICES CM 2015\ACOM:26. 80 pp. <http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2015/WGBYC/01%20WGBYC%20->

20Report%20of%20the%20Working%20Group%20on%20Bycatch%20of%20Protected%20Species%20(WGBYC).pdf

ICES. 2016. 1.6.6.2. OSPAR request on indicator assessment of coastal bottlenose dolphins. ICES Special Request Advice Northeast Atlantic Ecoregion. 14 pp.

http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2016/Special_Requests/OSPAR_Indicator_assessment_of_coastal_bottlenose_dolphins.pdf

Kinze, C.C., Addink, M., Smeenk, C., Hartmann, M.G., Richards, H.W., Sonntag, R.P. and Benke, H. 1997. The white-beaked dolphin (*Lagenorhynchus albirostris*) and the white-sided dolphin (*Lagenorhynchus acutus*) in the North and Baltic Seas: review of available information. *Report of the International Whaling Commission* 47: 675–681.

Kuiken, T., Simpson, V.R., Allchin, C.R., Bennet, P.M., Codd, G.A., Harris, E.A., Howes, G.J., Kennedy, S., Kirkwood, J.K., Law, R.J., Merret, N.R. and Philips, S. 1994. Mass mortality of common dolphins (*Delphinus delphis*) in south west England due to incidental capture in fishing gear. *Veterinary Record* 134: 81–89.

Lambert, E., Pierce, G.J., Hall, K., Brereton, T., Dunn, T.E., Wall, D., Jepson, P.D., Deaville, R. and MacLeod, C.D. 2014. Cetacean range and climate in the eastern North Atlantic: future predictions and implications for conservation. *Global Change Biology* 20: 1782-1793. DOI:10.1111/gcb.12560.

López, A., Pierce, G.J., Santos, M.B., Gracia, J. and Guerra, A. 2003. Fishery by-catches of marine mammals in Galician waters: Results from on-board observations and an interview survey of fishermen. *Biological Conservation* 111: 25–40.

MacLeod C.D., Bannon S.M., Pierce G.J., Schweder C., Learmonth J.A., Reid R.J. and Herman J.S. 2005. Climate change and the cetacean community of north-west Scotland. *Biological Conservation* 124: 477–483.

Mannocci, L., Dabin, W., Augeraud-Veron, E., Dupuy, J.-F., Barbraud, C. and Ridoux, V. 2012. Assessing the impact of bycatch on dolphin populations: the case of the common dolphin in the eastern North Atlantic. *PLoS ONE* 7:e32615. DOI.org/10.1371/journal.pone.0032615.

Morizur, Y., Berrow, S.D., Tregenza, N.J.C., Couperus, A.S. and Pouvreau, S. 1999. Incidental catches of marine-mammals in pelagic trawl fisheries of the northeast Atlantic. *Fisheries Research* 41: 297-307.

Northridge, S.P. and Hammond, P.S. 1999. Estimation of porpoise mortality in UK gill and tangle net fisheries in the North Sea and west of Scotland. Paper SC/51/SM42 presented to the Scientific Committee of the International Whaling Commission, Grenada, May 1999.

Northridge, S.P., Tasker, M.L., Webb, A. and Williams, J.M. 1995. Distribution and relative abundance of harbour porpoise (*Phocoena phocoena* L.), white-beaked dolphins (*Lagenorhynchus albirostris* Gray) and minke whales (*Balaenoptera acutorostrata* Lacepède) around the British Isles. *ICES Journal of Marine Science* 52: 55–66.

- Northridge, S., Tasker, M., Webb, A., Camphuysen, K. and Leopold, M. 1997. White-beaked (*Lagenorhynchus albirostris*) and Atlantic white-sided dolphin (*L. acutus*) in Northwest European and US North Atlantic waters. *Report of the International Whaling Commission* 47: 797–805.
- Northridge, S., Kingston, A. and Thomas, L. 2017. Annual report on the implementation of Council Regulation (EC) No 812/2004 during 2016. Final report to DEFRA. Sea Mammal Research Unit, St. Andrews, UK. 36 pp.
- Oudejans, M.G., Visser, F., Englund, A., Rogan, E. and Ingram, S.N. 2015. Evidence for distinct coastal and offshore communities of bottlenose dolphins in the North East Atlantic. *PLoS ONE* 10:e0122668. DOI: 10.1371/journal.pone.0122668
- Peltier, H., Jepson, P.D., Dabin, W., Daniel, P., Van Canneyt, O. and Ridoux, V. 2014. The contribution of stranding data to monitoring and conservation strategies for cetaceans: Developing spatially explicit mortality indicators for common dolphins (*Delphinus delphis*) in the eastern North-Atlantic. *Ecological Indicators* 30: 203-214.
- Read, F.L. 2016. Understanding cetacean and fisheries interactions in the north-west Iberian Peninsula. PhD thesis, Universidade de Vigo, Spain. 309 pp.
- Reid, J.B., Evans, P.G.H. and Northridge, S.P. 2003. Atlas of cetacean distribution in North-west European Waters. JNCC, Peterborough. 75 pp.
- Reyes, J.C. 1991. The conservation of small cetaceans: a review. Report prepared for the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals. UNEP/CMS Secretariat, Bonn.
- Robinson, K.P., Einfeld, S.M., Costa, M. and Simmonds, M.P. 2015. Short-beaked common dolphin (*Delphinus delphis*) occurrence in the Moray Firth, north-east Scotland. *Marine Biodiversity Records* 3:e55. DOI:10.1017/S1755267210000448.
- SAMBAH Final Report to the European Commission. 2016. Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise (SAMBAH) LIFE Project Number LIFE08 NAT/S/000261. 77 pp. <http://www.sambah.org/SAMBAH-Final-Report-FINAL-for-website-April-2017.pdf>
- SCANS III. 2017. Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Final report. 39 pp. <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revised.pdf>
- Skora, K.E. and Kuklik, I. 2003. Bycatch as a potential threat to harbour porpoises (*Phocoena phocoena*) in the Polish Baltic waters. In: Harbour Porpoises in the North Atlantic. *NAMMCO Scientific Publications* 5: 303-315.
- Sveegaard, S., Galatius, A., Dietz, R., Kyhn, L., Koblitz, J.C., Amundin, M., Nabe-Nielsen, J., Sinding, M.-H.S., Andersen, L.W., and Teilmann, J., 2015. Defining management units for cetaceans by combining genetics, morphology, acoustics and

satellite tracking. *Global Ecology and Conservation*, 3: 839–850. DOI:10.1016/j.gecco.2015.04.002.

Tregenza, N. and Collet, A. 1998. Common dolphin (*Delphinus delphis*) bycatch in pelagic trawl and other fisheries in the northeast Atlantic. *Report of the International Whaling Commission* 48: 453-459.

Tregenza, N.J.C., Berrow, S.D., Hammond, P.S. and Leaper, R. 1997. Harbour porpoise (*Phocoena phocoena* L.) by-catch in set gillnets in the Celtic Sea. *Ices Journal of Marine Science* 54: 896-904.

Vingada, J., Ferreira, M., Marçalo, A., Santos, J., Araújo, H., Oliveira, I., Monteiro, S., Nicolau, L., Gomes, P., Tavares, C. and Eira, C. 2011. Safesea-Manual de apoio para a promoção de uma pesca mais sustentável e de um mar seguro para cetáceos. Programa EEA-Grants- EEA Financial Mechanism 2004–2009 (Project 0039). 114 pp.

Vinther, M., Larsen, F., 2004. Updated estimates of harbour porpoise (*Phocoena phocoena*) bycatch in the Danish North Sea bottom-set gillnet fishery. *Journal of Cetacean Research and Management* 6: 19–24.

Walker, J. D. 2005. Using oceanographic features to predict areas of high cetacean diversity. MSc Thesis. University of Wales, Bangor.

Weir, C.R., Hodgins, N.K., Dolman, S.J. and Walters, A. In Press. Risso's dolphins (*Grampus griseus*) in a proposed Marine Protected Area off east Lewis (Scotland, UK), 2010–2017. *Journal of the Marine Biological Association UK*.

Wiemann, A., Andersen, L., Berggren, P., Siebert, U., Benke, H., Teilmann, J., Lockyer, C., Pawliczka, I., Skóra, K., Roos, A., Lyrholm, T., Paulus, K., Ketmaier, V. and Tiedemann, R. 2010. Mitochondrial Control Region and microsatellite analyses on harbour porpoise (*Phocoena phocoena*) unravel population differentiation in the Baltic Sea and adjacent waters. *Conservation Genetics* 11: 195–211.

Annex 1

IUCN Red List of Threatened Species

IUCN Red List of Threatened Species⁵¹ assessment aims to *'provide information and analyses on the status, trends and threats to species in order to inform and catalyse action for biodiversity conservation'*. For the present report, the European IUCN Regional Assessment Status has been included for each species. However, it should be noted that for the several of the species covered in this report, the conservation status is from 2007 and it is noted on the webpage that the status requires updating. The Red List Assessment categories are Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct. However, there is no distinction for the different regional seas within Europe for most species.

Convention on the Conservation of Migratory Species of Wild Animals (CMS)

The Convention on the Conservation of Migratory Species of Wild Animals (CMS)⁵², or the 'Bonn Convention' is overseen by the United Nations Environment Programme (UNEP) and is the only global convention for migratory species. Within the CMS there are two appendices, Appendix I and Appendix II.

Species listed on Appendix I are 'Endangered Migratory Species' which includes species that are *'facing a very high risk of extinction in the wild in the near future'*. Range States of Appendix I species are required to strictly protect them by *'prohibiting the taking of such species, with very restricted scope for exceptions; conserving and where appropriate restoring their habitats; preventing, removing or mitigating obstacles to their migration and controlling other factors that might endanger them'*.

Species listed on Appendix II are 'Migratory species conserved through Agreements' and covers species that *'have an unfavourable conservation status and that require international agreements for their conservation and management, as well as those that have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement'*. It further requests that Range States *'conclude global or regional Agreements for the conservation and management of individual species or groups of related species'*.

⁵¹ <https://www.iucnredlist.org>

⁵² <https://www.cms.int/>

The species included in the appendices may be amended at any meeting of the Conference of Parties by a formal submission from any Contracting Party. Since the agreement entered force in 1983, for cetaceans species in the North and the Baltic Seas, the only amendments to the appendices have been the inclusion of the 8 main species in Appendix II in 1988 and 1991 (see Table 12 for an overview). However, the North East Atlantic populations for these species are presently not included.

Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS) and Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)

Under the auspices of the CMS is the Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS)⁵³ which entered in to force in 1994. In 2008, the ASCOBANS agreement area was extended to include the North East Atlantic and Irish Sea and subsequently the name changed to the Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS). Whilst the agreement area includes Ireland, Spain and Portugal, they are not Parties of ASCOBANS. ASCOBANS aims to *'promote close cooperation between countries with a view to achieving and maintaining a favourable conservation status for small cetaceans throughout the Agreement Area'*.

The Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)⁵⁴ which includes to the west of the Strait of Gibraltar is also under the auspices of the CMS. ACCOBAMS is *'a cooperative tool for the conservation of marine biodiversity in the Mediterranean and Black Seas'*. Spain and Portugal are both Parties of ACCOBAMS. In 2010 Parties adopted a Resolution to extend the Agreement Area to include the waters of the Atlantic already covered by ASCOBANS. Whilst the extension was agreed, to date it has not been formally ratified.

ASCOBANS, *per se*, does not formally have a conservation status for each species, ASCOBANS uses the IUCN Red List of Threatened Species assessment (see above) to provide a conservation status for the ASCOBANS Area. Although ASCOBANS is a daughter agreement of the CMS, the distribution and abundance (and therefore range) of the main cetacean species is not consistent with the current populations for CMS, most notably due to the exclusion of the North East Atlantic populations by CMS.

⁵³ <https://www.ascobans.org>

⁵⁴ <https://www.accobams.org>

European Union Conservation Status

Within Europe, the European Union oversees the legislation relevant to conservation of cetaceans. The main legislative framework for cetaceans in relation to the present report is the Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (the “Habitats Directive” 92/43/EEC)⁵⁵. The Habitats Directive aims to ‘*promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements*’. All species of cetacean are listed in Annex IV as “*species of community interest in need of strict protection*” while the bottlenose dolphin (*Tursiops truncatus*) and harbour porpoise (*Phocoena phocoena*) are also listed in Annex II which requires the designation Special Areas of Conservation (SACs) for their protection.

Member States are required to report to the European Commission on a six-yearly cycle on their implementation of Articles 12 and 17 for cetaceans. The assessment is made based on information on status and trends of species, populations or habitats, and on information on main pressures and threats. Each Member States assesses the conservation status for each species as being either ‘Unfavourable-Bad’ (red), ‘Unfavourable-Inadequate’ (orange) ‘Favourable’ (green) or ‘Unknown’ (grey). Based on the assessments by each Member State, the European Union provide an overall conservation status for each species. For the present report, we only included data from the Marine Atlantic (all species) and the Marine Baltic (harbour porpoise only).

⁵⁵ http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm