

**European Community Directive
on the Conservation of Natural Habitats
and of Wild Fauna and Flora
(92/43/EEC)**

**Fourth Report by the United Kingdom
under Article 17**

on the implementation of the Directive
from January 2013 to December 2018

Conservation status assessment for the species:

**S2031 - Atlantic white-sided dolphin (*Lagenorhynchus
acutus*)**

UNITED KINGDOM

IMPORTANT NOTE - PLEASE READ

- The information in this document represents the UK Report on the conservation status of this species, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- It is based on supporting information provided by the geographically-relevant Statutory Nature Conservation Bodies, which is documented separately.
- The 2019 Article 17 UK Approach document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Maps showing the distribution and range of the species are included (where available).
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the UK assessments. Further underpinning explanatory notes are available in the related country-level reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was not relevant to this species (section 12 Natura 2000 coverage for Annex II species).
- The UK-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, <https://jncc.gov.uk/article17>, for further information on UK Article 17 reporting.

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NATIONAL LEVEL

1. General information

1.1 Member State	UK
1.2 Species code	2031
1.3 Species scientific name	<i>Lagenorhynchus acutus</i>
1.4 Alternative species scientific name	
1.5 Common name (in national language)	Atlantic white-sided dolphin

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2013-2018
2.3 Distribution map	Yes
2.4 Distribution map Method used	Insufficient or no data available
2.5 Additional maps	No

3. Information related to Annex V Species (Art. 14)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	No
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	No
	c) regulation of the periods and/or methods of taking specimens	No
	d) application of hunting and fishing rules which take account of the conservation of such populations	No
	e) establishment of a system of licences for taking specimens or of quotas	No
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	No
	g) breeding in captivity of animal species as well as artificial propagation of plant species	No
	h) other measures	No

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3.3 Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

b) Statistics/ quantity taken	Provide statistics/quantity per hunting season or per year (where season is not used) over the reporting period					
	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
Min. (raw, ie. not rounded)						
Max. (raw, ie. not rounded)						
Unknown	No	No	No	No	No	No

3.4. Hunting bag or quantity taken in the wild Method used

3.5. Additional information

BIOGEOGRAPHICAL LEVEL

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs

Marine Atlantic (MATL)

4.2 Sources of information

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- JNCC (2017). JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys .
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5. Range

5.1 Surface area (km ²)	831438	
5.2 Short-term trend Period	1994-2018	
5.3 Short-term trend Direction	Stable (0)	
5.4 Short-term trend Magnitude	a) Minimum	b) Maximum
5.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data	
5.6 Long-term trend Period		
5.7 Long-term trend Direction		
5.8 Long-term trend Magnitude	a) Minimum	b) Maximum
5.9 Long-term trend Method used		
5.10 Favourable reference range	a) Area (km ²)	831438
	b) Operator	
	c) Unknown	
	d) Method	Range estimated for the current period matches the range given in the 2013 reporting round (excluding analytic differences).
5.11 Change and reason for change in surface area of range	Use of different method	
	The change is mainly due to:	Use of different method
5.12 Additional information	Range estimated for the current period matches the range given in the 2013 reporting round (excluding analytical differences). This range is considered sufficient and includes all significant ecological variations to ensure survival of the species. Areas within the range are utilised to a lesser or greater extent.	

6. Population

6.1 Year or period	2016	
6.2 Population size (in reporting unit)	a) Unit	number of individuals (i)
	b) Minimum	7590

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	c) Maximum	109556
	d) Best single value	28836
6.3 Type of estimate	95% confidence interval	
6.4 Additional population size (using population unit other than reporting unit)	a) Unit b) Minimum c) Maximum d) Best single value	
6.5 Type of estimate		
6.6 Population size Method used	Complete survey or a statistically robust estimate	
6.7 Short-term trend Period	2007-2018	
6.8 Short-term trend Direction	Unknown (x)	
6.9 Short-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.10 Short-term trend Method used	Insufficient or no data available	
6.11 Long-term trend Period		
6.12 Long-term trend Direction		
6.13 Long-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.14 Long-term trend Method used		
6.15 Favourable reference population (using the unit in 6.2 or 6.4)	a) Population size b) Operator c) Unknown x d) Method	
6.16 Change and reason for change in population size	No change The change is mainly due to:	
6.17 Additional information	The estimate of population size (6.2) is given as a point estimate (6.2d) with the corresponding 95% confidence intervals (6.2b&c). This is the first reliable abundance estimate following a dedicated survey covering UK waters for this species.	

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat	a) Are area and quality of occupied habitat sufficient (for long-term survival)? b) Is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)?	Unknown
7.2 Sufficiency of area and quality of occupied habitat Method used	Based mainly on expert opinion with very limited data	

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7.3 Short-term trend Period	2007-2018
7.4 Short-term trend Direction	Unknown (x)
7.5 Short-term trend Method used	Based mainly on expert opinion with very limited data
7.6 Long-term trend Period	
7.7 Long-term trend Direction	
7.8 Long-term trend Method used	
7.9 Additional information	

8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
Geotechnical surveying (C09)	M
Industrial or commercial activities and structures generating noise, light, heat or other forms of pollution (F25)	M
Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species (G01)	M
Bycatch and incidental killing (due to fishing and hunting activities) (G12)	M
Mixed source marine water pollution (marine and coastal) (J02)	M
Threats and pressures from outside the EU territory (Xe)	M
Threat	Ranking
Geotechnical surveying (C09)	M
Industrial or commercial activities and structures generating noise, light, heat or other forms of pollution (F25)	M
Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species (G01)	M
Bycatch and incidental killing (due to fishing and hunting activities) (G12)	M
Mixed source marine water pollution (marine and coastal) (J02)	M
Decline or extinction of related species (e.g. food source / prey, predator / parasite, symbiote, etc.) due to climate change (N07)	M
Threats and pressures from outside the EU territory (Xe)	M

8.2 Sources of information

8.3 Additional information

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9. Conservation measures

9.1 Status of measures

- a) Are measures needed? No
- b) Indicate the status of measures

9.2 Main purpose of the measures taken

9.3 Location of the measures taken

9.4 Response to the measures

9.5 List of main conservation measures

9.6 Additional information

10. Future prospects

10.1 Future prospects of parameters

- a) Range Good
- b) Population Unknown
- c) Habitat of the species Unknown

10.2 Additional information

These results are based on the current conservation status for each parameter combined with the future trend for each parameter. The future trend is an estimate of how the parameter is likely to progress into the future, using the current trend as a baseline and considering the balance between threats and measures to assess how these are likely to affect that trend over the next two reporting cycles (12 years). For Atlantic white-sided dolphin, the future trend of Range is assessed as Overall Stable. As the current conservation status for Range is Favourable for this species, the future prospects are considered Good. The future trend and consequently the future prospects for the Population and Habitat parameters are assessed as Unknown; this is due to there being insufficient data to establish current trends for these parameters.

11. Conclusions

11.1. Range

Favourable (FV)

11.2. Population

Unknown (XX)

11.3. Habitat for the species

Unknown (XX)

11.4. Future prospects

Unknown (XX)

11.5 Overall assessment of Conservation Status

Unknown (XX)

11.6 Overall trend in Conservation Status

Unknown (x)

11.7 Change and reasons for change in conservation status and conservation status trend

a) Overall assessment of conservation status

Use of different method

The change is mainly due to: Use of different method

b) Overall trend in conservation status

No change

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The change is mainly due to:

11.8 Additional information

Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is stable and (ii) the current Range surface area is approximately equal to the Favourable Reference Range.

Conclusion on Population reached because: (i) the FRP is unknown; and (ii) the short-term trend direction in Population size is unknown.

Conclusion on Habitat for the species reached because: (i) the area of habitat is sufficiently large but (ii) the habitat quality is unknown for the long-term survival of the species; and (iii) the short-term trend in area and quality of habitat is unknown.

Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; but (ii) the Future prospects for Population are unknown; and (iii) the Future prospects for Habitat for the species are unknown.

Overall assessment of Conservation Status is Unknown because two or more of the conclusions are Unknown.

Overall trend in Conservation Status is based on the combination of the short-term trends for Range - stable, Population - unknown, and Habitat for the species - unknown.

12. Natura 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network (on the biogeographical/marine level including all sites where the species is present)

- a) Unit
- b) Minimum
- c) Maximum
- d) Best single value

12.2 Type of estimate

12.3 Population size inside the network Method used

12.4 Short-term trend of population size within the network Direction

12.5 Short-term trend of population size within the network Method used

12.6 Additional information

13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

13.3 Other relevant Information

Distribution Map

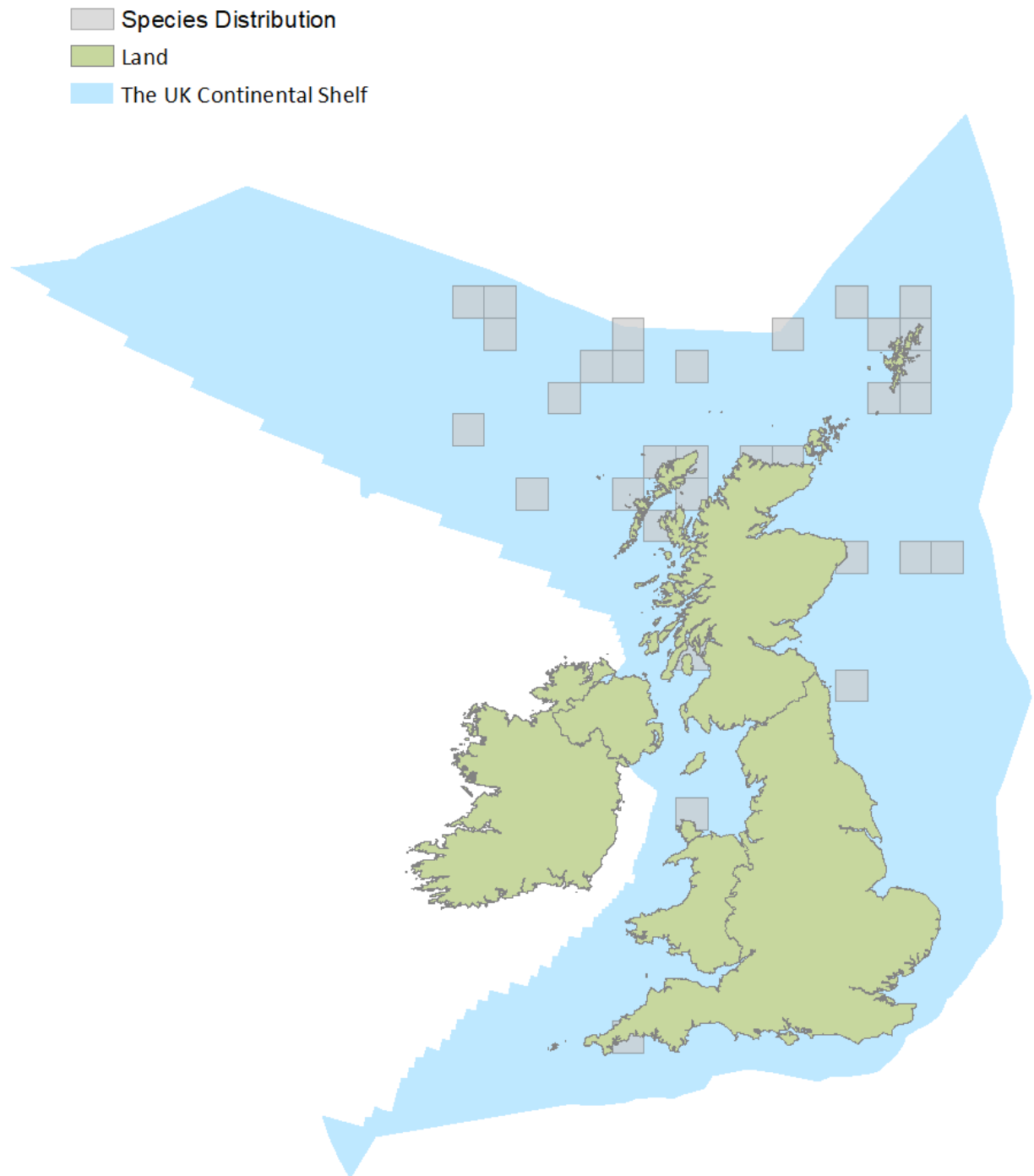


Figure 1: UK distribution map for S2031 - Atlantic white-sided dolphin (*Lagenorhynchus acutus*).

The 50km grid square distribution map is based on available species records within the current reporting period. For further details see the 2019 Article 17 UK Approach document.

Range Map

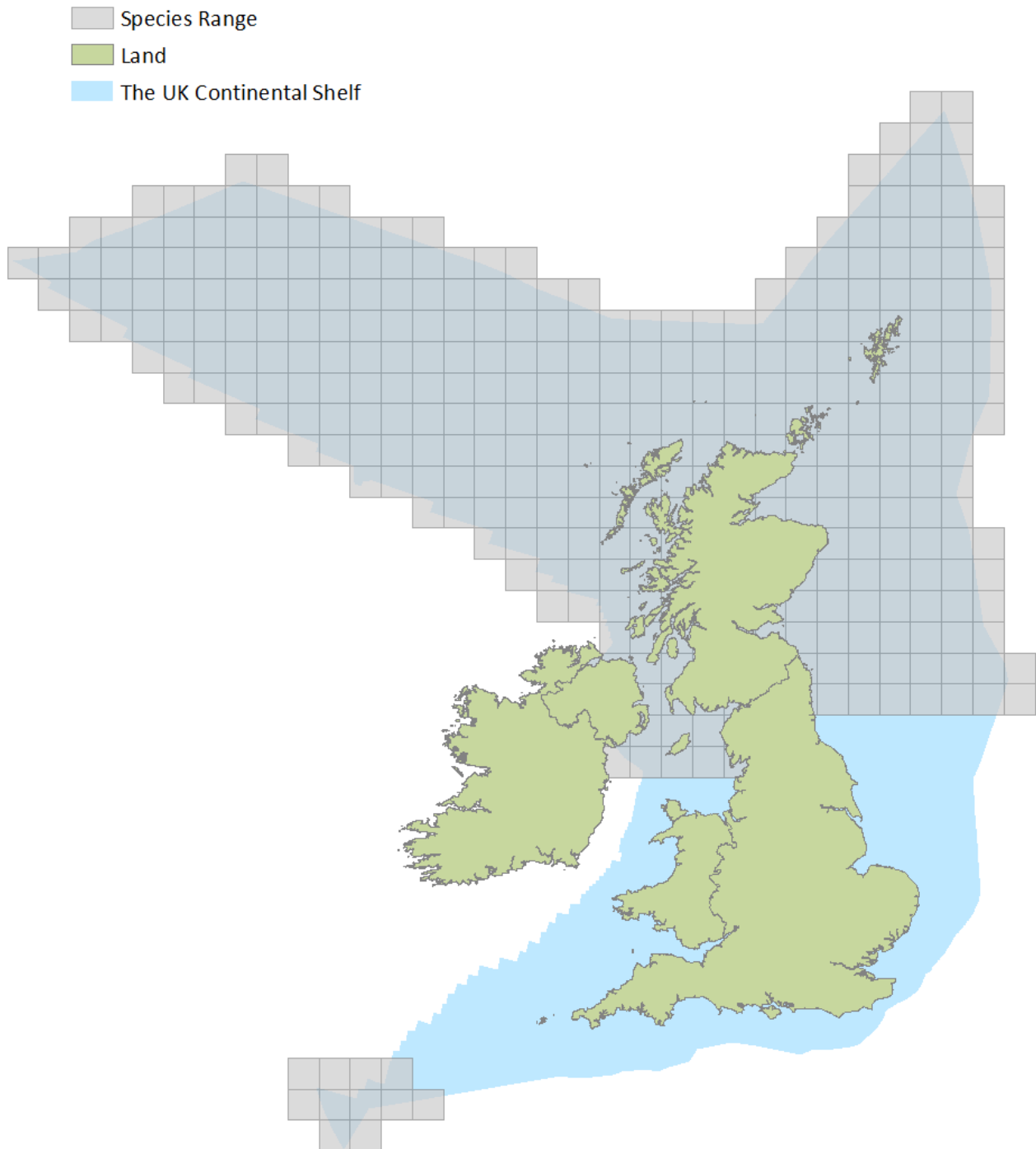


Figure 2: UK range map for S2031 - Atlantic white-sided dolphin (*Lagenorhynchus acutus*).

The range for the 2013-2018 report was based on an analysis of effort related survey data spanning 1994-2010 compiled for the Joint Cetacean Protocol (JCP) undertaken by Paxton et al. (2016). The estimated range was based on a modelled prediction of Atlantic white-sided dolphin (*Lagenorhynchus*

acutus) distribution during August 2010 (see Paxton et al., 2016 for further detail) and adapted based on additional sightings data and expert knowledge for the current reporting period. The range was mapped using a grid of 50x50km resolution and projected to ETRS LAEA 5210.

Explanatory Notes

Species name: *Lagenorhynchus acutus* (2031)

Field label	Note
2.1 Sensitive species	This refers to sensitivities around publishing distribution data.
2.3 Distribution map	The distribution illustrated in 2.3 under-represents the distribution of this species. Due to low survey effort, their presence in offshore areas is not well represented by the map, though it does illustrate their northerly distribution. The distribution map is based on actual sightings of Atlantic white-sided dolphin, covering the UK Exclusive Economic Zone (EEZ) and UK Continental Shelf area (hereafter referred to as 'UK waters') between 2013 and 2018. This collates sightings data from the SCANS-III, National Biodiversity Network, SeaWatch Foundation, MARINELife and ORCA datasets and includes both effort related sightings and confirmed opportunistic sightings collected from land, ship and aerial platforms during this period. The highest densities of Atlantic white-sided dolphin tend to occur offshore (Weir et al., 2001; Macleod et al., 2003; Macleod, 2004; Stone, 2015) It is likely that the species range gives a better indication of where the species is likely to be found in UK waters.
2.5 Additional maps	Predicted core range for Atlantic white-sided dolphin in UK waters. No evidence of change since 2013 reporting round. The 2013 range was based on an analysis of effort-related survey data spanning 1994-2010 compiled for the Joint Cetacean Protocol (JCP) undertaken by Paxton et al. (2016). The estimated range was based on a modelled prediction of Atlantic white-sided dolphin distribution during August 2010 and adapted based on additional sightings data and expert knowledge (see Paxton et al., 2016 for further detail).

Species name: *Lagenorhynchus acutus* (2031) Region code: MATL

Field label	Note
5.3 Short term trend; Direction	Range for the current report (831,438 km ²) is equal to the range presented in the 3rd reporting round (831,424km ²).
5.5 Short term trend; Method used	The 2013 reported range was based on an analysis of effort related survey data compiled for the JCP undertaken by Paxton et al. (2016). The distribution data collated for the current report was compared with the predicted range from the 2013 report. As there was no discernible difference between the 3rd (2013) and 4th (2019) reporting rounds, the range is considered stable.
5.10 Favourable reference range	The favourable reference range is approximately equal to the surface area given in Section 5.1 of the assessment report.
5.11 Change and reason for change in surface area of range	Range is considered stable but there is a minor difference in the range value between this report and the 3rd reporting round (2013). The difference is due to the use of a slightly different grid template and does not represent an actual difference in the species range between reporting rounds.
6.1 Year or Period	This is when the SCANS-III survey was conducted (Hammond et al. 2017).
6.2 Population size	SCANS-III block estimates of abundance have been pro-rated by area across UK waters. Minimum and maximum are the lower and upper 95% confidence intervals respectively. The best single value is the point estimate.
6.6 Population size; Method used	The SCANS-III survey was designed to provide robust estimates of cetacean abundance. The survey provides coverage of UK EEZ waters. The area west of the EEZ out to the UK Continental Shelf boundary was assumed to have the same density of animals as the adjacent survey block from SCANS-III. The resulting estimates are considered statistically robust.

6.10 Short term trend; Method used	This is the first time that an assessment of Atlantic white-sided dolphin abundance from a single survey with coverage of the UK EEZ has been made (SCANS-III; Hammond et al. 2017). The previous reporting round (2013) did give a value for Atlantic white-sided dolphin abundance but there is little confidence in the estimate. The estimate was derived from the SCANS-II (2005) survey but the match between the model prediction and that based on the raw survey data was poor and it is not comparable with the estimate derived from the SCANS-III (2016). Therefore, assessment of trend is not achievable.
6.15 Favourable reference population	This is the first reliable abundance estimate following a dedicated survey covering UK waters for this species. The 3rd UK Article 17 report set an FRV for Atlantic white-sided dolphin abundance but there is low confidence in the estimate. It was based on abundance estimates derived from the SCANS II (2005) and CODA (2007) surveys. However, it is not as robust as the estimate derived from the single SCANS III survey in 2016. Given there is only one reliable population estimate and a lack of reliable trend information it is not possible to state whether the current population represents a favourable reference population. The FRP is therefore currently 'Unknown'.
7.1 Sufficiency of area and quality of occupied habitat	As data relating to habitat quality is limited for this species, the assessment of this parameter is based on the conclusions for range and population as a proxy for habitat. Although Atlantic white-sided dolphin range is considered stable, with only one reliable UK abundance estimate it is not possible to explore trends and the conclusion for the population parameter is Unknown. As the population parameter is Unknown, we cannot conclude that the supporting habitat is sufficient.
8.1 Characterisation of pressures/ threats	General information for Atlantic white-sided dolphin: Pressure ranking is mainly based on expert opinion and data from post mortem of stranded animals, which indicate sources of mortality for this species (Deaville et al, 2011:2017). A literature search was carried out to support the assessments. The UK Dolphin and Porpoise Conservation Strategy (initial draft presented to stakeholders in April 2018) was used in support of identification of pressures and threats.
8.1 Characterisation of pressures/ threats	C09 Geotechnical surveying. Application of pressure: Used where there is evidence that this pressure alone, has an impact rated Medium or above. Considers all geotechnical surveying activity. Atlantic white-sided dolphins were the most numerous species recorded during visual and/or acoustic observation between 1994 and 2010 in UK waters (Stone, 2015) indicating relatively high exposure to this pressure. Seismic and other geotechnical surveys have an immediate influence on Atlantic white-sided dolphins, causing disturbance. The species shows strong avoidance of seismic activity (Stone, 2015; Stone et al., 2017) with significant increases in fast swimming (Stone, 2003), orientation variation, and displaying strong lateral spatial avoidance (Stone and Tasker, 2006). This may indirectly influence survival and/or fecundity.
8.1 Characterisation of pressures/ threats	F25 Industrial or commercial activities and structures generating noise, light, heat or other forms of pollution. Application of pressure: Used to identify risk of the cumulative effects of noise on cetaceans. Cetaceans rely on echolocation for navigation, foraging and communication, making them sensitive to noise (Middel and Verones, 2017). Although various individual sources of disturbance have been identified as potential pressures in the pre-defined EU list, these pressures independently have not been identified as Medium or High risk to Atlantic white-sided dolphins in UK waters, with the exception of geotechnical surveying. For example, disturbance reactions have been observed in response to shipping (Hermannsen et al., 2014), but evidence does not suggest this alone is a significant risk for the species. The cumulative impact of these and other sources of noise disturbance may, however, be greater when combined.

8.1 Characterisation of pressures/ threats	Xe Threats and pressures from outside the EU territory. Atlantic white-sided dolphin has been historically hunted in neighbouring waters, and the species is taken annually in hunts in NE Atlantic countries out with the EU. This species is still taken as part of the pilot whale hunt and opportunistically in the Faroe Islands, with over 400 animals recorded in some years over the past decade (http://www.whaling.fo/en/regulated/450-years-of-statistics/catches).
8.1 Characterisation of pressures/ threats	G01 Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species. Application of pressure: Used to identify risk from prey depletion and disturbance due to fishing activity. Starvation is identified as an important cause of death for Atlantic white-sided dolphin in UK waters, with 9% (6/64) of animals examined between 2000 and 2017 diagnosed with starvation as the cause of death (Deaville, 2011:2017). However, prey depletion can result from both natural and anthropogenic causes. No link has been identified between commercial fishing practices and the cases of cetacean starvation recorded through the UK CSIP.
8.1 Characterisation of pressures/ threats	G12 Bycatch and incidental killing (due to fishing and hunting activities). Application of pressure: Used to identify risk from bycatch in active fishing gears. Atlantic white-sided dolphins are susceptible to capture in midwater trawl nets (Ross, 2003) and substantial numbers have been bycaught in pelagic trawl fisheries for horse mackerel and mackerel south-west of Ireland (Reeves et al., 1999) and in the English Channel (Morizur et al., 1999). Post-mortem of stranded animals during 2000-2017 identified bycatch as a cause of the death in 2% (1/64) of the animals. (Deaville, 2011:2017). The UK Bycatch Monitoring Programme also reported a single bycaught animal ('probable' identification) in 2013. However, the offshore distribution reduces the chance of this issue being observed given limited bycatch observer effort and the reduced chance of dead animals stranding.
8.1 Characterisation of pressures/ threats	N07 Decline or extinction of related species (e.g. food source / prey, predator / parasite, symbiot, etc.) due to climate change. Application of pressure: Used to identify risk of changes in availability of prey as a result of from climate change. There is no current evidence for the effects of climate change on Atlantic white-sided dolphins. The effects of climate change on Atlantic white-sided dolphins is likely to be mediated through variation in prey resource initially. The species has a varied diet with a preference for gadiformes and they adapt their feeding seasonally depending on movement of prey species (Hernandez-Milian et al., 2016). Atlantic white-sided dolphins may therefore adapt to new food sources, potentially reducing the impact of this threat.
8.1 Characterisation of pressures/ threats	J02 Mixed source marine water pollution (marine and coastal). Contaminant concentrations in Atlantic white-sided dolphins were lower than other marine mammal species stranded along the southern North Sea coast (Van De Vijver et al., 2003), likely due to their largely offshore distribution. However, in blubber samples taken around Greenland, Finland, and the Faroe Islands, PDBE levels in Atlantic white-sided dolphins were markedly higher in the males sampled than in some other cetacean species (Rotander et al., 2012), and varied across years with the peaks around 2000 when production levels were at their highest.
9.5 List of main conservation measures	CJ01 Reduce impact of mixed source pollution: The impact of chemical pollution on Atlantic white-sided dolphins is an issue (Jepson et al, 2016). However, establishing measures beyond the historic ban on PCB use, has not been achieved to date. Further information is required to understand where exposure is occurring to be able to identify appropriate measures.
9.5 List of main conservation measures	CH01 Reduce impact of military installations and activities: UK Ministry of Defence (MOD) has a Statement of Intent with UK Statutory Nature Conservation Bodies concerning conduct in relation to marine disturbance. The MOD has developed a real-time alert procedure for naval training operations.

9.5 List of main conservation measures	CG04 Control/eradication of illegal killing, fishing and harvesting: Wales (as amended) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended), which make it an offence to kill, injure, capture or disturb European marine protected species. Similar legislation exists for Scottish and Northern Irish inshore waters.
9.5 List of main conservation measures	CG05 Reduce bycatch and incidental killing of non-target species: The UK is implementing the European Council Regulation EC 812/2004, which lays down measures concerning incidental catches of cetaceans in fisheries, and more generally the bycatch obligations within the Habitats Directive. Since 2004, a dedicated bycatch monitoring programme has been in place, with both dedicated and non-dedicated onboard observers collecting data on bycatch numbers. These data inform implementation and potential effectiveness of measures such as pingers. There is a requirement for all fishing vessels over 12m using gill nets or entanglement nets to use pingers under the criteria laid out in the regulation.
9.5 List of main conservation measures	CC02 Adapt/manage exploitation of energy resources: Guidance for the protection of marine European Protected Species from deliberate injury, killing and disturbance has been drafted (JNCC 2010a; Marine Scotland, 2014). Marine Industries generate a variety of noise through activities such as geophysical surveys (e.g. seismic surveys (JNCC 2017)), construction (e.g. pile driving (JNCC 2010b)) and decommissioning (e.g. use of explosives (2010c)). As part of the licencing procedures, developers and operators are required to utilise JNCC guidelines to minimise the risk of injury to cetaceans when undertaking such activities (JNCC 2010b, 2010c; JNCC 2017). The guidelines advise on conducting marine mammal observations prior to and during the activity and, where suitable, utilising procedures such as soft start (gradual introduction of the sound) to reduce and avoid direct harm to animals. A review of the marine mammal observer data demonstrated the effectiveness of soft start approach (Stone et al., 2017).
10.1 Future prospects of parameters	Range: The overall assessment of this parameter is Favourable and there is no evidence that risk is increasing in the next 12 years (two reporting rounds); Population: Insufficient information to assess the status of this parameter. Although the pressures impacting this parameter are not thought to be increasing and there are no threats identified which are likely to impact in the next 12 years, the uncertainty surrounding the current status of this parameter make it impractical to predict future prospects; Habitat of the species: Insufficient reliable information to assess the status of this parameter. Although the pressures impacting this parameter are not thought to be increasing and there are no threats identified which are likely to impact in the next 12 years, the uncertainty surrounding the current status of this parameter make it impractical to predict future prospects.
11.1 Range	There is no evidence to suggest range has changed since the last reporting round (2013) and therefore the range assessment remains Favourable.
11.2 Population	The FRP is Unknown. Therefore, the current abundance cannot be compared to the FRP and the conclusion for population is Unknown.
11.3 Habitat for the species	Range is Favourable but population is Unknown. Therefore, the quality of habitat for the species cannot be inferred in the absence of population information.
11.4 Future prospects	There are two or more Unknown results (population and habitat) therefore future prospects are Unknown.
11.5 Overall assessment of Conservation Status	There are two or more Unknown results (population, habitat and future prospects) therefore the overall assessment of conservation status is Unknown.

11.7 Change and reasons for change in conservation status and conservation status trend	<p>The assessment has changed from Favourable in the UK 3rd reporting round (2013) to Unknown due to a revised approach to dealing with limited data and interpretation of the guidance relating to the Favourable Reference Values (FRVs). According to the Art17 reporting guidance (DG Environment, 2017) assessment of the population parameter is based on how the current estimate compares with the Favourable Reference Population (FRP). A population is considered Favourable if the species abundance estimate is not below the FRP. Due to data limitations, cetacean FRPs were set based on the best UK abundance estimates made as close in time as possible to when the Habitats Directive was adopted. This approach was taken in the UK 3rd reporting round (2013) and was supported by the Article 17 Guidance at the time (Evans and Marvela, 2013). However, the UKs interpretation of the FRP concept has changed between reporting rounds and concludes that information on trends needs to be understood to set an FRP. A minimum of three data points is required to explore trends and considering the large confidence intervals associated with cetacean abundance estimates, the statistical power to detect anything beyond a dramatic change is likely to be limited from only three estimates. Where less than three data points are available, identification of trends is not possible. The change in the overall conclusion is therefore driven by this change in approach between the reporting rounds.</p>
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