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

Third Report by the United Kingdom under Article 17

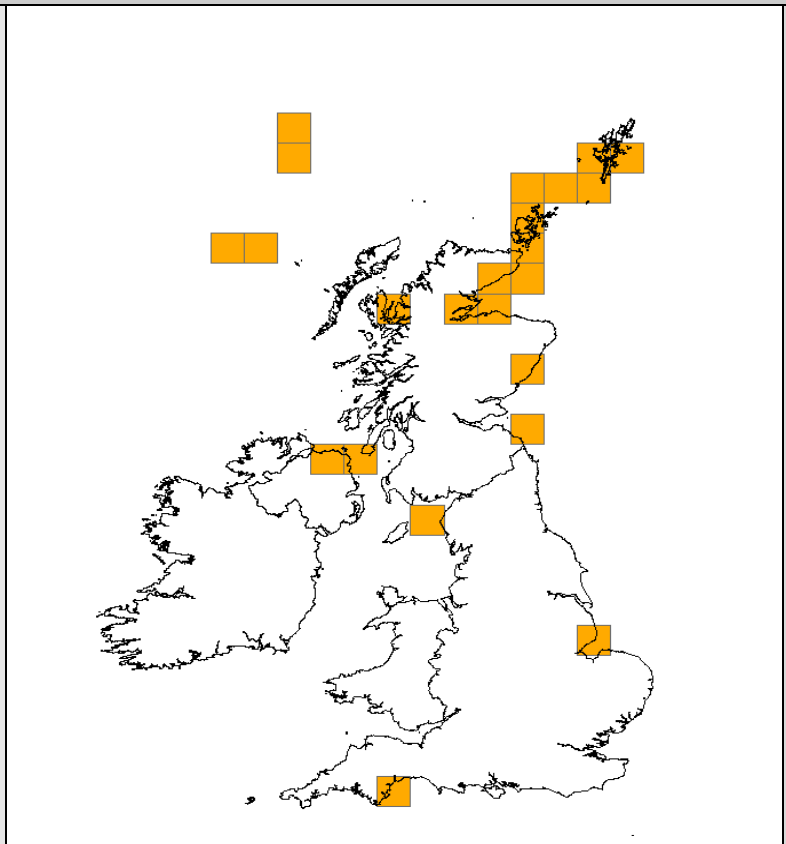
on the implementation of the Directive from January 2007 to December 2012
Conservation status assessment for

Species:

S5031 - Sperm whale (*Physeter macrocephalus*) (also known as *catodon*))

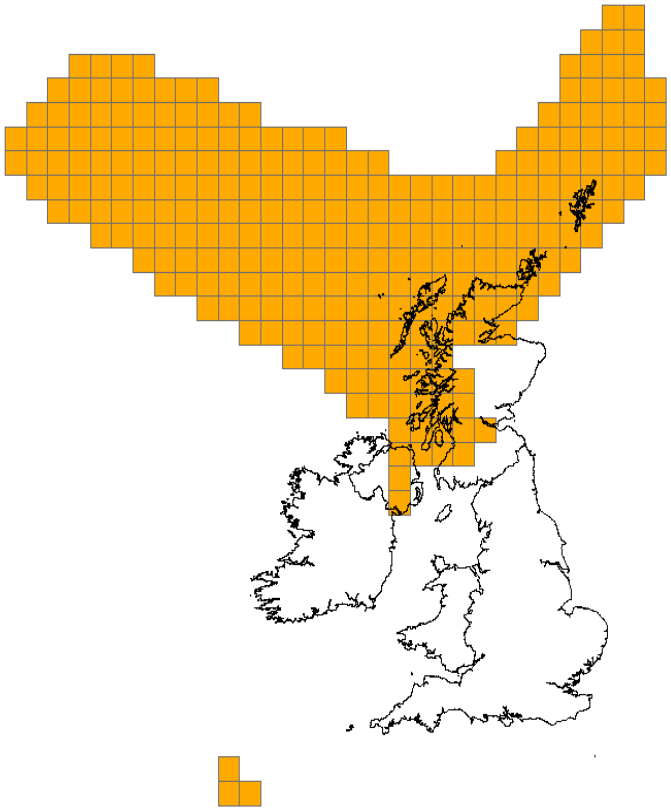
Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV & V species

Field name	*Brief explanations*	
0.2 Species	**0.2.1 Species code**	**S5031**
	0.2.2 Species scientific name	***Physeter macrocephalus* (also known as *catodon*)**
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	

1.1 Maps			
1.1.1 Distribution map		**Sensitive**	**False**
	Strandings records show that sperm whales off the UK are almost exclusively maturing or mature males (e.g. Evans, 1997; Smeenk, 1997); females reside at lower latitudes, generally between 40º North and South in the North Atlantic (Culik, 2011). Typically the sperm whale is considered a deep water species, and off the UK they have been recorded in waters around Rockall, north of Outer Hebrides, and north and west of Shetland in the Faroe-Shetland Channel (Macleod et al. 2003;		

	Reid et al. 2003; Mendes, 2006). Sightings in British and Irish waters mainly occur between July-December, but there is increasing evidence of small groups remaining at high latitudes into winter (Evans et al., 2003; Reid et al., 2003; Evans, 2008) and so there is year-round presence (Mendes, 2006). Whilst this species predominantly occurs beyond the continental shelf edge in deep waters, there are sightings on the continental shelf. The SeaWatch Foundation have 38 records of sperm whales during the reporting period all on the UK continental shelf. Sightings were particularly concentrated around the Northern Isles, Moray Firth and southeast England and occurred most often in spring (March-May) and early autumn (September - October). Off the coast of Northern Ireland (Co. Antrim) sperm whales were recorded acoustically from a single survey in June 2007 (Dunlop and Mellor, 2008), although the precise location of the animals could not be defined. This suggests that there are low densities of sperm whales on the continental shelf for at least some parts of the year. Mendes (2006) suggested that during spring most of the sperm whales off northwest Scotland might be expected to be sub-adults or non-breeding adult males which have not migrated south for the main breeding season (March-May, Clarke 1956). The number of sperm whale strandings along UK coasts has seen a steady increase since the 1960s, although reasons for this remain unclear (Jepson, 2005). Between 2000-2005, 27 sperm whales stranded around the UK coast, while 29 stranded between 2005-2010 (21 in Scotland and 8 in England) (Jepson, 2005; Deaville and Jepson, 2011). In 2011 there were 9 stranded animals (5 in Scotland and 4 in England) (Deaville, 2011), and a further single sperm whale stranded in England and another in Scotland between January and June 2012 (Deaville, 2012). Sperm whales also strand on Northern Ireland, the most recent (although out with the reporting period) occurred during February 2005 at Fair Head, Co Antrim and, during the same month at Garron Point, Co Antrim (Burrows, pers comm).

1.1.2 Method used - map	**Estimate based on partial data with some extrapolation and/or modelling**
	A national sightings database is collated by the SeaWatch Foundation. This includes opportunistic sightings at sea and on land by a large number of, mainly amateur, observers, together with some effort related data. Sightings held within the SeaWatch Foundation database for the 2007-2012 reporting period were mapped. Additionally, sightings within the Joint Cetacean Protocol (JCP, 2012) for the current reporting period were extracted; these include effort-related sightings from SeaWatch, the Cetacean Offshore Distribution and Abundance (CODA) survey in July 2007 and a variety of other opportunistic platforms. All sightings were converted to presence in 50x50km grid cells to represent distribution over the period. Offshore sightings of this species are likely under represented due to less survey effort in these waters. Sperm whales also strand but these records have not been used to map distribution due to the inherent problems with interpreting location of stranding with 'normal' distribution of the species.
1.1.3 Year or period	**2006-2012**
	The data were collated for the current reporting period, 2007-2012.
1.1.4 Additional distribution map Optional	**False**

1.1.5 Range map	
	Range is based on the distribution of sightings and expert judgement. Continental shelf records of this species come from the Northern Isles, Moray Firth, Firth of Forth, North Sea, Irish Sea, Inner Hebrides and southwest approaches. Of these, a single record in the North Sea is considered extralimital and the central and southern North Sea is not considered within the normal range for this species. However, numerous records exist for the Northern Isles and south to the Firth of Forth suggesting that sperm whales frequently use the northern North Sea. There was a single record in the Irish Sea (east of the Isle of Man). Records beyond the continental shelf edge for this reporting period come only from the CODA survey (CODA, 2009). There is limited survey effort in these waters but all UK offshore waters are considered core areas of this species range.

2.1 Biogeographical region & marine regions	**MATL**
2.2 Published sources	**Best, P.B. 1979. Social organisation in sperm whales, Physeter macrocephalus. In Winn, H. E. And Olla, B. L. Behaviour of marine animals. Plenum Press, New York. pp. 227-290** **CODA. 2009. Cetacean Offshore Distribution and Abundance in the European Atlantic. Final Report. 43pp. [Available from**

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2.3 Range		
2.3.1 Surface area Range	**638244**	
	The range is based on the distributional data for the reporting period and expert judgement as to the likely boundaries of the species range. Sightings data suggest that the range of this species varies seasonally but the map represents the likely greatest extent of this species range considering year-round distribution data.	
2.3.2 Method used Surface area of Range	**Estimate based on partial data with some extrapolation and/or modelling**	
	The range was based on the distributional data (2007-2012) and expert judgement to determine where sperm whales regularly occur. Distribution was mapped on 50x50km grid cells together with actual sightings. Sperm whale sightings occurred primarily to the north, west and southwest of the UK on the continental shelf and beyond and considered likely to occur within different parts of this range at different times of the year.	
2.3.3 Short-term trend Period	**2001-2012**	
2.3.4 Short term trend Trend direction	**unknown**	
	The range for this species was not calculated for the previous reporting period. It is therefore not possible to discern whether the range has changed over the short-term.	
2.3.5 Short-term trend Magnitude Optional	**a) Minimum**	
	b) Maximum	
2.3.6 Long-term trend Period Optional	**1988-2012**	
	The mapped range for the current reporting period was compared with the mapped distribution in the Cetacean Atlas (Reid et al. 2003). This Atlas was based on an analysis of data collected between 1979-2001 and an index of abundance for cetacean species was mapped, taking into account survey effort which differed spatially and temporally. The Atlas shows sperm whale encounters only beyond the continental shelf edge, particularly off northwest Scotland and within the Faroe-Shetland Channel. Effort related SeaWatch Foundation data collected from land	

	and sea were incorporated into the Atlas. The SeaWatch data were also used to create the distribution and range maps for the current reporting period; however, the difference being that the sightings were not restricted to effort-related surveys and may have also come from opportunistic sightings. Comparison of the Atlas map with the current reporting period map suggest that although the offshore range for this species is the same, their occurrence on the continental shelf is not represented by the Atlas, despite a large amount of survey effort, yet is documented in the current 2007-2012 distribution data. The literature does suggest that sperm whales do occasionally go on to the shelf (Evans, 2003) but the number of shelf records for this reporting period may reflect heightened observation effort in key areas or a more regular shelf occurrence.	
2.3.7 Long-term trend Trend direction Optional	**unknown**	
2.3.8 Long-term trend Magnitude Optional	**a) Minimum**	
	b) Maximum	
2.3.9 Favourable reference range	**a) Value in km²**	
	b) Operator for FRR	**approximately equal to**
	The FRR in UK waters is considered to approximately equal the current range. However, it is known that the UK range is only a component of a much larger range of a more widespread population.	
	c) FRR is unknown (indicated by "true")	**False**
	d) Method used to set FRR	**Based on expert judgement, the current range for sperm whales in UK waters has all significant ecological variations for the given biogeographical region, and is sufficiently large to be considered suitable for the survival of the species for the foreseeable future. The current range is therefore considered to approximate the FRR. However, the range in UK waters is only a proportion of the total range of this species in the Marine Biogeographical region and the required range area is therefore greater than the UK range in isolation. It should also be noted, that the range of this species may change**

		seasonally and what is represented is the likely greatest extent of their range in the UK.
2.3.10 Reason for change Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to…	**a) Genuine change?**	**False**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.4 Population		
2.4.1 Population size estimation (using individuals or agreed exceptions where possible)	**a) Unit**	**number of individuals**
	b) Minimum	**340**
	c) Maximum	**1334**
2.4.2 Population size estimation (using population unit other than individuals) Optional *(if 2.4.1 filled in)*	**a) Unit**	
	b) Minimum	
	c) Maximum	
2.4.3 Additional information on population estimates / conversion Optional	**a) Definition of "locality"**	
	b) Method to convert data	
	c) Problems encountered to provide population size estimation	

2.4.4 Year or period	**2007**	
2.4.5 Method used Population size	**Estimate based on partial data with some extrapolation and/or modelling**	
	There are no estimates of sperm whale abundance from a single survey that covered its entire UK range. The Cetacean Offshore Distribution and Abundance survey sampled offshore waters beyond the continental shelf edge of the UK, Ireland, France and Spain (CODA, 2009) in July 2007. Blocks 1 and 2 of this survey included parts of UK waters beyond the shelf edge to the west of Scotland and off southwest England. Density estimates from these blocks (Macleod et al. 2009) were used to estimate abundance of sperm whales throughout their UK range. The areas of sperm whale range beyond the continental shelf edge (northwest and southwest were measured in GIS (ArcMap 10.1). Similarly, the continental shelf area included within the range was also measured. The estimates of density for block 1 were assumed representative of the north and northwest offshore area of the sperm whales range in the UK EEZ; the density estimate was multiplied by the northwest offshore range area to generate an abundance estimate. This process was repeated for the offshore southwest area within the sperm whale range but using the density estimate from Block 2. For the shelf area, only the lower 95% confidence interval estimate of density for Block 1 was used to estimate abundance. Density of sperm whales on the shelf is expected to be much lower than offshore areas. The resulting abundance estimates were summed and the associated CV and confidence intervals around the total estimate were calculated. The lower and upper 95% confidence interval values of abundance were used to represent the minimum and maximum population size.	
2.4.6 Short-term trend Period	**2001-2012**	
2.4.7 Short-term trend Trend direction	**unknown**	
	This is the first reporting period for which a UK estimate of the sperm whale population has been estimated. It is therefore not possible to assess short-term trend for the 2001-2012 period within the UK EEZ.	
2.4.8 Short-term trend Magnitude Optional	**a) Minimum**	
	b) Maximum	
	c) Confidence interval	

2.4.9 Short-term trend Method used	**Absent data**	
2.4.10 Long-term trend – Period Optional	**1988-2012**	
2.4.11 Long-term trend Trend direction Optional	**unknown**	
2.4.12 Long-term trend Magnitude Optional	**a) Minimum**	
	b) Maximum	
	c) Confidence interval	
2.4.13 Long term trend Method used Optional	**Absent data**	
2.4.14 Favourable reference population	**a) Number of individuals/agreed exceptions/other units**	
	b) Operator	
	c) FRP is unknown (indicated by "true")	**True**
	d) Method used to set FRP	**Sperm whales were the target of two phases of whaling, both of which resulted in major declines of sperm whale populations. Whitehead (2002) estimated that the pre-whaling global population had declined by 29% through 'open-boat' whaling by 1880 and later by a further 38% through modern whaling in the 20th century. Hunting of sperm whales peaked in the 1960s when whalers re-focussed their efforts from depleted baleen whales to this species (Whitehead, 2002). Whaling virtually ceased with the implementation of the moratorium on**

		commercial whaling in 1985/86. Evidence to support recovery of sperm whales is lacking; in contrast, there are data for some areas, such as the Mediterranean, to suggest sperm whales are continuing to decline due to continuing pressures from other sources (Reeves and Notarbartolo di Sciara, 2006). Therefore, it is likely that the Favourable Reference Population in the UK is greater than current, given the historical abundance of this species, but is unknown. The Cetacean Offshore Distribution and Abundance survey (CODA, 2009) estimated the abundance of sperm whales in the offshore European Atlantic as 2,091 (CV = 0.34) (Macleod et al., 2009) using visual data and 2,239 (CV = 0.14) using acoustic data (Swift et al. 2009). The best estimate of abundance for this species in the UK EEZ has been derived from the CODA estimates (July, 2007) and is 673 individuals (CV=0.36); this estimate has made the strong assumption that the density of sperm whales on the shelf are comparable to the lower 95% centile density estimates in the their main habitat offshore. Sperm whales in UK waters are only a component of a much wider North Atlantic population but population structuring, globally, is not well understood. Both sexes are capable of long-distance latitudinal and longitudinal movements across ocean basins (Ivashin and Rovnin, 1967; Mitchell, 1975; Frantzis et al., 2011) and genetic diversity between ocean basins is generally low. However, this is more the case within males than the philopatric females which have more limited oceanic movements (Lyrholm et al., 1999). Yet, some geographic structuring is supported and this may have a genetic (Mesnick et al., 1999; Drouot, 2004) but also a behavioural basis. Sperm whale social groups can be assigned to clans based on their vocal repertoire (Rendell and Whitehead, 2003). Rendell et al. (2012) suggests that vocal clan is a more important factor in matrilineal population genetic structuring than geography and that such structuring is maintained by the cultural transmission of their clan's vocal repertoire between mother-offspring. However, clans are only described from

		the Pacific and there is no evidence of cultural clans in the North Atlantic (Whitehead et al., 2012). As such, without a robust estimate of population size of sperm whales in the northeast Atlantic and the population structure, it is currently impossible to set a Favourable Reference Population.
2.4.15 Reason for change Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	**a) Genuine change?**	**False**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.5 Habitat for the species		
2.5.1 Area estimation	**638244**	
	In the absence of data to define sperm whale habitat, the area of suitable habitat for this species is assumed to be equivalent to its range.	
2.5.2 Year or period	**2007-2012**	
2.5.3 Method used Habitat for the species	**Estimate based on partial data with some extrapolation and/or modelling**	
2.5.4 Quality of the habitat	**a) Habitat quality**	**Unknown**
	Cetacean habitats (e.g. feeding and breeding areas) vary temporally and spatially and are influenced by natural and anthropogenic factors (e.g. Ingram et al., 2007; MacLeod et al., 2007; Weir et al., 2007). It is often difficult to determine what features characterise cetacean habitats and in quantifying their extent. The quality of this habitat can therefore not be assessed.	
	b) Assessment method	**The UK range is primarily used for feeding and as a migration route to more northerly waters and at least parts of it are occupied by sperm whales year-round. Habitats are used preferentially depending on, in particular, the distribution and abundance of prey which,**

		in turn, changes spatially and temporally in response to environmental variability (Forney, 2000). The sperm whale diet is variable, although stranded animals in the North Sea have showed a preference for the squid, *Gonatus fabricii* (Santos et al., 1999) whilst animals further south and stranded along the French coast ate predominantly *Histioteuthis bonnellii* (Spitz et al., 2011). Therefore, the area of habitat utilised will vary seasonally depending on its activity (i.e. migration versus foraging) and spatially depending on prey availability.
2.5.5 Short-term trend Period	**2001-2012**	
2.5.6 Short-term trend Trend direction	**unknown**	
2.5.7 Long-term trend Period Optional	**1988-2012**	
2.5.8 Long-term trend Trend direction Optional	**unknown**	
2.5.9 Area of suitable habitat for the species	**a) Value in km²**	
	b) Absence of data indicated as '0'	
2.5.10 Reason for change Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	**a) Genuine change?**	**False**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.6 Main pressures		
a) Pressure	**b) Ranking**	**c) Pollution qualifier**
	H = high importance	

	(max 5 entries) M = medium importance L = low importance	
H03: Marine water pollution	M	X
C02: Exploration and extraction of oil or gas	L	
D03: shipping lanes, ports, marine constructions	L	
F02: Fishing and harvesting aquatic resources	L	

Between 1991-2010, 17 post mortem examinations were undertaken on UK stranded sperm whales. The main causes of death were live stranding (82%) and starvation (6%) (Deaville and Jepson, 2011). In 2011, 3 post mortem examinations were undertaken. Two whales died as a consequence of live stranding, while one examination result is still pending (Deaville, 2011). Similarly, the whale examined in 2012 appears to have died as a consequence of live stranding (Deaville, 2012). Therefore, there is no evidence in the stranding records of mortality due to trauma (e.g. ship strike or bycatch). However, the sample size is small and not all sources of mortality would necessarily be apparent from strandings of this predominantly offshore species.
Historical whaling activities have severely depleted sperm whale abundance (Whitehead, 2002). Small numbers of sperm whales are still taken by Japan and although Norway and Iceland formally objected to the moratorium on commercial whaling imposed by the International Whaling Commission in the mid-1980s, neither have expressed interest in taking this particular species (NMFS, 2009). Even though the threat from whaling is now very low, sperm whales are not well adapted to recover from population depletion, and with a maximum rate of increase of around 1% per year, the population in 2002 was calculated to only be at about 32% of the pre-whaling level (Whitehead, 2002). Whaling activities often focused exclusively on one sex, which may have had long-term consequences on recovery rates mediated through, for example, impacts on pregnancy rates (Whitehead et al. 1997).
Direct and indirect interaction with fishing gear is also a threat to sperm whales and has been a particular problem in some areas (e.g. gillnets in the Mediterranean, Reeves and Notarbartolo di Sciara, 2006). Net scraps and ropes, as well as other plastic debris, have been found in the stomach of a number of beached whales (Viale et al., 1992; Jacobsen et al., 2010), and deaths are reported after entanglement in fishing gear. However, the true scale of the problem is not well known particularly for high-seas fisheries. Sperm whales have often been reported to feed in association with working fishing nets, both on bycatch and depredating long-line catches, which can lead to entanglements and deaths (Fertl and Leatherwood, 1997; Hucke-Gaete et al., 2004).
Sperm whales are also common victims of ship collisions worldwide (Laist et al. 2001; Jensen and Silber, 2004).
Levels of contaminants in sperm whales have been shown to be high but the impact on populations is not clear. Similarly, the impacts of noise on populations from seismic, military, shipping etc. are unclear. A recent study analysing visual and acoustic data collected during seismic surveys between 1995-2010, found no significant response of sperm whales to firing of large airgun arrays; in contrast, there was a lateral response to firing small airgun arrays (Stone, in prep). Other studies have found an acoustic response to seismic surveys, including a decrease in vocalisation rates ('buzzes') associated with foraging (Jochens et al. 2008; Miller et al. 2009).

2.6.1 Method used – Pressures	**mainly based on expert judgement and other data**
	Pressure ranking for Physeter macrocephalus is based on expert opinion, published literature and data from post mortem of stranded animals, which indicate sources of mortality for this species. Most pressures have been ranked low and this is due to minimal overlap in the distribution of sperm whales and the pressure or due to both sperm whales and pressure co-occurring in the UK but at low density relative to the rest of its wider northeast Atlantic range.Only pollution is deemed of medium

	importance due to known accumulation of certain pollutants by sperm whales and the ubiquitous nature of pollutants.

2.7 Threats		
a) Threat	**b) Ranking**	**c) Pollution qualifier**
	H = high importance (max 5 entries) M = medium importance L = low importance	
H03: Marine water pollution	M	X
M02: Changes in biotic conditions	M	
C02: Exploration and extraction of oil or gas	L	
D03: shipping lanes, ports, marine constructions	L	
F02: Fishing and harvesting aquatic resources	L	
M01: Changes in abiotic conditions	L	

The pressures identified are expected to continue in the longer term. New threats from climate change are possible but the impacts are largely unknown. MacLeod (2009) predicts that the range of sperm whales, as a cosmopolitan species occuring in polar and tropical areas, will be unaffected by changes in sea temperatures predicted as a result of climate change. Climate change impacts on prey may see corresponding changes in distribution and/or abundance of predators. Whitehead et al. (1989) correlated decreased feeding success in sperm whales off the Galapagos during El Nino years when sea surface temperatures were warmer compared to years of cooler sea surface temperature.	
2.7.1 Method used – Threats	**expert opinion**

2.8 Complementary information	
2.8.1 Justification of % thresholds for trends	
2.8.2 Other relevant information	
2.8.3 Trans-boundary assessment	**The distribution of sperm whales is continuous in offshore waters beyond the shelf west of UK and Ireland. Therefore, the future prospects of this population in the UK EZZ are also**

	dependent on the actions within the adjoining Irish EEZ and wider northeast Atlantic.

2.9 Conclusions *(assessment of conservation status at end of reporting period)*		
2.9.1 Range	**a) Conclusion**	**Favourable**
	The current range is considered equivalent to the favourable reference range based on best available information and expert judgment. The conclusion for this parameter is Favourable.	
	b) Qualifier	
2.9.2 Population	**a) Conclusion**	**Unknown**
	Although population size has been estimated for this reporting period, the continental shelf component is questionable due to lack of data (and very low densities of animals) and the means of inferring shelf density from lower bounds of offshore density estimates. This does not represent a robust estimate and is likely to be considerably lower than historical abundance, given the limited evidence of recovery post-exploitation in the North Atlantic. The FRV is therefore unknown.	
	b) Qualifier	
2.9.3 Habitat for the species	**a) Conclusion**	**Unknown**
	The conclusion for this parameter is unknown.	
	b) Qualifier	
2.9.4 Future prospects	**a) Conclusion**	**Unknown**
	In line with the EU guidance, where the conclusions for two or more parameters are unknown, then the overall future prospects are also unknown.	
	b) Qualifier	
2.9.5 Overall assessment of Conservation Status	**Unknown**	
	The overall assessment for this species is unknown. However, in UK waters, threats to this species in its predominantly offshore range are considered minor. Conservation measures have been undertaken in the UK and adjacent waters, to protect, survey and monitor marine mammal abundance, health and distribution as part of the requirements of the Habitats Directive. It is important to stress that many human activities that have the potential to affect the assessed species are already regulated with the conservation of marine mammals and other wildlife in mind. Assuming that these measures are maintained and further measures are taken, should other pressures emerge or existing	

	pressures change, then the future prospects for cetacean species in UK waters should be favourable. However the effects of lesser understood impacts are hard to predict. Many cetaceans occurring in UK waters will also use waters of other Member States and those of non-Members, so coordination of conservation measures through, for instance ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas) is essential to avoid activities in other waters affecting the animals occurring in UK waters. Oil and gas exploration and production generates a variety of noise, including initial geophysical surveys (using seismic methodologies), rig construction and drilling, and, finally, structure removal. Of greatest concern is the noise associated with the seismic surveys which use airguns to generate low frequency sound. The Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 implements the EU Habitats Directive for all oil and gas activities within the UKCS. As part of these regulations any company wishing to carry out a seismic survey must apply for consent from the Department of Energy and Climate Change (DECC, formerly the DTI), the JNCC are consulted on whether consent should be granted for each individual seismic survey and if a consent is granted, a standard condition is that the operator must follow the JNCC guidelines for minimising the risk to marine mammals during seismic surveys (JNCC, 2010). The guidelines advise on conducting marine mammal observations prior to and during seismic activity and utilizing procedures such as soft start (gradually increasing the number of active airguns to allow animals nearby to move away) to reduce and avoid direct harm to animals. Over the years, most recently in 2010, these guidelines have been reviewed and revised in the light of scientific evidence, technical developments and operational understanding. A review of these guidelines and their effectiveness (Stone, in prep) has shown that the soft-start procedure is an effective component of the mitigation of disturbance. The impact of military activity and, in particular, use of low- and mid-frequency active sonar of high-intensity has become a major issue in recent years. The UK Ministry of Defence (MOD) has developed a number of measures to address the potential impact of military sonar and noise in the marine environment, including the developed a real-time alert procedure for naval training operations. This enables local information on unusual cetacean sightings, such as the presence of a species group closer to shore than usual, to be incorporated into the training schedule and for operations to be relocated if necessary. Such continual improvement of mitigation strategies by the military themselves is probably the best way to limit future impacts. The UK's position within the International Whaling Commission (IWC) has been, amongst others, to support the moratorium on commercial whaling, to work towards placing the issue of environmental threats to cetaceans permanently on the IWC agenda and to ensure that international trade in whale products is prohibited.
2.9.6 Overall trend in Conservation Status	

3 Natura 2000 coverage & conservation measures - Annex II species
(only applies to species listed under Annex II of the Directive)

3.1 Population

3.1.1 Population size Estimation of population size included in the SAC network	**a) Unit**	
	b) Minimum	
	c) Maximum	
3.1.2 Method used		
3.1.3 Trend of population size within the network (short-term trend) Optional		

3.2 Conservation measures

Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.

3.2.1 Measure	**3.2.2 Type**					**3.2.3 Ranking** H = high importance M = medium importance L = low importance	**3.2.4 Location** where the measure is PRIMARILY applied			**3.2.5 Broad evaluation of the measure**					
	a) Legal/statutory	**b) Administrative**	**c) Contractual**	**d) Recurrent**	**e) One-off**		**a) Inside**	**b) Outside**	**c) Both inside & outside**	**a) Maintain**	**b) Enhance**	**c) Long term**	**d) No effect**	**e) Unknown**	**f) Not evaluated**