European Offshore Wind Deployment Centre
Environmental Statement

Chapter 21: Commercial Fisheries

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21 COMMERCIAL FISHERIES

21.1 Introduction

1 This section of the Environmental Statement (ES) summarises the assessment of the potential impacts on commercial fishing from construction, operation and decommissioning of the proposed European Offshore Wind Deployment Centre (EOWDC). For the purpose of this study, commercial fishing is defined as any legal fishing activity undertaken for declared taxable profit. Brown and May Marine have undertaken this commercial fisheries assessment.

2 The following technical reports support this chapter and can be found as:

- Commercial Fisheries Baseline Technical Report (Appendix 21.1)
- Environmental Impact Assessment Technical Report (Appendix 21.2)

21.1.1 Methodology Consultation

3 Consultation with local stakeholders was undertaken by the Scottish Fishermen's Federation (SFF) between 2008 and 2010, particularly with the skippers of the vessels which were identified to fish in the area of the development. In addition, the local District Fisheries Officer provided valuable information for this assessment.

4 The individuals and organisations consulted were:

- Aberdeen District Fisheries Office (281010)
- Fisheries Research Services (211107)
- Scottish Fishermen's Federation (211107)
- Sid McLean – Boy Paul – Peterhead (170111)
- Ricky Greenhowe – Skua II- Aberdeen (170111)
- John Anderson – Tern – Aberdeen (170111)
- Stuart Willox – Maddie Marie – Peterhead (170111)
- Scottish Inshore Fish Producers Association (December 2007 &150211)

21.1.2 Key Guidance Documents

5 The key guidance documents used for both the baseline and impact assessment are as follows:

- Offshore Wind Farms, Guidance Note for Environmental Impact Assessment in Respect of FEPA and CPA Requirements - Version 2; Cefas, MCUE, Defra, DTI, June 2004
- Strategic Environmental Assessment (SEA) of Draft Plan for Offshore Wind Energy in Scottish Territorial Waters: Volume 1: Environmental Report; Marine Scotland 2010
- UK Offshore Energy – Strategic Environmental Assessment; DECC, January 2009
- Recommendations for Fisheries Liaison; FLOW, May 2008
- Fisheries Liaison Guidelines – Issue 5; UK Oil & Gas, 2008
- Guidelines to Improve Relations between Oil & Gas Industries and Near-shore Fishermen, UKOOA (renamed UK Oil & Gas), August 2006

- Fishing & Submarine Cables – Working Together, International Cable Protection Committee (CPC), February 2009
- Options and Opportunities for Marine Fisheries Mitigation Associated with Wind farms, COWRIE 2010; and
- Scoping Response - Marine Scotland (2011)

21.1.3 Data Information and Sources

6 The principal data and information sources used were:

- International Council for the Exploration of the Sea (ICES)
- Marine Management Organisation (MMO)
- Marine Scotland, Marine Science (MS)
- European Commission- Fisheries (Europa)
- Scottish Fisheries Protection Agency (SFPA)
- Brown & May Marine in-house databases

21.2 Baseline Assessment

7 This section provides a brief description of the current commercial fisheries baseline for the EOWDC (salmon and sea trout fisheries have been assessed separately).

8 There is currently no single data source or recognised model for establishing commercial fisheries baselines within small discrete sea areas such as wind farms. The following description has, therefore, been derived using data and information from a number of sources:

- ICES statistical rectangles
- daily log sheets of vessels over 10 m in length
- surveillance sightings recorded by fishery protection aircraft and surface craft as a means of policing fisheries legislation in UK territorial waters and
- satellite tracking of all EU registered fishing vessels 15 m and over in length which are monitored approximately every 2 hours

9 The average landing values (2000-2009) of fish caught in ICES rectangles 43E7 and 43E8 are £89,468 and £1,125,276 respectively. Within 43E7, the main target species is crab using creels, whilst in 43E8 scallops and haddock are the main targets using dredges and otter trawls. Both ICES rectangles are large in relation to the area of sea occupied by the proposed development, as illustrated in Figure 21.1. The majority of landing values (approximately 80%) in ICES rectangle 43E7 are recorded as landed in Aberdeen, for ICES rectangle 43E8 approximately 40 % of the landing values are recorded as being landed in Aberdeen.

10 To date, there have been only low levels of fishing activity within the boundaries of the proposed EOWDC site, largely as a result of the poor productivity of the area. Four local vessels were identified as operating within the general area of the site, all of which are inshore demersal trawlers. These vessels are 11 m and under in length, with two registering their home port as Aberdeen and two Peterhead. The fishing grounds of these vessels were stated to be between Aberdeen Harbour Fairway Buoy and the buoys off the

Black Dog Firing Range, with the main target species being plaice. In addition to trawling, three of the vessels have the capacity to deploy creel gear.

11 From the consultation undertaken and the evidence obtained, it is apparent that the area of the proposed EOWDC constitutes only a small proportion of the fishing grounds of the identified vessels.

12 Analysis of Vessel Monitoring System (VMS) data for over 15 m vessels indicates that vessels with plots recorded within the site are steaming through it to more productive fishing grounds further afield rather than actually fishing within it. The nearest scallop dredging areas are on the Bennachie ground, which lies in the deeper offshore waters beyond Aberdeen Bay. The nearest nephrops grounds are identified well to the south of the site, off the coast of Montrose. Potting, largely by virtue of the habitat requirements of the main target species, is concentrated in areas to the south and the north of the site.

21.3 Impact Assessment

13 The assessment aims to describe the magnitude of effect of each potential impact and the sensitivity of each environmental receptor based on importance and recoverability.

14 The criteria used in the assessment are as follows:

- spatial extent of the effect (national, regional, local and site-specific)
- duration of effect (long term/ permanent (>10 years), medium(5-10 years), short term(1-5 years) or temporary(<1 year))
- scale of effect
- recoverability of the receptor (high, medium, low or none); and
- importance of the receptor (high, medium, low or none)

15 The impact significance is then given as major, moderate, minor or negligible guided by the matrix in Table 21.1.

TABLE 21.1
Matrix for Significance of Impact

	Sensitivity of Receptor				
Magnitude of Effect based on spatial, duration and scale of effect		**Very High**	**High**	**Medium**	**Low**
	Very High	Major	Major	Major	Moderate
	High	Major	Major	Moderate	Minor
	Medium	Major	Moderate	Moderate	Minor
	Low	Moderate	Minor	Minor	Negligible
	Negligible	Minor	Negligible	Negligible	Negligible

16 Some of the potential impacts described within this report are based upon incomplete knowledge and data gaps. In such instances, the assessment may be based upon a number of assumptions and, therefore, a degree of uncertainty will exist.

17 Where the significance of a potential impact is classified as moderate or major, it is considered to be a potentially significant effect. Impacts that were classified as moderate or major during construction, decommissioning and operation of EOWDC are listed in Table 21.2 below.

TABLE 21.2 Impact Assessment				
Construction and Decommissioning				
Potential Impact	**Significance Level**	**Mitigation**	**Residual Significance**	**Monitoring**
Damage to fishing gears by presence of seabed obstacles and obstructions	Negligible to Major if damage occurred	Contractors' obligations and standard offshore practices would prevent , or in case of accidental incidents, remove dropped objects	Negligible	None proposed
Safety issues for fishing vessels (collision with construction vessels)	Negligible to Major if damage occurred	Implementation and adherence to standard offshore safety procedures. Involvement of the SSF for liaison and information distribution	Negligible	None proposed
Operational				
Potential Impact	**Significance Level**	**Mitigation**	**Residual Significance**	Monitoring
Complete loss of, or restricted access to traditional fishing grounds	Negligible (for larger vessels) Moderate (for local vessels)	Certain fishing practices may resume within the operational site with some modification to operating practices	Negligible to beneficial (for larger vessels) Minor (for local vessels)	None proposed
Damage to fishing gears by presence of seabed obstacles and obstructions	Minor to Major if damage occurred	Contractors' obligations and standard offshore practices should ensure objects are removed. Any scour protection rock placement would be adjacent to wind turbines	Negligible	None proposed
Safety issues for fishing vessels (collision with wind turbines)	Minor to Major if collision occurred	Implementation and adherence to standard offshore safety procedures	Negligible	None proposed
Damage to fishing gear/vessels from exposed cables	Minor to Major	Cable burial to 0.6 m depth. Implementation and adherence to standard offshore procedures. Cable route surveys	Negligible to Minor	None proposed

18 Cumulative impact assessments used the same methodology and potential impacts for the standard impact assessment. Cumulative impact assessments have been undertaken on all existing and any reasonably foreseeable project/development activities. The elements that are considered to have the potential to contribute to cumulative impacts are:

- commercial shipping movements (discussed in Chapter 15 Shipping and Navigation)
- other offshore wind farms. As the closest wind farms are 58 km and 117 km from the EOWDC site, it is considered to be of negligible significance

- potential Ocean Laboratory. It is proposed that an Ocean Laboratory may be installed within the site and would be subject and separate application and EIA. As such, at this stage it is only assessed in terms of its cumulative effect

19 Cumulative impacts are, for the most part, expected to be of negligible significance. This is a consequence of the little offshore development, either existing or planned, in the vicinity of the site. Furthermore, as the EOWDC is expected to result in very few impacts above minor significance and those which do occur would be temporary and localised, the contribution of the development to cumulative impacts is expected to be minimal.

20 In-combination impacts, for the purposes of this assessment, describe impacts in relation to the Habitats Directive and have therefore been scoped out of the assessment. Any impacts relating to salmon are dealt with in the Chapter 22 Salmon and Seat Trout Impact Assessment.

21 It should be noted that current trends in fishing activity indicates that levels are unlikely to increase over the lifetime of the project. The current baseline is therefore taken as the worst realistic case in terms of the types and levels of fishing activity. The realistic worst case site layout is assumed to be the highest density of wind turbines within the site ie 11 wind turbines.

21.4 Summary

22 To date, there have been very low levels of fishing activity within the boundaries of the proposed EOWDC site. Four inshore demersal trawlers were identified as operating in the general area, ranging in length between 8 and 11 m. The main activity for these vessels is trawling for plaice, although the vessels also have the capacity to deploy other methods such as creeling for crabs and lobster. From the consultation undertaken it was apparent that the EOWDC site represents only a small proportion of the vessels' fishing grounds.

23 Taking the low levels of fishing activity, the small area of the site and the limited number of wind turbines to be installed, the potential impacts on commercial fishing of the proposed EOWDC are, for the most part, predicted to be of negligible significance.