



Offshore Wind Power Limited

West of Orkney Windfarm Offshore EIA Report Addendum

Commercial Fisheries Additional Information

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Executive Summary

Offshore Wind Power Limited (OWPL) ('the Applicant') submitted an application for consent of the offshore elements of the West of Orkney Windfarm ('the offshore Project') in September 2023, supported by an Offshore Environmental Impact Assessment (EIA) Report ('the Offshore Application').

Following the review of the Offshore Application and upon receipt of representations from consultees, Marine Directorate – Licensing Operations Team (MD-LOT) issued Additional Information Requests to the Applicant on 8th February 2024 and 8th April 2024. The following key topics were relevant to commercial fisheries:

- Consideration of the additional dataset 'Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length';
- Further justification of how fishing is presumed to be able to resume in the offshore Project post-construction;
- Further justification to support the statement that consultation with the fishing industry identified that research into commercially important fish and shellfish species was a suitable alternative to commercial fisheries monitoring; and
- Clarification of the term "guard vessel offset" in relation to the secondary mitigation that was stated for creelers.

This document is an addendum to chapter 14: Commercial fisheries of the Offshore EIA Report and provides the additional information in response to the Additional Information Requests and other relevant specific clarifications points from consultees.

A description of the "Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length – annual averages 2017 – 2021", published subsequent to the Offshore Application being submitted, is included within this addendum and conclusions drawn on any material changes to the information presented in chapter 14: Commercial fisheries of the Offshore EIA Report. Overall, it is concluded that this additional dataset does not materially change the original baseline characterisation and associated impact assessment conclusions.

Further details are provided to justify the assumption that some fishing activity can resume within the offshore Project area once operational, based on published and anecdotal evidence, and also feedback gained through consultation.

The details of the discussions and outcomes from the Fisheries Working Groups held throughout the EIA process with regards to the agreement of contribution to research projects and the value of contributing to commercially important fish and shellfish species is provided.

Lastly, the meaning of the term "guard vessel offset" is clarified as relating to the opportunity for fishing vessels to be contracted as guard vessels during construction. This will be further discussed as part of the Fisheries Working Group.

Overall, none of the points raised have resulted in a change to the baseline characterisation or assessment conclusions as presented within chapter 14: Commercial fisheries of the Offshore EIA Report.



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1 INTRODUCTION

Offshore Wind Power Limited (OWPL) ('the Applicant') is proposing the development of the West of Orkney Windfarm ('the Project'), an Offshore Wind Farm (OWF), located at least 23 kilometres (km) from the north coast of Scotland and 28 km from the west coast of Hoy, Orkney.

The Applicant submitted an application for consent under Section 36 of the Electricity Act 1989 and Marine Licences under Part 4 of the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009 to Scottish Ministers in September 2023 ('the Offshore Application') for the offshore components of the Project seaward of Mean High Water Springs (MHWS) ('the offshore Project'). The offshore Project will consist of Wind Turbine Generators (WTGs) and all infrastructure required to transmit the power generated by the WTGs to shore.

In accordance with relevant EIA Regulations¹, an Offshore Environmental Impact Assessment (EIA) Report was submitted to Marine Directorate – Licensing Operations Team (MD-LOT) as part of the Applicant's Offshore Application. Chapter 14: Commercial fisheries of the Offshore EIA Report provided the assessment of potential effects from the offshore Project on commercial fisheries receptors, both from the offshore Project alone and also cumulatively with other projects, plans and activities, and whole Project perspective.

Following the review of the Offshore Application, and upon receipt of representations from consultees, MD-LOT issued Additional Information Requests to the Applicant on 8th February 2024 and the 8th April 2024. The following key topics were relevant to commercial fisheries:

- Consideration of 'Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length' in addition to ScotMap data;
- Further justification of how fishing is presumed to be able to resume in the offshore Project post-construction;
- Further justification to support the statement that consultation with the fishing industry identified that research into commercially important fish and shellfish species was a suitable alternative to commercial fisheries monitoring; and
- Clarification of the term "guard vessel offset".

This document is an addendum to chapter 14: Commercial fisheries of the Offshore EIA Report and provides the additional information in response to the Additional Information Request and has been produced by Xodus Group Limited.

Stakeholder consultation was undertaken throughout the Offshore EIA in relation to commercial fisheries as outlined within section 14.3 of chapter 14: Commercial fisheries of the Offshore EIA Report. Further consultation activities relevant to commercial fisheries have been carried out following the submission of the Offshore Application and in the process of developing this Additional Information. This further consultation was undertaken through the Fisheries

¹ The relevant EIA Regulations include the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, and the Marine Works (Environmental Impact Assessment) Regulations 2007.



Working Group, which consists of the same organisations that participated throughout the EIA process, with the addition of the Orkney Regional Inshore Fisheries Group (ORIFG):

- The Applicant;
- Fishing Industry Representative (FIR);
- Scottish Fishermen's Federation (SFF);
- Scottish White Fish Producers Association (SWFPA);
- Orkney Crab (previously Orkney Fishermen's Society (OFS));
- Orkney Fisheries Association (OFA);
- Orkney Regional Inshore Fisheries Group;
- North East Coast Regional Inshore Fisheries Group (NECRIFG); and
- Xodus (including acting as Fisheries Liaison Officer).

The relevant documents previously submitted as part of the Offshore EIA Report that should be read alongside this document are:

- [Offshore EIA Report Volume 1 - Chapter 14: Commercial Fisheries of the Offshore EIA Report;](#)
- [Offshore EIA Report Volume 2 – Supporting Study 13: Commercial fisheries baseline report;](#) and
- [Offshore EIA Report Volume 3 – Outline fisheries management and mitigation strategy.](#)



2 STRUCTURE OF THIS DOCUMENT

This document has been structured as follows:

- Section 3 – summary of the Additional Information Request;
- Section 4 – additional information in response to the requests outlined in section 3;
- Section 5 – summary and conclusions;
- Section 6 – references; and
- Section 7 – acronyms.



3 REQUEST FOR ADDITIONAL INFORMATION

On the basis of Marine Directorate – Science, Evidence, Digital and Data (MD-SEDD) responses to the Offshore Application MD-LOT have requested (8th February 2024) that additional information is provided with regards to the commercial fisheries assessment.

A summary of the key matters raised in the MD-LOT Additional Information Request is included in Table 3-1, alongside the Applicant’s response, where suitable, or cross references to where further information has been provided within this document.

Table 3-1 Summary of MD-LOT and MD-SEDD Additional Information Request relevant to commercial fisheries

REQUEST	RESPONSE
<p>MD-LOT and MD-SEDD have requested evidence to support the conclusion that engagement with the fishing industry concluded that it would be more meaningful to put resources into research projects into commercially important fish and shellfish species as opposed to commercial fisheries monitoring.</p>	<p>The following summarises discussions and outcomes from the Fisheries Working Groups held throughout the EIA process with regards to the agreement of contribution to research projects:</p> <ul style="list-style-type: none"> • Fisheries Working Group 1 – 5th May 2022: the commercial fishing industry attendees of the FWG noted that the effect of the offshore Project on brown crab and their migration was a concern. The FWG meeting was followed up by a meeting with the Orkney Inshore Fisheries Group (IFG) Chair at the time (24th May 2022), to discuss if the Chair had any relevant additional data available that they could share on the brown crab population and/or migration patterns; • Fisheries Working Group 2 – 8th September 2022: the mitigation strategy was discussed, where a scientific approach was suggested by members of the fishing industry; • Fisheries Working Group 3 – 10th January 2023: monitoring of the fishing industry by the Project was raised under AOB. The fishing industry suggested that, instead of monitoring the commercial fishing industry, research could be conducted into commercially sensitive species, especially brown crab; and • Fisheries Working Group 4 – 14th November 2023: the Applicant confirmed the intention to contribute towards research into commercially important fish and shellfish species. <p>The Applicant expects a consent condition to participate in and contribute to appropriate research groups and initiatives as opposed to commercial fisheries monitoring.</p> <p>Meeting minutes of the Fisheries Working Group meetings have been shared with attendees and MD-LOT.</p>



REQUEST	RESPONSE
<p>MD-LOT and MD-SEDD have requested, in relation to displacement, further justification to explain how fishing is presumed to be able to resume in the development post-construction.</p>	<p>Section 4.1 presents further justification to explain why fishing is anticipated to be able to resume in the development post-construction and this is placed within the context of the conclusions of chapter 14: Commercial fisheries of the Offshore EIA Report.</p>
<p>MD-LOT and MD-SEDD have advised that the 'Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12m overall length - annual averages 2017 to 2021' should be considered alongside the ScotMap data presented in Chapter 14: Commercial fisheries and Supporting Study 13: Commercial fisheries baseline report of the Offshore EIA Report.</p>	<p>Section 4.2 presents consideration of the requested data set and how the additional dataset affects the baseline characterisation and subsequent EIA conclusions as presented in chapter 14: Commercial fisheries of the Offshore EIA Report.</p>
<p>MD-LOT and MD-SEDD requested clarification as to the term "guard vessel offset".</p>	<p>The term 'guard vessel offset' means that fishing vessels impacted by the development may be given the opportunity to be contracted as guard vessels during the construction of the development instead of fishing. This would follow the Fisheries Liaison with the Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison (FLOWW, 2014).</p> <p>The Applicant will endeavour to use local guard vessels. Ongoing discussions with the Fisheries Working Group will ensure continued engagement with the local fishing fleet making them aware of certification requirements well ahead time.</p>



4 ADDITIONAL INFORMATION

4.1 Further justification to explain how fishing is presumed to be able to resume in the development post-construction

MD-LOT and MD-SEDD requested that further justification is provided to explain how fishing is presumed to be able to resume in the offshore Project area post-construction (see Table 3-1).

The MD-SEDD response specifically highlighted statements made in relation to creel fishing. Chapter 14: Commercial fisheries of the Offshore EIA Report assessed the displacement of fishing effort during the operation and maintenance stage (see section 14.6.1.2 of chapter 14: Commercial fisheries of the Offshore EIA Report). The assessment on creelers assumed that creel fishing may be possible within the Option Agreement Area (OAA), and therefore, displacement during the operation and maintenance stage is likely to be very limited. Chapter 14: Commercial fisheries of the Offshore EIA Report also assessed the loss or restricted access to fishing grounds during the operation and maintenance period (see section 14.6.2.2 of chapter 14: Commercial fisheries of the Offshore EIA Report), where the assessment on creelers noted that some changes to operating practices (e.g. to take into account infrastructure locations) to ensure safe fishing around turbines may be required to fish within the OAA, although it is expected fishing will be able to resume. The assessment includes consideration of embedded mitigation measures (see table 14-10 of chapter 14: Commercial fisheries of the Offshore EIA Report), such as the production of a Fisheries Management and Mitigation Strategy (FMMS) (see Outline Management Plan 3: Outline FMMS) which will aim to maximise the potential for the offshore Project to co-exist, and other measures such as charting of installed infrastructure. Further justification for these statements is provided below and placed within the context of the conclusions of chapter 14: Commercial fisheries of the Offshore EIA Report. Consideration is also provided to mobile gear types to ensure a full understanding how fishing is presumed to be able to resume in the development post-construction.

In relation to creel fishing, direct effects from an offshore windfarm on the local fishing industry was researched by Ørsted. The developer collaborated with the local fishing industry to research the impacts of the Westernmost Rough offshore windfarm on the local lobster fisheries (which are commonly caught with creels). The results were published by Roach *et al.*, (2017) and Roach *et al.*, (2022). Roach *et al.*, (2017) looked into the effects of temporary exclusion of fishing vessels during construction, and showed that catch rates of lobsters were high immediately after re-opening of the windfarm site, and quickly returned to similar catch rates to the surrounding areas (Roach *et al.*, 2017). Roach *et al.*, (2022) investigated the longer-term (over six years) co-existence between the offshore windfarm including export cable and fishing sector. Lobster sizes, catch, Landings-Per-Unit-Effort (LPUE) and Catch-Per-Unit-Effort (CPUE) from between sites in the windfarm, near the windfarm and from a control site were compared. The conclusions showed that lobsters remained similar in size structure, LPUE and found increases in CPUE (Roach *et al.*, 2022).

Mobile gear (mainly smaller demersal trawlers) is also anticipated to be able to resume within the offshore Project area. The findings of the Gray *et al.*, (2016) study on changes to fishing practices around the United Kingdom (UK) as a result of the development of offshore windfarms was considered as part of the assessment presented in section 14.6.2.2.2 of chapter 14: Commercial fisheries Offshore EIA Report. The study analysed fishing activity data in areas within and relevant to six operational windfarms in the Irish Sea. The study findings showed an overall reduction of fishing effort by demersal trawling vessels, which was explained in part by changes in Total Allowable Catch (TAC)



allocations. Displacement of activity by *Nephrops* trawlers was observed in relation to Walney 2, whereas for all other operational offshore wind farms in the study no significant displacement of this fishery was recorded (Gray *et al.*, 2016).

During the Scottish Renewables Offshore Wind Conference in January 2024, representatives of the commercial fishing industry have confirmed that their members have successfully returned to mobile gear fishing within operational fixed offshore windfarms. The Beatrice and Moray East offshore windfarms were both named as good examples of successful returned fishing on *Nephrops* and scallops during the Panel Session ‘Harmony in the seas’ by the Scottish White Fish Producers Association (SWFPA) representative (Offshore Wind Conference, 2024). This was also confirmed at Fisheries Working Group 5 held on 19th March 2024, where it was acknowledged that fishing, including trawling and dredging, would be able to continue within the OAA due to the fixed foundations. However, there was uncertainty whether seine netting would also be able to continue.

None of the aforementioned projects have taken additional steps to allow commercial fishing activity within their OWF aside from keeping to maritime safety regulations and standard embedded mitigation, including cable burial where possible, cable protection if burial is not possible. Therefore, it can be assumed that these projects are safe to navigate within. Legally, all fishing vessels are allowed to fish inside these OWFs.

Within chapter 14: Commercial fisheries of the Offshore EIA Report, it was concluded that creeling along the offshore Export Cable Corridor (ECC) and OAA would be able to resume once the offshore Project is operational (see section 14.6.1.2 and 14.6.2.2 of chapter 14: Commercial fisheries of the Offshore EIA Report), and that some fishing within the OAA by vessels operating mobile gear, mainly smaller demersal trawlers, will be possible during the operation and maintenance stage. The aforementioned studies and statements acknowledge the statements originally used in chapter 14: Commercial fisheries of the Offshore EIA Report. It is concluded that the Offshore EIA Report findings remain unchanged.

4.2 Inclusion of the spatial dataset ‘Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12m overall length - annual averages 2017 to 2021’ to both baseline data set, and commercial fisheries assessment

MD-LOT and MD-SEDD requested that consideration of the ‘Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length - annual averages 2017 to 2021’ would help inform the baseline activity in the area surrounding the Project. The data has been considered here and conclusions drawn on whether it affects the baseline characterisation and subsequent EIA conclusions, as presented within chapter 14: Commercial fisheries of the Offshore EIA Report.

Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length had not been considered within chapter 14: Commercial fisheries of the Offshore EIA Report, as the gridded fisheries data had not been published yet. The results of the gridded fisheries data are shown in Figure 4-1. The data is only published when five or more fishing vessels actively fish the area, therefore it can be assumed that large sections of the OAA and ECC are fished by a maximum of four fishing vessels as demonstrated by the lack of data.



Figure 4-1 shows that the annual average number of vessels fishing near the landfall of the ECC was between five and fifteen between 2017 and 2021, using pots and traps. The annual average value around the landfall between 2017 and 2021 was found to be between £2,000 and £20,000, with higher incomes to the east of the cable landfall. The annual average weight caught was found to be between 0 and 15,000 kg, with higher weights caught to the east of the cable landfall. The annual average number of days fished near the cable landfall was between 0 and 100 days.

The original baseline concluded that creels (pots and traps) were a key fleet across the commercial fisheries offshore study area. The ScotMap data (2007 – 2011) used for the original assessment² showed fewer than 10 fishing vessels around the landfall area, and fewer than 25 to the east of the ECC near the cable landfall, which broadly matches the patterns shown by the gridded fisheries data. The ScotMap data did, however, also show a large section of the OAA and larger section of the cable landfall with <10 vessels, which is not shown within the gridded fisheries data. Thus, it is assumed that fishing activity has shifted around the ECC and OAA and has not increased over time. The 'Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length - annual averages 2017 to 2021' complements the data originally used in the EIA, but do not change the original baseline characterisation and associated impact assessment conclusions.

² Supporting Study 13: Commercial fisheries baseline report of the Offshore EIA Report.

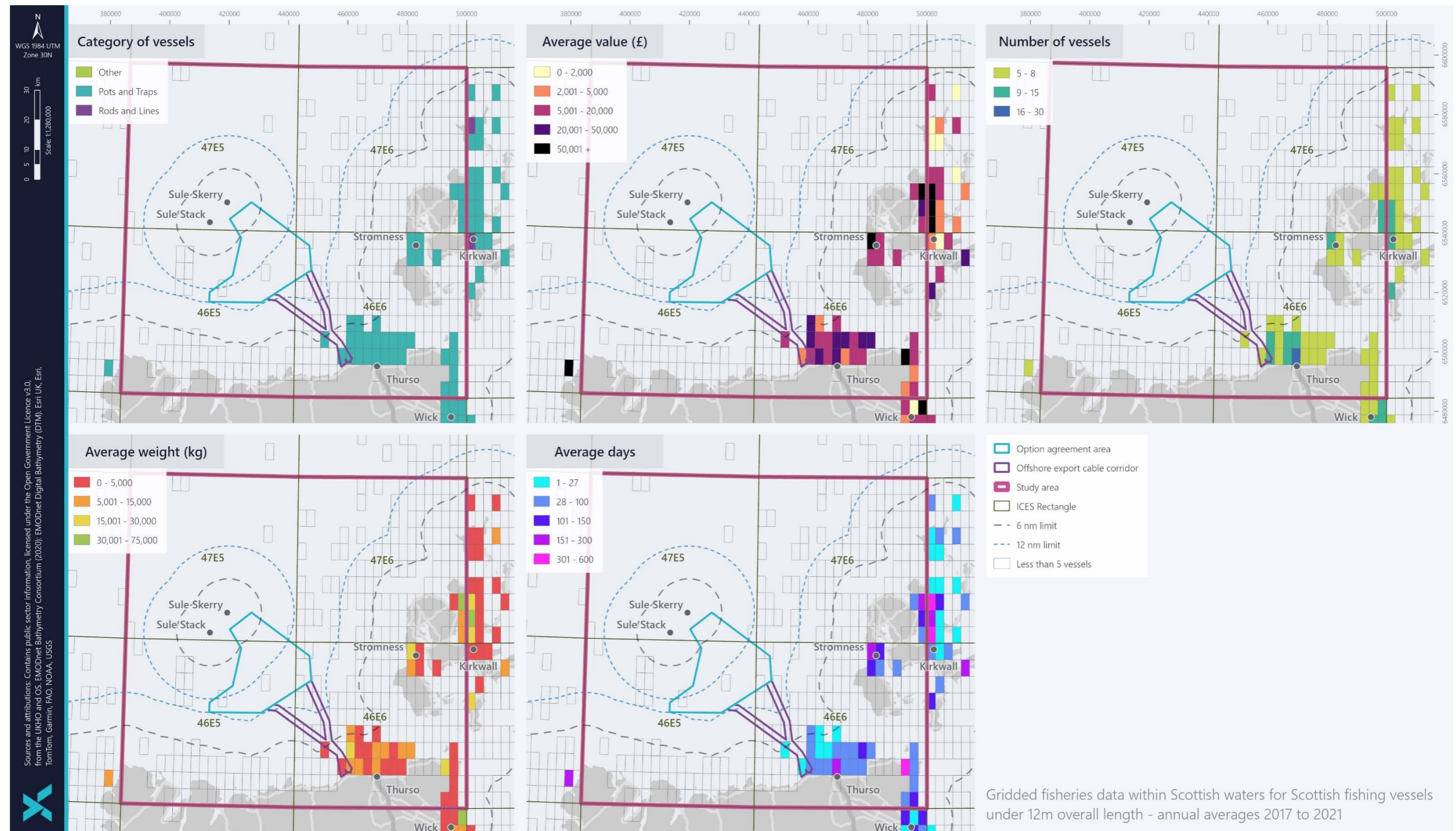


Figure 4-1 Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12m overall length - annual averages 2017 to 2021 (Scottish Government, 2024)



5 SUMMARY AND CONCLUSIONS

This addendum to chapter 14: Commercial fisheries of the Offshore EIA Report has been prepared in response to the MD-LOT Additional Information Request. Information has been provided to address the points raised by both MD-LOT and MD-SEDD. Further justification as to how fishing is presumed to be able to resume in the development post-construction has been provided and the spatial dataset 'Gridded fisheries data within Scottish waters for Scottish fishing vessels under 12 m overall length - annual averages 2017 to 2021' has been considered. None of the points raised have resulted in a change to the baseline characterisation or assessment conclusions as presented within chapter 14: Commercial fisheries of the Offshore EIA Report.



6 REFERENCES

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7 ACRONYMS

ACRONYM	DEFINITION
CPUE	Catch Per Unit Effort
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
FIR	Fisheries Industry Representative
FLOWW	Fisheries Liaison with the Offshore Wind and Wet Renewables Group
FMMS	Fisheries Management and Mitigation Strategy
FWG	Fisheries Working Group
IFG	Inshore Fisheries Group
km	kilometre
LPUE	Landings Per Unit Effort
MD-LOT	Marine Directorate - Licensing Operations Team
MD-SEDD	Marine Directorate – Science, Evidence, Data & Digital
MHWS	Mean High Water
NECRIFG	North East Coast Regional Inshore Fisheries Group
OAA	Option Agreement Area
OFA	Orkney Fisheries Association
OFS	Orkney Fishermen's Society
ORIFG	Orkney Regional Inshore Fisheries Group



ACRONYM	DEFINITION
OWF	Offshore Wind Farm
OWPL	Offshore Wind Power Limited
SFF	Scottish Fishermen's Federation
SWFPA	Scottish White Fish Producers Association
TAC	Total Allowable Catch
UK	United Kingdom
WTG	Wind Turbine Generators