

Chapter 25 Addendum: Noise (Airborne) and Vibration



ORIEL WIND FARM PROJECT

Environmental Impact Assessment Report - Addendum Chapter 25 Addendum: Noise (Airborne) and Vibration

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25 CHAPTER 25: NOISE (AIRBORNE) AND VIBRATION

25.1 Introduction

This Addendum provides information to supplement the assessment of airborne noise and vibration presented in chapter 25: Noise (Airborne) and Vibration of the Environmental Impact Assessment Report (EIAR)(2024) (volume 2C).

In response to the Request for Further Information (RFI) from An Coimisiún Pleanála (formerly An Bord Pleanála) regarding the planning application (case reference ABP-319799-24) for the Oriel Wind Farm Project (hereafter referred to as “the Project”), the location of the export cable at the landfall (above the HWM) at Dunany including the location for the Transition Joint Bay (TJB) (options 1 and 2) have been adjusted within the planning application boundary. The adjustments have been made to address concerns regarding potential impacts on the cliff and coastal habitats as outlined in items 6.K. and 8.G. on the Schedule – Further Information Request. This has removed the requirement to install the export cable through the cliff (using sheet piles to support the works). Further details on the adjusted design are provided in chapter 5 Addendum: Project Description (EIAR volume 2A Addendum).

The change in location of the TJB options has resulted in a change to the assessment provided in section 25.10.2 of chapter 25: Noise (Airborne) and Vibration relating to ‘Noise impacts to NSLs from construction at cable landfall’. The revised design results in the temporary works to install the TJB being closer to Noise Sensitive Receptors. Overall, there is no change to the significance of effect. Also, there are no other changes to chapter 25 Noise (Airborne) and Vibration arising from the updated assessment presented in 25.10.2.

The Application has also adjusted the location of the temporary construction compound west of the M1 Motorway and Dublin Belfast Rail Line (within the planning application boundary) in response to further engagement with TII. The revised location has also been assessed in section 25.10.3. Overall, there is no change to the significance of effect.

The section and subsection headings in this Addendum correspond to those used in chapter 25: Noise (Airborne) and Vibration of the EIAR. The reader is directed to review the information presented in this Addendum alongside the assessment presented in the EIAR chapter.

25.2 Purpose of this chapter

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.3 Study area

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.4 Policy Context

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.5 Consultation

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.6 Methodology to inform the baseline

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.7 Baseline environment

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.8 Key parameters for assessment

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.9 Impact assessment methodology

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10 Assessment of significance

25.10.1 Noise impacts to onshore NSLs from offshore piling

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.2 Noise impacts to NSLs from construction at cable landfall

Construction at the landfall will comprise open trench installation of the offshore export cable as far as the TJB. Two options for the location of the cable trench are under consideration, one approximately 50 m east along the beach access road from the crossroads (option 1) and the other approximately 130 m further east along the beach access road (option 2). Since the trench location near the crossroads (option 1) is closer to the nearest NSL, option 1 has been assessed since impacts of option 2 would be less due to the additional separation distance.

Table 25A-1: Predicted construction noise levels for NSLs within 100 m of landfall excavation.

NSL Geodirectory ID	Distance to centre of activity (m)	BS 5228 threshold value, dB L _{Aeq}	Predicted Noise Level, dB L _{Aeq}	Initial Magnitude of Impact
80957626	55	65	65	Medium
80957627	80	65	61	Low

Magnitude of Impact

The construction activities at the landfall will cause a direct noise impact and result in potentially audible noise at a small (<5) number of nearby properties. The predicted noise level at the nearest NSL of 65 dBA is for TJB rock breaking works which will be brief and only occur if required by ground conditions. However, predicted noise levels at the nearest NSL are 5 dB lower when the rock breaker is not in use. The magnitude of impact is therefore modified to low given the low likelihood of sustained noise levels from the rock breaker.

Sensitivity of the receptor

The receptors are determined to be of high sensitivity.

Significance of the effect

The magnitude of the impact is deemed to be low, and the sensitivity of the receptor is considered to be high. The predicted significance of effect is **moderate adverse significance** at the nearest NSL and less at all other NSLs, which is not significant in EIA terms. The significance of effect remains the same as that presented in EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.3 Noise impacts to NSLs from construction of onshore cable

The location of the compound (west) for the M1 Motorway and Dublin Belfast Rail crossing has been adjusted to the south (within the planning application boundary) which has resulted in a change in distance for the NSL as shown in Table 25A-2 (see text in strikethrough and blue). This has not changed the magnitude of the impact.

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Table 25A-2: Predicted HDD construction noise levels at nearest NSLs.

No	Cable Crossing	Preferred Method	Duration	Nearest NSL	Distance (m)	Predicted Noise Level, dB LAeq	Initial Magnitude of Impact
2	M1 Motorway and Dublin Belfast Rail Line @ Charleville	HDD	3 months	35472921	167 135	58 60	Low

25.10.4 Vibration impacts to NSLs from onshore cable construction

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.5 Noise impacts to NSLs from construction of onshore substation

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.6 Noise impacts to NSLs from operation of onshore substation

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.7 Noise impacts to NSLs from operation of offshore WTGs

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.8 Noise impacts to NSLs from operation of maintenance CTVs

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.9 Noise impacts to NSLs from decommissioning of cable landfall

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.10.10 Noise impacts to NSLs from decommissioning of onshore substation

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.11 Mitigation and residual effects

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.12 Cumulative Impact Assessment

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.13 Transboundary effects

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.14 Interactions

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

25.15 Summary of impacts, mitigation measures and residual effects

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.

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References

There are no changes to EIAR chapter 25: Noise (Airborne) and Vibration.