

## **AQUIND** Limited

# **AQUIND INTERCONNECTOR**

Environmental Statement – Volume 3 – Appendix 3.8 Onshore and Marine Programme

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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### DOCUMENT

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## **APPENDIX 3.8 ONSHORE AND**

### MARINE PROGRAMME

#### 1.1. INTRODUCTION

- 1.1.1.1. The description of the programme for the construction aspect of the Proposed Development is structured as follows:
  - Overall programme for marine and onshore; and
  - Programme clarifications.

#### 1.2. **PROGRAMME CLARIFICATIONS**

- 1.2.1.1. The working hours for the Marine and Onshore components are anticipated to cover shifts and working days, as detailed in Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') Volume 1 (document reference 6.1.3).
- 1.2.1.2. Landfall related activities (including drilling and reaming, duct pull) for the Marine and Onshore Components are anticipated to be carried out in 12 hour shifts over 7 days.
- 1.2.1.3. Some operations may require work to take place outside these times. For example, abnormal loads may be encouraged to avoid causing disruption to traffic with overnight transportation.
- 1.2.1.4. There may be consideration given to working outside of normal hours on the on the Onshore Cable Corridor section if this is required to satisfy certain mitigation requirements to minimise localised impacts.
- 1.2.1.5. Due to the potential for adverse weather conditions between October and March, cable installation operations in European waters are typically limited to a 6-month window between April and September. However, this may extend into the winter season due to developments in technology and operations, dependent on a number of conditions and subject to interactions with activities of other marine users and other limitations. All marine works are expected to be performed on the basis of 24 hours all days of the week.
- 1.2.1.6. It is anticipated that the marine works will be undertaken during 2021-2023 and Chapter 3 (Description of the Proposed Development) outlines the indicative marine construction programme for the Proposed Development. It is currently assumed that each of the two cable circuits will be manufactured and installed by a separate contractor. The cable lay and burial is therefore assumed to occur in parallel, albeit generally spatially separate (with a separate contractor for each cable circuit, work being undertaken at the same time but generally at different locations).



- 1.2.1.7. Some works, as part of seabed preparation and in relation to cable crossing construction, may be undertaken jointly for both cable circuits (i.e. both cable circuits works are undertaken at the same time).
- 1.2.1.8. Although not anticipated at this stage, there remains the potential for cable pair works to be undertaken individually by a single contractor, and therefore could occur separately, with one after the other.
- 1219 These timescales are subject to cable production, installation campaigns and types of vessels used, environmental considerations and other circumstances which are not within the Applicant's control, such as weather conditions causing vessel down time.
- 1.2.1.10. Accordingly, the indicative worst-case programme, as outlined in Chapter 3 (Description of the Proposed Development) will form the basis of assessments for the Environmental Impact Assessment ('EIA'), and allows for a more flexible approach to cable installation to accommodate some disruption. In addition, some seabed preparation and installation activities may occur in the winter. Seabed preparation may also be phased more closely to cable lay and burial.
- 1.2.1.11 In Table 1, the orange bars represent tasks, whilst the green bars represent the individual activities within those tasks. These are current estimates for sequencing of activities. However, in order to maintain flexibility in the construction programme, these individual activities may occur at other times during the period allocated to the overall summary task, although sequencing is likely to remain similar.
- 1.2.1.12. Illustrative durations for activities are also provided, where works relating to the two cable circuits are undertaken separately, this is identified (e.g. circuit 1 + circuit 2, but they might still be undertaken in parallel in terms of timing). Where they are anticipated to be undertaken at the same time (e.g. circuit 1 and circuit 2 in the same operation, which is more likely for sandwave clearance, boulders or cable crossing), they are shown cumulatively.



#### 1.3. OVERALL PROGRAMME

## Table 1 - Indicative worst-case Marine Cable installation, Onshore Cable installation and Converter Station Construction programme

|                                     |   |                                   | 2021 |    | 2022 |    |    |    |    | 20 | 23 |    | 2024 |    |    |    |
|-------------------------------------|---|-----------------------------------|------|----|------|----|----|----|----|----|----|----|------|----|----|----|
| Key Task                            | Related Activities  | Indicative<br>Duration<br>(Weeks) | Q3   | Q4 | Q1   | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |
| Seabed<br>Clearance<br>/Preparation | All activities  |                                   |      |    |      |    |    |    |    |    |    |    |      |    |    |    |
|                                     | Pre-lay grapnel run<br>('PLGR') and OOS<br>cable recovery | 4 (in parallel)<br>8 (separately) |      |    |      |    |    |    |    |    |    |    |      |    |    |    |
|                                     | Boulder clearance   | 15 (jointly)                      |      |    |      |    |    |    |    |    |    |    |      |    |    |    |
|                                     | Sandwave clearance  | 17 (jointly)                      |      |    |      |    |    |    |    |    |    |    |      |    |    |    |
|                                     | Cable crossing preparation                                | 1 (jointly)                       |      |    |      |    |    |    |    |    |    |    |      |    |    |    |
| Landfall<br>Installation            | All activities  |                                   |      |    |      |    |    |    |    |    |    |    |      |    |    |    |



|                                      |   |   | 2021 |    | 21 2022 |    |    |    | 2023 |    |    |    | 2024 |    |    |    |
|--------------------------------------|---|---|------|----|---------|----|----|----|------|----|----|----|------|----|----|----|
| Key Task                             | Related Activities                          | Indicative<br>Duration<br>(Weeks)         | Q3   | Q4 | Q1      | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |
|                                      | Preparation, drilling and duct installation | 44  |      |    |         |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Transition Joint Bay                        |   |      |    |         |    |    |    |      |    |    |    |      |    |    |    |
|                                      | ORS   |   |      |    |         |    |    |    |      |    |    |    |      |    |    |    |
| Marine Cable<br>Installation<br>(UK) | All activities                              |   |      |    |         |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Nearshore cable lay and burial              | 14 (in<br>parallel)<br>25<br>(separately) |      |    |         |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Offshore cable lay                          | 16 (in<br>parallel)<br>30<br>(separately) |      |    |         |    |    |    |      |    |    |    |      |    |    |    |



|                                       |                          |   | 2021 |    | 2022 |    |    |    | 20 | )23 |    | 2024 |    |    |    |    |
|---------------------------------------|--------------------------|---|------|----|------|----|----|----|----|-----|----|------|----|----|----|----|
| Key Task                              | Related Activities       | Indicative<br>Duration<br>(Weeks)         | Q3   | Q4 | Q1   | Q2 | Q3 | Q4 | Q1 | Q2  | Q3 | Q4   | Q1 | Q2 | Q3 | Q4 |
|                                       | Offshore cable burial    | 4 (in parallel)<br>8 (separately)         |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
|                                       | Remedial protection*     | 21 (in<br>parallel)<br>42<br>(separately) |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
| Cable<br>Crossing                     | All activities           |   |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
|                                       | Construction of crossing | 2 (jointly)                               |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
| Onshore Cable<br>Installation<br>(UK) | All activities           |   |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
|                                       | Route construction       |   |      |    |      |    |    |    |    |     |    |      |    |    |    |    |
|                                       | Cable pulling            |   |      |    |      |    |    |    |    |     |    |      |    |    |    |    |

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|                                      |   |                                   | 2021 |    | 2022 |    |    |    | 2023 |    |    |    | 2024 |    |    |    |
|--------------------------------------|---|-----------------------------------|------|----|------|----|----|----|------|----|----|----|------|----|----|----|
| Key Task                             | Related Activities                      | Indicative<br>Duration<br>(Weeks) | Q3   | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |
|                                      | Jointing and terminating                |                                   |      |    |      |    |    |    |      |    |    |    |      |    |    |    |
| Converter<br>Station<br>Construction | All activities, including reinstatement |                                   |      |    |      |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Enabling /Diversion<br>Works            |                                   |      |    |      |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Main Civils Construction works          |                                   |      |    |      |    |    |    |      |    |    |    |      |    |    |    |
|                                      | Mechanical and<br>Electrical Work       |                                   |      |    |      |    |    |    |      |    |    |    |      |    |    |    |

\* This includes transit to and from the quarry, and loadout, and therefore, depending on the actual requirements for remedial works, the total time in the corridor within this window is likely to be 6-10 weeks, and only for a few days on each occasion. If a larger vessel was used, the volumes would be the same, but fewer loads needed, possibly a small overall window and fewer visits to the Marine Cable Corridor, but the visit might be a few days longer.

