



AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Volume 3 – Appendix 16.10 Reptile Survey Report

The Planning Act 2008

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

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EXECUTIVE SUMMARY

This report has been prepared on behalf of AQUIND Limited (the 'Applicant') to support an application (the 'Application') for a Development Consent Order ('DCO'). AQUIND Interconnector is a proposed electricity Interconnector between France and the UK. The Application for the DCO is made in respect of the UK elements of AQUIND Interconnector (referred to as the 'Proposed Development').

WSP was commissioned by the Applicant to undertake a reptile survey.

Previous ecological survey work associated with the Proposed Development identified suitable reptile habitat within the vicinity of the Converter Station Area. Therefore, a reptile survey was undertaken to establish the presence or likely absence of reptiles within the Converter Station Area of the Proposed Development.

The survey comprised the deployment and checking of 250 artificial refugia, deployed in areas of suitable reptile habitat. Refugia were checked in suitable weather conditions in June and early July 2019.

No reptiles or evidence of reptiles were recorded during the survey. However, the likely absence of reptiles could not be concluded due to the large extent of the Survey Area and the presence of natural refugia which could not be safely lifted or thoroughly inspected for reptiles during the surveys, and therefore a small population of reptiles could exist within the Survey Area.

Reptiles are protected from killing and injury under the Wildlife and Countryside Act 1981, as amended, and are Species of Principal Importance for the conservation of nature under the Natural Environment and Rural Communities Act 2006. It is understood that the Proposed Development will likely require vegetation clearance of suitable reptile habitat and removal of natural refugia. It is therefore recommended that a Precautionary Method of Works document is produced, which would include measures to ensure compliance with biodiversity legislation relating to reptiles during the Construction Stage of the Proposed Development.

APPENDIX 16.10 REPTILE SURVEY

REPORT

1.1. INTRODUCTION

1.1.1. PROPOSED DEVELOPMENT BACKGROUND

1.1.1.1. This report has been prepared on behalf of AQUIND Limited (the 'Applicant') to support an application (the 'Application') for a Development Consent Order ('DCO'). AQUIND Interconnector is a proposed electricity Interconnector between France and the UK. The Application for the DCO is made in respect of the UK elements of AQUIND Interconnector (referred to as the 'Proposed Development').

1.1.1.2. The Proposed Development is described in detail in Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') Volume 1 (document reference 6.1.3).

1.1.1.3. WSP was commissioned by the Applicant to undertake a reptile survey.

1.1.2. ECOLOGICAL BACKGROUND

1.1.2.1. A Phase 1 survey and subsequent Preliminary Ecological Appraisal ('PEA') (Appendix 16.2 (PEA/Phase 1 Habitat Survey) of the ES Volume 3 (document reference 6.3.16.2)) of the Proposed Development was commissioned by the Applicant in August 2017 and updated in June 2019. The PEA identified ecological constraints associated with the Converter Station Area, including potential effects on reptiles as suitable reptile habitat was noted within the Converter Station Area.

1.1.2.2. Reptile surveys have therefore been undertaken to inform the baseline of the Proposed Development and the Ecological Impact Assessment.

1.1.3. BRIEF AND OBJECTIVES

1.1.3.1. WSP was commissioned to complete a survey to inform the assessment of ecological impacts on reptiles.

1.1.3.2. To achieve this, the following objectives were set:

- Undertake a reptile survey using standard techniques in suitable habitats to identify the presence or likely absence of reptile species.
- Provide recommendations as to how proposals should account for reptiles in relation to legislation, planning, and biodiversity policy.

2. METHODS

2.1. REPTILE PRESENCE/LIKELY ABSENCE SURVEY

- 2.1.1.1. The reptile survey to determine presence/likely absence was completed with regard for guidance within the Herpetofauna Workers' Manual (1998) and the methodology within Frog Life's Reptile Survey Advice Sheet 10 (1999).
- 2.1.1.2. A 'Survey Area' was defined as all land within the Converter Station Area at the time of this study, as shown on Figure 1.
- 2.1.1.3. The survey comprised eight visits to the Survey Area, each incorporating two elements:
- survey of artificial refugia; and
 - visual observation of habitats and natural refugia present.
- 2.1.1.4. A total of 200 refugia were installed within suitable reptile habitat within the Survey Area (or in suitable habitat directly adjacent to the Survey Area) on 28 May 2019, with a further 50 refugia deployed on 3 June 2019. Refugia were then left to bed down for a minimum of one week (refugia deployed on 28 May 2019 were left to bed down for two weeks) prior to the beginning of the survey visits. The approximate locations of the reptile refugia deployed are shown on Figure 1.
- 2.1.1.5. A mixture of materials sized approximately 0.5 m x 0.5 m or 0.5 m x 1 m were used as artificial refugia, including bitumen felt, corrugated metal and corrugated bitumen. Refugia were sited in suitable basking spots, close to cover, within areas identified as suitable reptile habitat during the Phase 1 habitat survey.
- 2.1.1.6. Reptiles are ectothermic animals, deriving their body heat from the external environment. Therefore, the timing of the survey visits was dictated by weather conditions. All surveys were completed within the appropriate season (March to October) and within the appropriate ambient temperature (10-20°C). As far as possible, surveys were undertaken on sunny days with low cloud cover and little wind to maximise the probability of recording reptiles, should they be present.

2.2. DATES OF SURVEY AND PERSONNEL

- 2.2.1.1. The reptile survey was completed by a competent surveyor with over four years' experience of ecological survey, including extensive reptile survey experience enabling them to develop a strong understanding of the ecology of native reptile species.
- 2.2.1.2. Survey dates and weather conditions are shown in Table 1 below.

Table 1 - Weather data and Survey Dates (2019)

Survey Visit Number		1	2	3	4	5	6	7	8
Date		10/06	19/06	21/06	25/06	27/06	28/06	01/07	03/07
Start	Time	09:00	09:00	09:00	08:00	08:00	08:00	08:00	08:30
	Air Temp. (°C) (shade)	15	15	14	17	16	15	14	17
	Cloud Cover (oktas)	8	4	5	8	0	1	4	0
	Wind Speed	1	1	1	1	2	1	2	1
	Time	12:00	11:30	11:30	10:30	11:00	10:30	11:30	12:30
Finish	Air Temp. (°C) (shade)	16	17	18	19	18	20	17	19
	Cloud Cover (oktas)	8	4	4	7	0	1	2	5
	Wind Speed	1	1	1	1	2	1	2	1
	Time	12:00	11:30	11:30	10:30	11:00	10:30	11:30	12:30

2.3. NOTES AND LIMITATIONS

- 2.3.1.1. Weather conditions on Visit 1 were considered to be sub-optimal due to wet ground conditions from recent and overnight heavy rain, and showers towards the end of the survey visit. Therefore, an additional survey visit (Visit 8) was scheduled in suitable weather conditions. As a minimum of seven survey visits in suitable conditions were completed, in accordance with good practice guidance, poor weather on Visit 1 is not considered to be a significant limitation to the survey.
- 2.3.1.2. A field in the north-east of the Survey Area was mown for silage in between Visit 4 and Visit 5, resulting in the partial degradation of approximately 20 artificial refugia. Refugia which had been in the path of the mower were subsequently relocated to field margins to avoid further disturbance. Given that the artificial refugia affected were still in a usable condition, this is not considered to be a significant limitation to the survey.
- 2.3.1.3. It is considered that the number of artificial refugia deployed for the survey was proportionate to the suitable habitat for reptiles available within the Survey Area. However, the Survey Area is extensive and largely dominated by overgrown grassy fields which may support sheltering or foraging reptiles not using the artificial refugia. In addition, several large natural refugia features were identified within the Survey Area including piles of large logs and the remains of farm machinery (see Figure 1). These features were too large to safely lift, and could not be thoroughly surveyed due to dense vegetation surrounding them. As such, it is possible that a low population of reptiles within the Survey Area may not be captured by the survey effort. Recommendations to account for this limitation have been provided in Section 5.

3. RESULTS

3.1. REPTILE SURVEY

- 3.1.1.1. No reptiles or evidence of reptiles was recorded by visual observation or under artificial refugia within the Survey Area during the survey.
- 3.1.1.2. However, given the large extent of the Survey Area and the presence of natural refugia discussed in Section 2.3.1.3, it is possible that reptiles sheltering and/or foraging within these features were not detected during the reptile survey.

3.2. EVALUATION

- 3.2.1.1. Although no reptiles were recorded within the Survey Area during the survey, the likely absence of reptiles within the Survey Area cannot be concluded due to the large extent of the Survey Area, and the presence of large man-made refugia which could not be fully inspected but are likely to provide suitable habitat to support reptiles.
- 3.2.1.2. Given the absence of reptiles recorded during the survey effort, it is likely that any reptile population undetected within the Survey Area will be small. It is therefore considered that the Survey Area is of Site level importance for reptiles.

4. LEGAL & PLANNING POLICY

CONTEXT

4.1. LEGISLATION

4.1.1. THE WILDLIFE AND COUNTRYSIDE ACT 1981, AS AMENDED

4.1.1.1. Native, widespread reptiles, including common lizard *Zootoca vivipara*, slow worm *Anguis fragilis*, grass snake *Natrix Helvetica* and adder *Vipera berus*, are protected under Schedule 5 of the Wildlife and Countryside Act 1981, as amended, under part of Section 9(1) and all of Section 9(5). As such, it is an offence to:

- “*Intentionally or recklessly kill or injure and individual of these species; or*
- *‘Sell, offer or expose for sale, or [have in] possession or transport for the purposes of sale, any live or dead [individual] or any part of, or anything derived from an individual of these species.’*”

4.1.2. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

4.1.2.1. All native species of reptile are also listed as a Species of Principal Importance (SPI) for the conservation of biodiversity in England in accordance with Section 41 of the NERC Act 2006. Under Section 40 of the NERC Act 2006, public bodies including local planning authorities have a duty to have regard for SPI when carrying out their functions, including determining planning applications.

4.1.2.2. Works relating to the Converter Station Area are likely to include vegetation clearance and removal of existing refugia from the Survey Area. As the presence of reptiles within the Survey Area cannot be ruled out, it will be necessary to adopt appropriate precautionary measures as part of the Proposed Development in order to minimise the risk of an offence under the legislation protecting reptiles.

4.2. PLANNING POLICY

4.2.1.1. At a national context planning policy is driven by the National Planning Policy Framework (‘NPPF’) (2019). The NPPF sets out, amongst other points, how at an overview level the

‘planning system should contribute to and enhance the national and local environment by:

- *“...recognising the wider benefits of ecosystem services;*

- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...*

4.2.1.2. The NPPF states that this should be achieved through local planning development frameworks and gives recommendations for criteria based policies which recognise the hierarchy of designated Survey Areas which range from internationally important habitat, to Survey Areas of importance at a local level and ensure that protection is

“commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.”

4.2.1.3. A list of principles which local planning authorities should follow when determining planning applications is included in the NPPF which includes the following:

- *“if significant harm resulting from a development cannot be avoided...adequately mitigated, or, as last resort, compensated for, then planning permission should be refused;*
- *...opportunities to incorporate biodiversity in and around developments should be encouraged; and*
- *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland...unless the need for, and benefits of, the development in that location clearly outweigh the loss...”*

5. DISCUSSION & RECOMMENDATIONS

5.1. PRECAUTIONARY WORKING METHODS

5.1.1.1. The extent of the Survey Area and the presence of natural refugia is such that the absence of reptiles cannot be confirmed. However, given the absence of reptiles recorded during the survey effort, it is likely that any population of reptiles within the Survey Area will be small.

5.1.1.2. Therefore, it is recommended that a Precautionary Method of Works ('PMoW') document is created which will detail how working methods during the Construction Stage of the Proposed Development can minimise the risk of killing or injury to reptiles.

5.1.1.3. Such working methods likely to feature in a PMoW may include, but are not limited to, the following:

- Two stage vegetation clearance of fields, whereby areas of suitable habitat for reptiles are cut down to a height of 300 mm, left for a period to enable reptiles to disperse, and then cut to ground level under ecological supervision.
- Removal of natural refugia by hand where safe to do so, or otherwise undertaken methodically using plant under ecological supervision.
- Plant and machinery to be kept to defined access routes around the Survey Area which are unsuitable for reptiles, until suitable habitat in the works area has been removed.
- Covering of any open excavations overnight, to prevent the trapping of animals including reptiles.

REFERENCES

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- Her Majesty's Stationary Office (HMSO) (1981). Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000).
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- WSP. (2017) Preliminary Ecological Appraisal – AQUIND interconnector route 3D. WSP, London.



LEGEND

- Survey Area
- Artificial refugia locations
- ◆ Natural refugia locations

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(i)

01	03/07/2019	MG	Reptile survey - refugia locations	LW	IE
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PROJECT:
AQUIND Interconnector

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**Figure 1 :
Reptile Survey
Artificial and Natural Refugia Locations**

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