



Norfolk Boreas Offshore Wind Farm Clarification Note Stages and Phases

Applicant: Norfolk Boreas Limited Document Reference: ExA.AS-5.D4.V1 Deadline 4

Date: January 2020 Revision: Version 1

Author: Royal HaskoningDHV

Photo: Ormonde Offshore Wind Farm





Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
28/01/2020	01D	First draft for internal review	ES/BT	CD/VR	JL
29/01/2020	01F	Final for Deadline 4 submission	ES/BT	CD	JL







Table of Contents

1	Introduction	4
2	Stages	4
2.1	Case Study	5
2.2	Project Example	6
3	Phases	8
Table of Tab	les	
Table 1 East	Anglia One Stages	5
Table 2 East	Anglia One Example Management Plan to Discharge DCO Requirements	6
Table 3 Proj	ect Example Stages	6
Table 4 Proi	ect Example Management Plan to Discharge dDCO Requirements	7





Glossary of Acronyms

ExA	Examining Authority
DCO	Development Consent Order
dDCO	Draft Development Consent Order
HDD	Horizontal Directional Drilling





1 Introduction

- 1. Following Issue Specific Hearing 3 on Onshore Effects including the draft
 Development Consent Order held on Tuesday 21st January 2020 an action was
 identified by the Examining Authority for the Applicant to produce a post-hearing
 note to clarify the terms 'stages' and 'phases' using case study examples.
- 2. The Applicant provided information on the terms 'phases' and 'stages' in the Written Summary of the Applicant's Oral Case at Issue Specific Hearing 1 draft Development Consent Order (REP1-041) on page 11, Items 3 and 4. This note aims to further explain the terms 'stages' and 'phases', as requested by the Examining Authority (ExA), providing examples and case studies where possible to illustrate how these relate to the approvals process.

2 Stages

- 3. Stages are the subdivision of works for the purposes of discharging consent conditions, with each stage required to work under its approved management plan.
- 4. Draft DCO Requirement 15 states:
 - (4) The onshore transmission works may not be commenced until a written scheme setting out the stages of the onshore transmission works for the relevant onshore phase has been submitted to the relevant planning authority.
- 5. Stages are geographical and could align with relevant planning authority boundaries or could be aligned by type of work such as the onshore project substation which covers a discreet geographical area. The stages may also be aligned by reference to temporal requirements, that is that certain elements of the works may need to be progressed at a different time, such as the landfall.
- 6. The exact detail and number of stages can, however, only be finalised once contractors have been appointed and have determined the detailed construction process and the approach to discharging requirements has been agreed with the relevant planning authority. Once the stages have been determined based on geographical or temporal requirements then in line with dDCO Requirement 15 a written scheme setting out the stages will be submitted to the relevant planning authority.
- 7. Section 2.1 below provides a case study of how stages were defined for the onshore transmission works for another offshore wind farm project, East Anglia One and how this related to the discharge of requirements. Section 2.2 provides an example of how the stages may be defined for the Norfolk Boreas project.





2.1 Case Study

- 8. One way of defining stages is by the different Work No's as defined in the DCO, as these can be grouped in different ways to reflect the discharge requirements.
- 9. For East Anglia One Offshore Wind Farm (East Anglia One) the stages were defined (a) to (j) and were defined by the Work No's based on the geographical area but were also grouped to reflect the different work elements, this is shown in Table 1.

Table 1 East Anglia One Stages

Stages	Work Element
(a) Works No. 3B and 3C (using the construction consolidation site at Work No. 4);	Landfall HDD
(b) Works No. 5 to 7A (using the construction	Cable installation
consolidation site at Work No. 7B);	
(c) Works No. 8 to 10A (using the construction consolidation site at Work No. 10B);	Cable installation
(d) Works No. 11 to 15(using the construction consolidation site at Work No. 16);	Cable installation
(e) Works No. 17 to 23A (using the construction consolidation site at Work No. 23B);	Cable installation
(f) Works No. 23C to 28A (using the construction consolidation site at Work No. 28B);	Cable installation
(g) Works No. 29 to 30A (using the construction consolidation site at Work No. 30B);	Cable installation
(h) Works No. 31 to 34A (using the construction consolidation site at Work No. 34B);	Cable installation
(i) Works No. 35A to 37D (using the construction consolidation site at Work No. 37E);	Cable installation
(j) Works No. 38 to 41.	Onshore substation

- 10. With regards to the discharging of the requirements and the production of management plans, for East Anglia One in some cases different plans were prepared for different stages and in some cases a single plan was prepared to cover all stages.
- 11. For example, in the case of East Anglia One, a single management plan was produced for all stages (a) to (j) and agreed with all the relevant planning authorities and consultees for the Code of Construction Practice, Traffic Management Plans and Archaeological Written Scheme of Investigation. However, for some elements of the works separate plans were produced to reflect the different work elements. For example, separate Landscape Management Schemes were produced for the onshore cable route (stages (a) to (i)) and the onshore project substation (stage (j)). In addition, certain documents were only relevant to certain work packages e.g. the Substation Detailed Design document was only relevant to the onshore project substation (Works No 38 to 41), so this was only required for stage (j). Table 2





provides examples of the management plans produced to discharge the DCO Requirements for East Anglia One and how this related to the stages.

Table 2 East Anglia One Example Management Plan to Discharge DCO Requirements

Management Plan	DCO Requirement and Stages
Code of Construction Practice	Requirement 20
	All stages (a) to (j)
Archaeology Written Scheme of Investigation	Requirement 18 (1) and (2)
	All stages (a) to (j)
Traffic Management Plan	Requirement 25 (1) (a)
	All stages (a) to (i)
Travel Plan	Requirement 25 (1) (b)
	All stages (a) to (i)
Access Management Plan	Requirement 25 (1) (c)
	All stages (a) to (i)
Onshore Cable Route Landscape Management Plan	Requirement 12
Works 3B to 37	Stages (a) to (i)
Substation Landscape Management Plan	Requirement 12
Works No 38 to 41	Stage (j)
Substation Detailed Design	Requirement 10
	Stage (j) only

2.2 Project Example

- 12. An example of how the stages may be defined for the Norfolk Boreas project is provided in Table 3, however the final written scheme setting out the stages will be produced post-consent.
- 13. The planning authorities have expressed a request to retain control of the discharge of the Requirements and associated management plans within their own districts, therefore this example is based on the planning authority boundaries and different work elements and can be linked to the Work No's defined in the dDCO.

Table 3 Project Example Stages

Stages	Work No's
a) Landfall (in North Norfolk)	Works No 4C
b) Onshore cable route in North Norfolk	Works No 5
c) Onshore cable route in Broadland	Works No 6
d) Onshore cable route in Breckland	Works No 7
e) Onshore project substation (in Breckland)	Works No 8A, 8B, 12A, 12B
f) 400kV cable route (in Breckland)	Works No 9
g) National Grid Substation Extension (in Breckland)	Works No 10A to 11B

14. An example of how these stages could be used to discharge the relevant DCO Requirements and in the production of management plans is set out in Table 4. This strategy is based on the planning authorities retaining control of their own areas/topics, however has tried to combine areas where Norfolk County Council are the leading authority such as archaeology and traffic. It is likely that this would need





to be refined further based on the work elements and dependent on contractor appointment and approach.

Table 4 Project Example Management Plan to Discharge dDCO Requirements

Management Plan	dDCO Requirement and	
	Stage	
North Norfolk District Council Plans		
Landfall Method Statement	Requirement 17	
	Stage a) only	
Landscape Management Scheme North Norfolk	Requirements 18 and 19	
	Stages a) and b)	
Code of Construction Practice North Norfolk	Requirement 20	
	Stages a) and b)	
Ecological Management Plan North Norfolk	Requirement 24	
	Stages a) and b)	
Broadland District Council Plans		
Landscape Management Scheme Broadland	Requirements 18 and 19	
	Stage c)	
Code of Construction Practice Broadland	Requirement 20	
	Stage c)	
Ecological Management Plan Broadland	Requirement 24	
	Stage c)	
Breckland District Council Plans		
Landscape Management Scheme Cable Route Breckland	Requirements 18 and 19 Stage d)	
Landscape Management Scheme Onshore Project	Requirements 18 and 19	
Substation and Associated Infrastructure Breckland	Stage e) to g)	
Code of Construction Practice Breckland	Requirement 20	
	Stages d) to g)	
Ecological Management Plan Breckland	Requirement 24	
	Stage d) to g)	
Design and Access Statement	Requirement 16	
	Stage e) only	
Operational Drainage Plan	Requirement 32	
	Stages e) and g) only	
Project Wide Plans		
Archaeology Written Scheme of Investigation	Requirement 23	
	All stages	
Traffic Management Plan	Requirement 21 (a)	
	All stages	
Travel Plan	Requirement 21 (b)	
	All stages	
Access Management Plan	Requirement 21 (c)	
	All stages	
Skills and Employment Strategy	Requirement 33	
	All stages	





3 Phases

- 15. Phases relate to the temporal element and are only applicable to the cable pulling works (operations to pull cables through ducts) which could be undertaken in single phase or two separate phases. As defined in the dDCO:
 - 'Single onshore phase' means a single duct laying operation (where relevant under scenario 2, **one** separate operation to pull the cables through the ducts and **one** separate operation to fit out the onshore project substation;
 - 'Two onshore phases" means a single duct laying operation (where relevant under scenario 2), **two** separate operations to pull the cables through the ducts and **two** separate operations to fit out the onshore project substation'
- 16. The cable will be installed in phases to facilitate the commissioning of the offshore wind turbines which may be undertaken in a single phase or two phases. For the purpose of the onshore Environmental Impact Assessment a worst-case of a two phased approach was assumed.
- 17. Draft DCO Requirement 15 states:
 - (a) The onshore transmission works may not be commenced until notification has been submitted to the relevant planning authority:
 - (b) detailing whether the onshore transmission works will be constructed in a **single onshore phase** or in **two onshore phases**.
- 18. In accordance with Requirement 15 the Applicant must not commence the onshore transmission works until notification has been submitted to the relevant planning authority detailing whether the onshore transmission works will be constructed in a single onshore phase or in two onshore phases.
- 19. As the phases, as defined in the dDCO, are specific to the Norfolk Boreas project, no case studies can be provided.