AQUIND Limited

AQUIND INTERCONNECTOR

DCO Parameters Index Document

The Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010, Rule 8(1)(b)

Document Ref: 7.7.5

PINS Ref.: EN020022

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PINS REF.: EN020022

DOCUMENT: 7.7.5

DATE: 6 OCTOBER 2020

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DOCUMENT

Document	DCO Parameters Index Document
Revision	001
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Date	6 October 2020
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Date	6 October 2020

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TABLES

1. REVIEW OF PARAMETERS

1.1. INTRODUCTION

1.1.1.1. Written Question DCO1.5.97 stated the following:

"There are various uncertainties in relation to the parameters set out in the dDCO and assessed in the ES, as highlighted in other questions, and it is noted that the maximum parameters presented in Schedule 1 of the dDCO (APP-019) do not appear to fully align with some of the maximum parameters set out at a wide variety of locations in the ES.

Therefore, please can the Applicant provide a reconciliation document to aid understanding of where maximum parameters assessed in the ES are secured in the dDCO to ensure that what is permitted in the dDCO is not outside the scope of the assessment reported in the ES and HRA report."

1.1.1.2. The Applicant has prepared this document to address the queries raised in relation to the parameters set out in the draft DCO ('dDCO') and assessed in the Environmental Statement ('ES'). The review of parameters is set out in Table 1, following the order of the ES Chapters (3 and 6 to 28) (APP-118 and APP-121 – APP-143).

Table 1 – Review of ES Parameters

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Chapter 3 (Description of the Proposed Development)			
Paragraph 3.5.2.3	The total length of the Marine Cable Corridor in UK waters is approximately 109 km from the Landfall at Eastney to the UK/France EEZ boundary line.	Work No. 7 (a) at Schedule 1 to dDCO states marine HVDC cables of up to 109 kilometres (each cable circuit) between the UK exclusive economic zone with France and Works No. 6 including where required works to facilitate HDD.	No resolution required as position aligned.
Paragraph 3.5.3.1	The Marine Cable Route will consist of four 320 kV HVDC cables, installed for the majority of the route as two HVDC Circuits. There is the potential that the Marine Cables will be installed as four individual cables for up to approximately 200 m between the point where the Marine Cables exit from the Landfall Horizontal Directional Drilling ('HDD') ducts on the seabed and the location where the trenching starts for the Marine Cables.	Marine HVDC cables defined at Article 2 as "*means two 320 kilovolt HVDC cable circuits for the transmission of electricity which may be bundled as two pairs of cables or take the form of single cables, together with: (i) fibre optic data transmission cables accompanying each HVDC cable circuit, for the purpose of control, monitoring, and protection of the HVDC cable circuits and converter station, and for commercial telecommunications uses; and (ii) one or more cable crossing*".	No resolution required as position aligned.
Paragraph 3.5.6.23	A total of 11 km of non-burial protection is assumed.	Condition1 to DML at Schedule 15 to dDCO confirms cable protection length of 23km. This includes for contingency and cable protection to be laid during operation (if required). The position in this regard is discussed in detail in the cable protection note included with the SoCG with the MMO (document reference 75.16) submitted at Deadline 1.	Np resolution required as position aligned.
Paragraph 3.5.8.2	The HDD is anticipated to comprise four bores, each approximately 1,400 to 2,000m in length.	Work No.7 (b) at Schedule 1 to dDCO confirms 1 HDD with up to 4 entry/exit pits; The length of the HDD is dictated by the Work Plans (APP-010) and controls in the OMCEMP identifying the indicative area for the HDD.	No resolution required as position aligned.
Paragraph 3.6.2.4	HVAC cable corridor length. Chapter 3 states up to 1 km.	dDCO states up to 800 m.	dDCO updated to refer to 1km
Paragraph 3.6.3.2	The proposed Converter Station area footprint is 200 m x 200 m (4 ha).	Requirement 5 to the dDCO requires compliance with Converter Station and Telecommunications Buildings Parameter Plans. The Converter Station and	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
		Telecommunications Buildings Parameter Plans identify a 200m x 200m footprint within which the Converter Station and associated equipment are to be located.	
Paragraph 3.6.3.7	This conversion equipment is housed indoors, within the two Converter Buildings. Each Converter Building will comprise of a steel structural frame and will measure approximately 90 m in length, 50 m in width and up to a maximum of 26 m in height to be measured from finished ground floor slab level.	Work No. 2 in Schedule 1 to dDCO states 2 converter hall buildings. Table WN2 within the dDCO secures the maximum parameters for the Converter Halls as 90m x 50m x 26m. The maximum AOD height of the Converter Hall Buildings is also now restricted by an addition to the Converter Station and Telecommunications Buildings Parameter Plans, which provides the converter halls may not be above 111.10m AOD in height.	No resolution required as position aligned, though clarification included on The Converter Station and Telecommunications Buildings Parameter Plans in relation to maximum AOD height.
Paragraph 3.6.3.9	The Control Building (item 2 in Plate 3.7) … will comprise a two-storey building with steel frame structure … with a maximum overall height of 15 m, to be measured from finished ground floor slab level.	Table WN2 at Requirement 5 to the dDCO does not state control building maximum parameters.	Draft DCO updated to confirm maximum parameters of Control Building as 26m in length x 50m in width x 15m in height.
Paragraph 3.6.3.11	The spare parts building (item 9 in Plate 3.7) will comprise a maximum 15 m high single storey steel frame structure … and a 2.4 m high internal perimeter for robustness.	No parameters stated in dDCO.	Draft DCO updated to confirm maximum parameters for the spares building of 27m in length x 25m in width x 15m in height and reference an internal perimeter fence for the spares building with a maximum height of 2.4m.
Paragraph 3.6.3.12	The lightning masts can generally be up to 4 m taller than the tallest building, are tall, narrow structures, with catenary wiring strung between them to shield the outdoor equipment from direct lightning strikes.	Maximum height of lightning masts stated to be 30m in Table WN2 at Requirement 5 to dDCO. The position is also confirmed on the Converter Station and Telecommunications Buildings Parameter Plans, which Requirement 5 requires compliance with.	No resolution required as position aligned.
Paragraph 3.6.3.13	Lighting columns, up to 15 m high (see items 15 and 16 in Plate 3.7) are proposed to illuminate the outdoor areas of the Converter Station during emergency situations, such as an intruder or unplanned maintenance work.	Lighting column maximum height of 15m stated in Table WN2 at Requirement 5 to dDCO.	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Paragraph 3.6.3.23	two Telecommunications Buildings (one for each HVDC Circuit) will be located in close proximity to the Converter Station to house required telecommunications equipment.	Work No.2 at Schedule 1 states up to 2 telecommunications buildings with a security perimeter fence.	No resolution required as position aligned.
Paragraph 3.6.3.24	Each Telecommunications Building will have a maximum footprint of 8 m long x 4 m wide x 3m high and will also have secure fencing, access and parking for up to two vehicles for maintenance purposes. The compound for the Telecommunications Buildings would have a maximum size of 10 m x 30 m.	Work No.2 at Schedule 1 states up to 2 telecommunications buildings with a security perimeter fence including a security gate and in-between sterile zone and parking for up to 2 vehicles at any one time. The length and width maximum parameters for the telecommunications buildings compound are secured in table WN2 at Requirement 2 to dDCO as 10m x 30m.	No resolution required as position aligned.
Paragraph 3.6.3.27	The Access Road to the Converter Station will be approximately 1.2 km in length, and is expected to be a standard width (no wider than 7.3 m) suitable for transportation of Heavy Goods Vehicles ('HGVs') and Abnormal Indivisible Loads ('AIL').	Table WN2 confirms the maximum parameters for the access road to be 1,200 metres in length and 7.3m in width.	No resolution required as position aligned.
Paragraph 3.6.3.32	The precise siting of the Converter Station Compound is yet to be confirmed, but will be located west of the existing Lovedean Substation with two options considered.	The siting options for the Converter Station are secured by Requirement 5 and by the Converter Station and Telecommunications Buildings Parameter Plans, with Requirement 4 securing the need to confirm the location.	No resolution required as position aligned.
Paragraph 3.6.3.41	Previously stated 150 parking spaces, whereas corrected to state 206 as assessed.	Work No.3 in Schedule 1 to dDCO updated from 150 car parking spaces to 206 car parking spaces.	Corrections made to ES and dDCO.
Paragraph 3.6.3.43	To keep the excavation within structureless chalk strata to mitigate contamination of the aquifer, 84.80m AOD has been proposed as Converter Station general finished level. Following initial Flood Risk assessment, the Converter Building finished floor level has been proposed to be 85.10m AOD (300mm above finished site level). Therefore, for the basis of the EIA assessment, 85.10m AOD has been used.	The Converter Station and Telecommunications Buildings Parameter Plans confirm heights indicated are heights above finished ground floor slab level of +85.100 AOD. Whilst this level is indicative, it confirms the assessment is aligned with the parameters regarding heights of buildings which this ground floor level is relevant to.	No resolution required as position aligned.
Paragraph 3.6.4.1	The Onshore Cable Corridor represents the maximum extent of the area within which the Onshore Cables may be located, otherwise described as the limits of deviation.	The Onshore Cable Corridor aligns with the extent of the limits of deviation shown for Work No. 4 on the Works Plans (APP-010).	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Paragraph 3.6.4.2	Two HVDC Circuits are proposed to be installed in the Onshore Cable Corridor between the Converter Station and the Landfall, the length of these circuits will be approximately 20km.	Work No. 4 (a) states (a) onshore HVDC cables of up to 20,000 metres in length (each cable circuit). Onshore HVDC cables is defined in Article (2) as "*means two 320 kilovolt HVDC cable circuits for the transmission of electricity together with: (i) fibre optic data transmission cables accompanying each HVDC cable circuit for the purpose of control, monitoring and protection of the HVDC cable circuits and the converter station, and for commercial telecommunications; and (ii) one or more cable crossing*"	No resolution required as position aligned.
Paragraph 3.6.4.3	Each circuit will contain two HVDC Cables and one FOC and will be installed independent from one another.	Onshore HVDC cables is defined in Article (2) as "*means two 320 kilovolt HVDC cable circuits for the transmission of electricity together with: (i) fibre optic data transmission cables accompanying each HVDC cable circuit for the purpose of control, monitoring and protection of the HVDC cable circuits and the converter station, and for commercial telecommunications; and (ii) one or more cable crossing*"	No resolution required as position aligned.
Paragraph 3.6.4.4	Joint Bay locations. Chapter 3 refers to a joint bay every 600 – 2000 m.	dDCO states up to 25 joint bays per cable circuit.	No resolution required as position aligned.
Paragraph 3.6.4.7	Link Boxes. Chapter 3 does not mention the number of boxes but states dimensions of 0.8 m x 0.8 m x 0.6 m.	dDCO says 6 per cable circuit with dimensions of up to 0.8 m x 0.8 m x 0.6 m.	Addressed in the ES Addendum (document reference 7.8.1) Section 3.2.2
Paragraph 3.6.4.7	Link Pillars. Chapter 3 does not mention the number of link pillars but states dimensions of 1 m x 1 m x 0.6 m.	dDCO says 6 per cable circuit with dimensions of up to 1 m x 1 m x 0.6 m.	Addressed in the ES Addendum (document reference 7.8.1) Section 3.2.2
Paragraph 3.6.3.11	Outer security perimeter fence of 3.4m in height. Inner security perimeter fence of 2.4 m in height.	dDCO Table WN2 states security perimeter fence of up to 3.4m in length.	Table WN2 in Schedule 2 to dDCO amended to refer to the correct height for both
Paragraph 3.6.5.6	ORS building parameters. Chapter 3 states the parameters as 10 m x 4 m x 4 m.	dDCO Table WN6 states the parameters as up to 11 m x 4 m x 4 m	11 m x 4 m x 4 is the correct parameter. Addressed in the ES Addendum (document reference 7.8.1) Section 3.2.2.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Paragraph 3.6.5.11	There will be two TJBs, one per HVDC Circuit. Each TJB will require an excavation of approximately 15 m x 5 m, to a depth of up to 1.75 m.	Draft DCO reflected this, but errata amendments required (see below)	Updated in the dDCO and Errata Sheet (document reference 7.8.1.1.) to confirm correct position.
Appendix 3.5 Table 1	Transitional Joint Bays Maximum: 8 m x 3 m x 2 m depth Notes: Excavation will be approximately 15 m x 5m x 2m	dDCO Works No.5 (b) states 2 transitional joint bays with dimensions of up to 15 metres in length by 5 meters in width by 1,75m in depth.	dDCO corrected to reflect the correct position
Chapter 6 (Physical Processes)			
Table 6.15	a) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits b) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material 1,754,000 m3 c) maximum footprint non-burial protection and contingency = c.0.7 km^2	a) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b). The location of the HDD entry/exit pits is required to be confirmed in accordance with Schedule 15, Part 2, condition 4(a)(ii), which is to accord with the Outline Marine Construction Environmental Management Plan which includes information regarding the location of the HDD entry/exit pit. b) the disposal of up to 1,754,000m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7. The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3) c) 0.7km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	No resolution required as position aligned.
Chapter 7 (Marine Water and Sediment Quality)			
Table 7.3	a) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits	a) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b).	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	b) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is 1,754,000 m3	b) the disposal of up to 1,754,000m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7. The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3)	
Chapter 8 (Intertidal and Benthic Habitats)			
Table 8.6	a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed Development) is approximately 57 km2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km). c) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits d) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is 1,754,000 m3 e) maximum footprint non-burial protection and contingency = c.0.7 km2	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6 c) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b) Schedule 15, Part 2, Condition 4(1)(a)(ii). d) the disposal of up to 1,754,000m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7 The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3) e) 0.7 km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Chapter 9 (Fish and Shellfish)			
Table 9.9	a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed Development) is approximately 57 km2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km). c) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits d) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is 1,754,000 m3 e) Maximum footprint non-burial protection and contingency = c.0.7 km2	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6 c) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b) . Schedule 15, Part 2, Condition 4(1)(a)(ii) d) the disposal of up to 1,754,000m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7 The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3) e) 0.7km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	No resolution required as position aligned.
Chapter 10 (Marine Mammals and Basking Sharks)			
Table 10.3	a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	Development) is approximately 57 km2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km).		
Chapter 11 (Marine Ornithology)			
Table 11.10	a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed Development) is approximately 57 km2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km). c) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits d) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is approx. 1.7 million m3 e) maximum footprint non-burial protection and contingency = c.0.7 km^2	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6Schedule 15, Part 1, Paragraph 6. c) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b). Schedule 15, Part 2, Condition 4(1)(a)(ii) d) the disposal of up to 1,754,000m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7 The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3) e) 0.7km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	No resolution required as position aligned.
Chapter 12 (Commercial Fisheries)			
Table 12.7	a) Exclusion zones for 108 km of the Marine Cable Corridor	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1	a) No resolution required. Maximum parameter of 108 km falls within the maximum parameter of 109 km secured through the DCO. This parameter is different because it is

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	b) maximum footprint non-burial protection and contingency = c.0.7 km^2	b) 0.7km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	not necessary to consider the 1 km landward of the marine HDD exit/entry point as works will not be undertaken here. b) No resolution required as position aligned.
Chapter 13 (Shipping, Navigation and Other Marine Users)			
Paragraph 13.6.1.1. and 13.6.1.2	Paragraphs cross reference to ES Appendix 3.2 (Marine Worst-Case Design Parameters) which presents the worst-case design parameters for seabed preparation, cable burial methods, non-burial protection, Landfall HDD works as follows: a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed Development) is approximately 57 km^2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km). c) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits d) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is 1,754,000 m^3	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6 c) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b). Schedule 15, Part 2, Condition 4(1)(a)(ii) d) the disposal of up to 1,754,000 m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7 The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3)	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	e) Maximum footprint non-burial protection and contingency = c.0.7 km^2	e) 0.7 km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	
Chapter 14 (Marine Archaeology)			
Paragraph 14.6.1.1. and 14.6.3.3	Paragraphs cross references to Appendix 3.2 (Marine Worst-Case Design Parameters) which presents the worst-case design parameters for seabed preparation, cable burial methods, non-burial protection, Landfall HDD works as follows; a) Maximum length for each cable is approximately 109 km b) Maximum area for Marine Cable Corridor within UK Marine Area (i.e. Proposed Development) is approximately 57 km^2 (as Marine Cable Corridor is 500 m wide for 8.6 km and 520 m wide for 100.4 km). c) KP0-KP21 HDD Entry/Exit Pit up to 4 HDD pits d) KP21-KP109 Sandwave clearance maximum volume for disposal of dredged material is 1,754,000 m^3 e) Maximum footprint non-burial protection and contingency = c.0.7 km^2	a) marine HVDC cable of up to 109 kilometres (each cable circuit) stated at Work No.7 (a) in Schedule 1 and Schedule 15, Part 2, Condition 1 b) Area of Marine Cable Corridor is provided for at Schedule 15, Part 1, Paragraph 6 c) HDD Exit/Entry with up to 4 entry/exit pits. Stated at Schedule 1, Paragraph 1, Work. No. 7 (b), Schedule 15, Part 1, Paragraph 3 (b). Schedule 15, Part 2, Condition 4(1)(a)(ii) d) the disposal of up to 1,754,000 m^3 of inert material of natural origin produced during the Works comprised within Works Nos 6 and 7 is stated at Schedule 1 paragraph 2 (n) in relation to Work No. 6 and 7 The same figure is stated at: - Schedule 15, Part 1, paragraph 2 (7) - Schedule 15, Part 1, Paragraph 4 (3) e) 0.7 km^2 cable protection area stated at Schedule 15, Part 2, Condition 1	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Chapter 15 (Landscape and Visual Amenity)			
Paragraph 15.1.1.2	Converter Station and Optical Regeneration Station parameters as detailed within: Converter Station and Telecommunication Buildings Parameter Plans Sheet 1 to 3 (APP-012) Optical Regeneration Station(s) Parameter Plan Sheet 1 (APP-017)	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station and Optical Regeneration Station as captured by the Converter Station and Telecommunications Building Parameter Plans (APP-012) and the Optical Regeneration Station(s) Parameter Plan (APP-017).	No resolution required as position aligned.
Section 15.4.6 Parameter Envelope Approach	The assessment of the Converter Station Area in Section 1 of the Proposed Development has been based on a maximum parameter design envelope. The parameter envelope is defined by the Converter Station and Telecommunications Buildings Parameter Plans Sheet 1 to 3 which form part of the Application. Two potential locations for the Converter Station: • Option B(i); and • Option B(ii). The assessment of the Landfall in Section 10 of the Proposed Development has also been based on a parameter envelope as defined by the Optical Regeneration Parameter Plan Sheet 1. The Parameter Plan enables some flexibility in the siting of up to two ORS buildings at the Landfall.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station and ORS as captured by the relevant parameter plan.	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Section 15.7 Proposed Mitigation	15.7.4 Two options for the siting of the Converter Station each subject to maximum spatial parameters were defined for the Converter Station Area allowing flexibility for siting, orientation and massing within this envelope. 15.7.8 Within the perimeter of the Converter Station, covering a footprint of 200 m x 200 m (appropriately 4 ha), would sit buildings up to 26 m high including the Converter Hall, Control Building, Valve Coolers, Spares Building (referred to on the Parameter Plans and Table as Parameter Zone 4). Buildings and equipment including transformers, termination equipment, reactors, generator and HVDC and HVAC cable termination equipment up to 15 m would sit within Parameter Zone 3 surrounded by a hardstanding compound. 15.7.9 The Telecommunication Buildings would lie to the south of the Converter Station and each building would have a maximum footprint of 8 m long x 4 m wide x 3 m high (Parameter Plan Zone 2). These, like the Converter Station, would be surrounded by a secure compound. 15.7.10 The Converter Station buildings and equipment would sit on a finished floor level 300 mm higher than the finished platform level of 84.8 m (AOD). The finished floor level is assumed to be 85.1 m AOD in compliance with the flood risk assessment. 15.7.12 Lighting columns up to 15 m high are proposed to illuminate the outdoor areas of the Converter Station during emergency situations, such as an intruder or unplanned maintenance work. The lights are not intended to be used during normal operation. There are also lightning masts located on site 4 m taller than the tallest building (up to 30 m high).	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Building Parameter Plans (APP-012) Reference to maximum 26 m height for the Converter Halls included at Table WN2 at Requirement 5 in Schedule 2 dDCO and also detailed on Converter Station and Telecommunications Buildings Parameter Plans (APP-012) required to be complied with. HVDC and HVAC cable termination equipment is within parameter Zone 3 which is subject to a maximum height limit of 15 m in accordance with the Converter Station and Telecommunications Buildings Parameter Plans (APP-012) required to be complied with. Reference to 8m x 4m x 3m included at Table WN2 at Requirement 5 in Schedule 2 dDCO. The Converter Station and Telecommunications Buildings Parameter Plans confirm heights indicated are heights above finished ground floor slab level of +85.100 AOD. Whilst this level is indicative, it confirms the assessment is aligned with the parameters regarding heights of buildings which this ground floor level is relevant to. Reference to lighting columns of a maximum height of 15m included at Table WN2 at Requirement 5 in Schedule 2 dDCO. The design principles are required to be complied with by virtue of Requirement 6 at Schedule to dDCO and noise levels at sensitive receptors are controlled by Requirement 20, therefore ensuring the appropriate controls for noise are captured	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	15.7.13 A specific building design principle covers noise and a 3 m noise barrier referred to as additional mitigation in Chapter 24 (document reference 6.1.24) which is proposed to reduce noise levels by 2.5-3db at Hinton Daubnay. The barrier would wrap around the southern converter cooling fan banks of the southern converter building.		
Landform and drainage Paragraph 15.7.1.15	The finished platform level of the Converter Station has been fixed at 84.8 m. The approximate maximum cut would be in the order of 4.5 m and the approximate maximum fill would be 4.5 m. This applies to both Option B(i) and B(ii).	The Converter Station and Telecommunications Buildings Parameter Plans confirm heights indicated are heights above finished ground floor slab level of +85.100 AOD. Whilst this level is indicative, it confirms the assessment is aligned with the parameters regarding heights of buildings which this ground floor level is relevant to.	No resolution required as position aligned.
15.8.2 Stages of Development Paragraph 15.8.2.5	In all cases, the assessment is based on a worst-case scenario for the Converter Station considering whichever of Options B(i) and B(ii) have the greater effect at a specific receptor area or location in the case of visual receptors.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012).	No resolution required as position aligned.
Study Area Paragraph 15.8.2.19	For the Converter Station, the visual assessment was based on the study areas defined above using Option B(i). Figures 15.45, Figure 15.46 and 15.47 present ZTV's showing the visual extent for both Options B(i) and B(ii) in addition to the location of/or routes for key visual receptors.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012).	No resolution required as position aligned.
Appendix 15.5 South Downs National Park Paragraph 1.3.1.7	Lighting columns up to 15 m high as referred to on the Parameter Plans would only come on in exceptional circumstances and there is no lighting within the remainder of the Converter Station Area including the Access Road.	Reference to lighting columns of a maximum height of 15m included at Table WN2 at Requirement 5 in Schedule 2 dDCO.	No resolution required as position aligned.
Chapter 16 (Onshore Ecology)			
Paragraph 16.4.6	At the Converter Station, two options for its footprint exist; Option B(i) and Option B(ii).	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	The final siting will be confirmed at a later date, and thus the full extent of the footprint of both options have been analysed as to their impacts on ecological features to ensure a robust assessment of the worst-case.	constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012).	
16.6.1.1	Ancient Woodland Buffer - the Proposed Development has incorporated a 15 m buffer between works and Stoneacre Copse, Crabden's Copse and Crabden's Row to avoid direct effects on this feature.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012). This parameter is specifically detailed within the Onshore Outline CEMP (APP-505 Rev002).	No resolution required as position aligned.
16.6.1.7	Stoneacre Copse lies outside the Order Limits, separated by a 15 m buffer zone.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012). This parameter is specifically detailed within the Onshore Outline CEMP (APP-505 Rev002).	No resolution required as position aligned.
16.8.6.1	HDD work will be set back from the edge of the playing field by at least 10 m to maintain habitats there and preserve bat flight lines.	Not specifically stated in the dDCO but the set back of 10m is integrated within the design This parameter is specifically detailed within the Onshore Outline CEMP (APP-505 Rev002).	No resolution required as position aligned.
Appendix 16.3 (Arboriculture Report)			
Paragraph 1.7.3.10	Two HVDC Circuits are proposed to be installed within the Onshore Cable Corridor, for which each excavated trench containing the HVDC and FOC Cables would be approximately 0.7 – 1m in width.	The definition of onshore HVDC cables at paragraph 1 to Article 2 of the dDCO confirms this consists of two 320 kilovolt HVDC cable circuits. As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a maximum width or depth is not confirmed in the dDCO.	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Chapter 17 (Soils and Agricultural Land Use)			
Paragraph 17.1.2.2 of ES Chapter 17	The study area of Section 1 extends to approximately 54 ha of land to the north, west and south of the existing Lovedean Substation. The proposed Converter Station is anticipated to have a footprint of approximately 4 ha and associated infrastructure (including the Access Road and temporary facilities) will require up to approximately 6 ha.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the Converter Station and Telecommunications Buildings Parameter Plans (APP-012), with the areas identified according with the areas stated in this Chapter of the ES.	No resolution required as position aligned.
Paragraph 17.6.2.1 and 17.6.2.2 of Chapter 17	17.6.2.1. Within the current design for the Onshore Cable Route, trenches within agricultural land will be excavated to a typical depth of 1300 mm (though actual burial depth will depend on the existing utilities and will be confirmed following the grant of the DCO and detailed design work). 17.6.2.2. Embedded mitigation to reduce the potentially significant effects relating to loss of and degradation of the soil resource includes ensuring that topsoil and subsoil resources are kept separate and placed either side of the exposed trenches. The cable ducts will be laid within approximately 400 mm of cement-bound sand and the remainder of the void will be backfilled with the excavated soil. Priority will be given to full use of the topsoil resource in the reinstatement of soils above the cable: the surplus material will be subsoil.	As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a maximum width or depth is not confirmed in the dDCO.	No resolution required as position aligned.
Appendix 3.5, Table 1 (appended to Chapter 3)	Maximum Onshore Cable burial depth 3000 mm and typically between 1250 mm and 1500 mm Minimum Onshore Cable depth 500 mm to cable covers, typically 750 mm to covers in roads and verges 900 mm elsewhere.	As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a maximum width or depth is not confirmed in the dDCO.	No resolution required as position aligned.
Chapter 18 (Ground Conditions)			

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
Review undertaken	No maximum parameters stated in chapter.	N/A	N/A
Chapter 19 (Groundwater)			
Review undertaken	Onshore Cable Route trenches to be excavated to depths of approximately 1.1 m – 1.3 m below ground level.	As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a maximum width or depth is not confirmed in the dDCO.	No resolution required as position aligned.
Chapter 20 (Surface Water Resources and Floor Risk)			
Chapter Paragraph 20.7.2.22	The presence of the Link Pillars, which are approximately 1.0 m x 1.0 m x 0.6 m, would result in a negligible impact on the local surface water drainage patterns and water environment.	The dimensions for the Link Pillars which accord with the ES are stated at paragraph (d) of Work No. 4 at Schedule 1 to the dDCO	No resolution required as position aligned.
Chapter Paragraph 20.7.2.22	The compound for the ORS(s) would have a maximum size of 18 m x 34 m with the maximum building dimensions of approximately 11 m long x 4 m wide	The dimensions for the ORS are stated in Table WN6 to the dDCO, with the compound maximum parameter being 18 m x 35 m and the individual ORS maximum parameter being 11m x 4m x 4m	The parameter considered in the ES is 18 m x 34 m rather than 18 m x 35 m as per the dDCO, this parameter error does not however affect the assessment undertaken. This is addressed in Section 3.2.2 of the ES Addendum (document reference 7.8.1).
FRA Section 6.2.4	FRA considers ORS parameter of 80m² roof area (assumes 2no 2m x 10m)	DCO Schedule 2 Table WN5 states 11m x 4m x 4m as maximum parameter.	The FRA considered a roof area of 80m² however the dDCO parameter considers 88m², which is 8 m² larger. 88 m² is the correct parameter. This has been addressed in Section 3.2.3 of the ES Addendum (document reference 7.8.1).
Chapter 21 (Heritage and Archaeology)			
Paragraph 21.6.2.6	The indicative Converter Station footprint would cover an area of approximately 4 ha. Converter Hall buildings, measuring approximately 90 m in length and 50 m in width, with the maximum height of the building 26 m and lighting masts potentially up to 4 m taller than the buildings.	Requirement 5 contained at Schedule 2 to the dDCO requires the relevant Works to be constructed within the relevant parameter envelope for the Converter Station as captured by the converter station and telecommunications building parameter plans, which includes the 4ha area. Reference to maximum parameters for the Converter Halls according with the across stated measurements are included at Table	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
		WN2 at Requirement 5 in Schedule 2 dDCO and also required to be complied with.	
Paragraph 21.6.2.8	Given the topography, the level platform built to accommodate the Proposed Converter Station would be at approximately 84.8 m Above Ordnance Datum ('AOD') with an approximate depth of 85.1 m AOD for the finished floor level.	The Converter Station and Telecommunications Buildings Parameter Plans confirm heights indicated are heights above finished ground floor slab level of +85.100 AOD. Whilst this level is indicative, it confirms the assessment is aligned with the parameters regarding heights of buildings which this ground floor level is relevant to.	No resolution required as position aligned.
Paragraph 21.6.2.14	It is anticipated that a Telecommunications Building would have a building footprint of approximately 8 m x 4 m x 3 m (high)	Reference to maximum parameters for the telecommunications buildings according with the across stated measurements are included at Table WN2 at Requirement 5 in Schedule 2 dDCO and also required to be complied with.	No resolution required as position aligned.
Paragraph 21.6.2.17	The HVAC Cables will be positioned within a typical 1.0 m wide trench and the approximate depth across agricultural land and open countryside is 1.3 MBGL	As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a depth is not confirmed in the dDCO.	No resolution required as position aligned.
Paragraph 21.6.22	The HVDC Onshore Cables would be placed within a trench approximately 0.7 m wide at an approximate depth of 1.4 MBGL.	As the depth of the trenches may vary to respond to specific constraints encountered along the Onshore Cable Route a depth is not confirmed in the dDCO.	No resolution required as position aligned.
Paragraph 21.6.2.27	Up to 25 JBs will be required along the Onshore Cable Corridor. Typically, these would be off the existing carriageway. The excavation required for each JB would be approximately 15.0 m x 3.0 m, with the permanent JBs themselves being approximately 6.0 m x 3.0 m. The proposed depth typically would be 1.7 MBGL in roads,	The number of Joint Bays and their dimensions stated across accord with those stated at paragraph (b) of Work No.4 at Schedule 1 to the dDCO.	No resolution required as position aligned. The ES Addendum (document reference 7.8.1) in Section 3.2.2.13 corrects the associated Joint Bay compound area to reflect 25 m x 5m.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
	foot paths/verges and 1.85 MBGL in open fields.		
Paragraph 21.6.2.29	At the proposed Landfall, anticipated to be located within the car park south of Fort Cumberland Road, two TJBs will be required, one per pair of HVDC Cables. The proposed depth would typically be 1.75 MBGL.	The number of Transmission Joint Bays and their dimensions stated across accord with those stated at paragraph (b) of Work No.5 at Schedule 1 to the dDCO.	No resolution required as position aligned.
Paragraph 21.6.2.32	Each structure (ORS) would measure approximately 10 m x 4 m x 4 m.	The maximum dimensions for each ORS, being 11m (length) x 4m (width) x 4m (height) are stated at Table WN6 to dDCO and required to be complied with by virtue of paragraph (2) of Requirement 5 at Schedule 2 to the dDCO.	The correct parameter is 11m (length) x 4m (width) x 4m (height) The discrepancy in length does not change the outcome of the assessment. This discrepancy is addressed in the ES Addendum (document reference 7.8.1) section 3.2.3
Chapter 22 (Traffic and Transport)			
Paragraphs 22.4.7.1 and 22.4.7.10 to 22.4.7.12	The assumption that all construction workers associated with construction of the Onshore Cable Route will use the Converter Station Area as their site compound	Paragraph (b) of Work No.3 states car parking for up to 150 vehicles.	If all construction workers use the Converter Station as a compound then 206 parking spaces (150 for the Converter Station + 56 for the Onshore Cable Route) are required. There was an error in the submitted ES and dDCO which should have referred to this figure as assessed, and has been revised in the updated version and ES Addendum (document reference 7.8.1) (document reference 7.8.1) to resolve the discrepancy.
Chapter 23 (Air Quality)			
Review undertaken	No maximum parameters relevant.	N/A	N/A
Chapter 24 (Noise and Vibration)			
Appendix 24.5 Table 5	Building heights. Converter buildings – 26m Control Buildings – 15m Spares Building – 15m	Maximum heights for each of these buildings are not stated in the dDCO,	There was an error in the submitted dDCO which should have referred to the dimensions for all of these buildings, and which has been revised in the updated version to resolve the discrepancy.
Paragraph 24.4.2.21 of Chapter 24.	5 HDD crossings (HDD-1, HDD-2,HDD-3,HDD-5,HDD-6)	Work No 4 (e) at at Schedule 1 to the dDCO identifies 4 HDD crossings.	No resolution required as position aligned.

Document Location	Parameter stated in ES	Parameter stated within Draft DCO	Resolution
		Work No. 4 (f) is a trenchless crossing (being the micro-tunnel crossing proposed beneath the railway at Farlington)	
Chapter 25 (Socio-economics)			
Paragraph 25.7.3.7	Optical Regeneration Station compound stated as being 18 m x 34 m	dDCO Table WN6 states the parameters as up to 18 m x 35 m.	The correct parameter is 18 m x 35 m. The discrepancy in length does not change the outcome of the assessment. This discrepancy is addressed in paragraph 3.2.3.3 of the ES Addendum (document reference 7.8.1)
Chapter 26 (Human Health)			
Paragraphs 26.6.3.55 and 26.6.3.61	Optical Regeneration Station compound stated as being 18 m x 34 m	dDCO Table WN6 states the parameters as up to 18 m x 35 m.	The correct parameter is 18 m x 35 m. The discrepancy in length does not change the outcome of the assessment. This discrepancy is addressed in paragraph 3.2.3.4 of the ES Addendum (document reference 7.8.1)
Chapter 27 (Waste and Material Resources)			
Review undertaken	No maximum parameters relevant.	N/A	N/A
Chapter 28 (Carbon and Climate Change)			
Review undertaken	No maximum parameters relevant.	N/A	N/A