Date: 25 January 2021

Application by Aquind Limited for a Development Consent Order for the 'Aquind Interconnector' electricity line between Great Britain and France (PINS reference: EN020022)

Response by the Affected Party to Examination Authority's Further Written Questions (ExQ2) - Question ExADCO2.5.1

On behalf of

Mr. Geoffrey Carpenter & Mr. Peter Carpenter

Registration Identification Number: 20025030

Submitted in relation to Deadline 7 of the Examination Timetable

INTRODUCTION

- 1. Following the CAH2 and in light of previous representations about the categorisation of certain of the fibre optic material within the "Fibre Optic Cable" envisaged to be situated alongside the HVAC and HVDC electricity bearing cables between the French and English Converter Station buildings, the Examining Authority (ExA") continues to test the categorisation of certain cables not envisaged to be required to both physically and functionally connect with those Stations and whether in any event they may be included within the proposed DCO, and if so how so. Having regard to the Representations made, those below, and the helpful further Deadline 6 Applicant evidence, the Affected Party summarises its nutshell understanding.
- 2. The categorisation of envisaged development within the Planning Act 2008 ("PA 2008") has been grappled with by the ExA at Tidal Lagoon Bay. That ExA faced similar practical and legal constraints to those faced by the instant ExA. In the Bay DCO, the ExA also had no guidance, was applying the same phraseology (in section 31 of the PA 2008) as the ExA is here in section 35(2)(a) (and falling back on 31) ("is or forms part of XXXX") and recognised the key test was the ordinary meaning of "part" ("essential constituent"), and applied that as a compass to the particular project by which to ascertain where to draw the jurisdictional "development" line of the PA 2008 as against the Town and Country Planning Act 1990 ("TCPA"). Recognising that the provision of an "offshore building" for potential educational and control room use lay outside of the scope of being "essential" to the lagoon energy project, was desirable, and could be locally granted planning permission in due course, that ExA ascertained with care that it could lawfully include the physical thickening of the lagoon wall structure as part of the PA 2008 development (i.e. as operational development but not use) (whilst simultaneously that lawful thickening could in due course also accommodate future extra-PA 2008 development avoiding actual wall "retrofitting" to allow subsequent erection upon it and its use for an "offshore building" (if permitted under the TCPA). The ExA excluded the "offshore building" from that DCO and the Secretary of State agreed that bifurcation in consenting that DCO.
- 3. By analogy with the properly *thickened* lagoon wall that *also* avoided retrofitting, and subject to a specific provision to exclude use, to avoid operation of section 157, PA 2008, the ExA could lawfully include 13 bundles of fibre optic bundle *material* as physical (but *non-functioning*) operational development part of the "Fibre Optic Cable" by reason of it comprising part of the *packing* material (but no more) in the inner copper tube of the Cable inside of which the functional fibre optic cable would be situated in a slotted plastic spacer. In due course, an application could be made to the Secretary of State to *change* the DCO to add use of the packing "for commercial telecommunications", or to so apply for a material change of use to the local authorities and permission for related buildings (enlarged ORS and

Telecommunications Building(s)). Private agreements could ensure delivery of the same, with local compulsory acquisition if not able to be secured.

RESPONSE TO EXA FURTHER QUESTIONS, QUESTION DCO2.5.1

4. The Response of the Affected Party is set out in **Sections below:**

Section A- Executive Summary;

Section B - Common Ground;

Section C — can the notional "spare capacity" comprising 180 be used for commercial telecommunications authorised by the PA 2008 for that particular use?

Section D – Applicant's evidence of "FOC" Cable Design: functional and physical;

Section E - Practical Approach and Monitoring Cable Lengths;

Section F - The Section 35 Direction and its Lawful Scope;

Section G - The Section 35 Direction Made;

Section H – the "proposed Development" (lower case "p"), the "Proposed Development" (upper case "P") and the "elements" supplemented.

5. The Response is accompanied by a number of Appendices attached hereto for convenience:

Appendix A: the ExA's Further Questions, Question DCO2.5.1 is set out;

Appendix B: Secretary of State's Direction under section 35 & the Request Statement for the Direction

Appendix C: Secretary of State's Guidance on: Planning Act 2008: Changes to Development Consent Orders (December 2015)

Appendix D: Extract from [REP6-063] 'Applicant's Response to action points raised at ISH1, 2 and 3, and CAH 1 and 2.

Appendix E: Other DCO examples where ExA has considered the scope of the Development

Appendix F: Extract from Planning Act 2008

Appendix G: Extract form shorter Oxford Dictionary, 6th edition

Appendix H: Appendix NSPAD 6 – Monitoring Cable Design Diagram

SECTION A: EXECUTIVE SUMMARY

- 6. The ExA has set out a hypothetical position in Question DCO2.5.1 of its Further Questions, dated January 2021 ("the Theoretical Position"). See **Appendix A**. The Theoretical Position relies on the terms of the Section 35 Direction made by the Secretary of State July 2018 ("the Section 35 Direction"). See **Appendix B**. In essence, the Theoretical Position asks for representations on *whether*, and lawfully:
 - a) The Section 35 Direction can be interpreted as *already* having directed that the spare capacity of the otherwise mere fibre optic material not used for the purpose of monitoring the electricity bearing cables nor for the purpose of intra-Converter Station communications can be said to be within the scope of the Direction as a "part of" the development made subject to that Direction (even though *described* as intended "associated development"), and in contrast to it not being within the scope of "any associated development";
 - b) whether it can be said that, notwithstanding the *description* by the Applicant of the capacity of fibre optic material as notional "spare capacity" within the otherwise functional use of adjacent fibre optic material can in some way be said to form "part of" the development for which development consent is required, in particular having regard to section 157(2) of the PA 2008.
- 7. There is a dispute about whether all of the elements within the Applicant's Application for development consent can be lawfully included within the scope of the terms of the dDCO. The dispute turns on the legal scope of the relevant provisions of the PA 2008 then applied to the facts, and, in turn, upon the terms of the Secretary of State's direction under section 35 of that Act ("the Section 35 Direction") and the terms of its prior request term in which the content of the "elements" of the development subject to that Direction are particularised by the Applicant.
- 8. The dispute is relevant and important since it will determine the theoretical extent of lawful land take falling for consideration to be taken against the will of the Affected Party by the Secretary of State's Order. A similar situation arose in the NSIP at Tidal Bay Lagoon where the ExA there had to ascertain the scope of the application development for an energy generating lagoon but that included certain development not within the PA 2008: in particular, an "offshore building". Although the NSIP was in Wales, the phraseology considered and applied by that ExA is the same as here: section 31 of the PA 2008: "to the extent that the development is or forms part of [an NSIP]"; section 35(2)(a)(i) of the PA 2008: "only if (a) the development is or forms part of a project (or proposed project) in the field of energy". In each section, the core test is "is or forms part of" and relates to the particular project (either as an NSIP of a specified type or as encompassed by a direction. See **Appendix E**.
- 9. The ExA in the bay DCO recognised that there was no guidance on the wording as to how to go about ascertaining what elements of the application development were lawfully inside the PA 2008 and which

must fall outside of the PA 2008. It also recognised that the "offshore building" that was envisaged to be situated on the proposed lagoon bay wall had a function (as use) different from the lagoon energy project (amenity use and education use) and would be desirable as a use. It had regard to the ordinary meaning of "part" and that included "essential" function. It then applied that test to the particular energy project, element by element. Recognising the desire for the "offshore building", that ExA ascertained that the bay wall could be properly thickened in the locality of a potential "offshore building" but for the purposes of the bay DCO (and not for the "offshore building") and that that approach could lawfully avoid the need for future thickening of the wall ("retrofitting") in due course of the "Offshore building" in the event it were granted planning permission by the local planning authority.

- 10. Having applied that test, the ExA drew its own version of the bay DCO that excluded the "offshore building", recommended the same be granted, and the Secretary of State agreed. See **Appendix E**.
- 11. For the detailed reasons set out below, the same legal and evaluative factual analysis results here in a similar outcome in law and fact that lawfully permits inclusion of the desirable 13 bundles of fibre optic material "for packing filler use" whilst expressly precluding their use "for commercial telecommunications" so as to avoid otherwise application of section 157 of the PA 2008.
- 12. The statutory scheme allows a grantee to request a "change" to a DCO and the Applicant could apply in due course and seek to persuade the Secretary of State to authorise a change of the use of the 13 bundles from packing filler to use "for commercial telecommunications". The Affected Party notes that the change of even fuel type for a permitted power station can result in a new DCO being required. See PA 2008: Guidance on Changes to Development Consent orders (December 2015), paragraph 20(iii), or an extension to a road's length (ii). Alternatively, because the Crown does not require planning permission onshore use of the Cable may be subject to a local application for planning permission (just as the "offshore building" was envisaged to be, even though it would be structurally integrated by its load with the lagoon bay wall when completed), and for related development comprised of ORS and Telecommunications Building(s) and related parking together with relevant justification at the time. Private agreements could enable delivery of the changed use and buildings and an applicant may agree with a local authority that the latter could seek to exercise compulsory purchase powers (if justified and compelling) in the then public interest.

SECTION B: COMMON GROUND

13. The Affected Party has already made Representations on the scope of "associated development" to which the ExA is referred. The Affected Party does not repeat those Representations here but continues to rely upon the same and that analysis remains legally sound.

"is or forms part of [the particular] proposed project"

- 14. In light of the emerging question since Deadline 5, the Applicant has helpfully provided further information and evidence. The outcome of this is that the Applicant has shown at Deadline 6 in [REP6-063], in line with the Affected Party's previous Representations, how the provisions of the dDCO concerning "for commercial telecommunications" may be stripped out of the Deadline 6 dDCO, and that the removal of that "use" would have no bearing on the Application for the development. That is, there would be no net difference, including to funding. Those concessions are helpful and acknowledged by the Affected Party. They also reinforce the extent of land asserted as required to be taken from the Affected Party now must exclude the use of the Cables "for commercial telecommunications" and the development comprising the Telecommunications Building(s) and related parking. Thus, it appears to be common ground that if the ExA agrees with the analysis of the Affected Party summarised above, then the compulsory acquisition of Land of the Affected Party permanently for that use and for those Buildings cannot be lawfully justified and must be excluded from the extent envisaged to be authorised as taken.
- 15. Following Deadline 6, it is helpful common ground (see **Appendix D** hereto) that:
 - a) The dDCO terms can be refined in line with the Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraph 2.9.2(A) (J), to exclude both commercial telecommunications use of fibre optic material and the Telecommunications Building(s), and reflecting the prior Representations of the Affected Party;
 - b) The exclusion of commercial telecommunications use of fibre optic material and the Telecommunications Building(s) would result in the exclusion of that development and its area (including related parking) from the Land of the Affected Party (and so reduce *permanent* land take extent), and result in an otherwise "unchanged situation". See the Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraph 2.9.3;
 - c) A "standard size" pre-manufactured 'fibre optic cable' contains 16 "bundles" of individual fibre optic cables. Each "bundle" contains 12 fibres. Of the 16 bundles, 3 bundles "are required for the essential operation of the interconnector" and ""essential use in connection with the safe operation of the Project" (i.e. 3 bundles x 12 fibre strands = 36 fibres in total). See the

- Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraphs 2.9.6 and 2.9.7;
- d) The purpose of the 3 bundles required for the essential operation of the interconnector can be seen, for example, at paragraphs 3.5.3.7 and 3.5.9.6 of Chapter 3 of the ES, Description of the Proposed Development [APP-118] and paragraph 1.1.3.12 of [APP-359] Environmental Statement Volume 3 Appendix 3.5 Additional Supporting Information for Onshore Works;
- e) The 3 bundles required for the essential operation of the interconnector terminate in the Convertor Station itself. "Visual inspection of the output of the Distributed Temperature Sensing ("DTS") hardware which is located within the Convertor Station would be required". See [APP-359] paragraph 1.1.3.12;
- f)There is no guidance by which to ascertain whether an element "is or forms part of the development/project ... in the field of energy" requiring development consent of section 35(2)(a) of the PA 2008 (or the similarly expressed phrase in section 31 (and as also used in 115(1)(a)). However, the ordinary meaning of "part" includes "essential or integral constituent". See Appendix G hereto. Further, the term "part" appears in the phrase "part of" and is also particular to, here, the field. Thus, a discernible test is: whether the element is "essential" to the particular development requiring development consent. This is a similar or the same test used by the ExA in Appendix E hereto, paragraphs 4.1.30 – 4.1.31 (where the ExA applied that test in respect of the particular development "itself"). So too has the Applicant used an "essential" test. See e.g. the Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraphs 2.9.3 ("essential to the operation of the interconnector"); 2.9.4 ("required for essential communication"; 2.9.5 ("required for essential communications purposes only"); 2.9.6 ("essential use"). Further, see the ordinary meaning of "part" includes "essential or integral constituent" and so the ordinary meaning of "part" encompasses "integral" as a constituent whilst ordinarily distinguishing from an "essential" constituent. The ExA in **Appendix E** itself also recognised that difference.
- g) The reason why the 3 bundles can lawfully 'be or form part of the [particular] development' here is because, notwithstanding their actual separation from the electricity bearing cables nearby, the 'FOC' cable (with those 3 bundles of cables in it) serves the use, as in purpose or function, of bearing data for the purposes of DTS and of permanently monitoring the status of the electricity bearing cables as they convey current as between two Converter Stations and to which Stations all those cables terminate, are essential to allow intra-Station communications,

- and, being data transfer cables, are necessarily and functionally electronically intra-related to therein via equipment;
- h) The terms of [AS-040], the Applicant's "Statement in support of an application for a Direction pursuant to Section 35 of the PA 2008" includes, in paragraph 3.5(D) an onshore element described as "two pairs of underground high voltage direct current (DC) cables together with smaller diameter fibre optic cables for data transmission from the proposed landfall site in Eastney (near Portsmouth) to the converter station at Lovedean..." and paragraph 3.5.2(A) described an offshore element as "four submarine cables between England and France, which can be bundled in pairs, and small diameter fibre optic cables for data transmission"...;
- i) However, of the 16 bundles of 12 fibres (other than the 3 bundles "required for the essential operation of the interconnector" and "essential use in connection with the safe operation of the Project"), the balance of 13 bundles (or 13 x 12 fibre strands resulting in 156 individual strands of fibre optic material) remain no more than desired by the Applicant to be "available" "for commercial telecommunications purposes" and are not in themselves expressed to be "essential" to the particular energy project. See the Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraph 2.9.6;
- j) The range of external environmental impacts that may bear on the electricity cables is different in the marine and land environments. See **Appendix NSPAD 6**, page 2, bottom picture, showing "steel wire armouring (marine cable only)";
- K) The asserted range of external "likely" impacts to which the "standard size" pre-manufactured 'fibre optic cable' may be subject in the marine and underground environments is (also) asserted to result in such manufactured cable having to have a "sufficient" overall diameter of "35-55mm". That is, a diameter of either 35mm or 55mm is "sufficient" so as to resist the (unidentified) likely impacts and either is also "standard". See Affected Party's Deadline 6 Appendix NSPADs 5 Extract from Chapter 3 of ES showing Plate 3.3 Configuration of the HVDC Cables and FOC within the cable trench, paragraph 3.5.3.7 and NSPA 7 Extract from Chapter 3 of ES showing Plate 3.5 Typical arrangement of HVAC cables and FOC in ground, Plate 3.5; and the Applicant's Response to action points raised at ISH1. 2 and 3, and CAH 1 and 2 [REP6-063], paragraph 2.9.7;
- There is evidence that the 13 bundles would electronically connect to the Telecommunications Buildings, and also to equipment in the ORS. See paragraphs 5.3 and 5.4 [REP1-127] Deadline 1 Submission - 7.7.1 - Statement in Relation to FOC - Rev 001;

- m) "The Telecommunications Building are solely required in connection with the commercial use" (see the Statement in Relation to FOC Rev 001 [REP1-127], paragraph 5.4). Without being connected to equipment in those buildings, the 13 bundles of fibre optic cable can have no function beyond their presence in the standard size cable (whether 35 or 55mm diameter). The evidence shows that those buildings and the equipment within them are exclusively related to the 13 bundles;
- n) In themselves, the 13 bundles of fibre optic strands comprise no more than *physical material* within the centre copper tube itself within a wider composite structure of a pre-manufactured standard cable. See **Appendix NSPAD 5** Extract from Chapter 3 of ES showing Plate 3.3 Configuration of the HVDC Cables and FOC within the cable trench, Plate 3.3; **Appendix NSPAD 7** Extract from Chapter 3 of ES showing Plate 3.5 Typical arrangement of HVAC cables and FOC in ground, Plate 3.5; and **Appendix NSPAD 6** Extract 1 Data Cable, page 2, top diagram. The material sits within the middle of the section, within a "copper tube" itself encompassed by 3 layers of "galvanized steel wires covered with bitumen" with two layers of "wrapping of polypropylene yarns", between the 13 bundles and the outside environment;
- o) Within the copper tube, the 16 bundles appear separated from each other by "slotted core polyethylene". i.e. a spacer, and each of the individual bundles is situated within a slot.

 Appendix NSPAD 6 Extract 1 Data Cable, page 2, top diagram;
- p) The physical presence of the 3 bundles within the copper tube and also actually functionally connected within the Convertor Stations' equipment for the performance of a function of data transmission related to the electricity provision results in those 3 bundles being "essential" and, thereby being "part of" that particular development;
- q) The physical presence of 13 bundles within the copper tube results, but not being functionally connected as above, precludes their having an active function to perform in relation to the Convertor Station or the monitoring of electricity cables between the two stations. The 13 bundles are not "essential" to the energy project but are "desirable". Rather, without more, the 13 bundles can have no active use or function or role other than as a passive "part of" the packing or spacer or filler material within the copper tube in which the functional 3 bundles would also situated;

It is possible to reduce the number of fibre optic material in the 13 bundles "to a lesser multiple" but this would not reduce the impacts to any degree". See paragraph 5.2 of [REP1-027] Deadline 1 Submission - 7.7.1 - Statement in Relation to FOC - Rev 001. The potential for reduction in fibre optic material without impact on external cable diameter evidences that the

fibres themselves have no structural role in the wider Cable consistent with their being situated inside of a compressively stronger copper tube that itself maintains the outer diameter of the Cable;

- constituents" essential to the structure of the Cable ("such as the "slotted core of polyethylene"; "copper tube"; "galvanized steel wires"; and "polyethylene yarns"), the area within the core copper tube comprises packing or space plastic and fibre optic cables, of which only 3 bundles would be electronically functionally related to the energy project. By contrast, it can be said that the 13 (un-related) bundles of fibre optic material can be said to be "integral constituents of the pre-manufactured cable and, in that sense (only) could be "integral constituents" of the *cable* but that does not equate to their being integral constituents of the particular energy project in respect of function (which is the key test here). Rather, the inclusion of the 13 bundles results in their being "integral constituents" as packing or filler or spacers within the copper tube whose exclusive role or use can be no more than that of filler or spacing material in the "slotted core of polyethylene".
- 16. To some extent, the 13 bundles contribute to the extent of packing out of the space inside of the copper tube in place of slotted plastic but that can only be the extent of their use. By contrast, external impacts protecting the 3 bundles are resisted by parts of the Cable outside of the copper tube. See Appendix H attached for convenience hereto (also at Appendix NSPAD 6 Extract 1 - Data Cable, page 2, top diagram), shows that the resistance to external impacts bearing on the cable is resisted by a number of layers of "galvanized steel wires" and layers of "polypropylene yarns", as well as a "copper tube" before the 13 bundles can have a role resisting external environmental impacts. It is difficult to see how the presence of the 13 bundles can relate to the maintenance of the diameter of the copper metal tube in which they are situated because a copper tube is an inherently structural strong shape. It is difficult to see how the 13 bundles inside of the copper tube in fact make the copper tube necessarily stronger at resisting likely external impacts above that outer metal casing, or adds or adds more than the slotted packer inside of the copper tube. By contrast, because the slotted plastic spacer is the relevant spacer, the 13 bundles cannot be said to be "essential" constituents of the manufactured cable since the slotted packer (even) provides a spacer role and the encompassing copper a structural role to maintain the external cable diameter. Thus, the 13 bundles are merely packing filler, and their role limited to space filler in place of more plastic or a slotted plastic spacer with fewer slots. In that sense alone could the 13 bundles be said to qualify as an "integral constituent" (since "constituent" means "an element of a complex whole").
- 17. The Applicant incorrectly asserts the 13 bundles as "available" in the Applicant's Response to action points raised at ISH1, 2 and 3, and CAH 1 and 2 [REP6-063], paragraph 2.9.6, i.e. as "spare capacity for

the provision of commercial telecommunications" "for commercial use". This assumes the potential for a function beyond mere filler material of those 13 bundles. But availability assumes that such bundles of physical material have, or can have - without more - an actual functional role (other than as exclusively packing or spacer material within gaps in a plastic spacer itself inside of a copper tube). Without authorisation of that further function, the 13 bundles can have no actual further function. Authorisation requires the 13 bundles to qualify as "forming part of" the particular project. Only if the 13 bundles can be shown to be "essential" to the operation "of" the Convertor Station or to the function "of" the electricity bearing cables can they qualify as, "or form part of" the particular project and, in consequence, be lawfully part of that development. In their inactive filler material role, incapable of data transmission, the 13 bundles can be said to be "form part of" that project. But, the evidence of the Applicant shows that, by contrast with the other 3 bundles that do have a required "essential" function relating to that particular project, there is no evidence that the 13 bundles have an "essential" function nor that "commercial telecommunications" is a required essential function of the particular project. Rather, the evidence shows that the theoretical function of the 13 bundles is not required for the operation of the particular Convertor Station and its related electricity bearing cables. It follows that the 13 bundles notional "spare capacity" cannot form part of the particular project in the field of energy and, therefore, falls outside of the scope of sections 31, 35(2)(a)(i), and (for the reasons given by the Affected Party in Deadline 5 or 6), cannot qualify within the scope of section 115(1) because the "commercial telecommunications" is not related to the field of energy nor to particular project.

18. The result of the foregoing is to exclude the separate use for commercial telecommunications of the 13 bundles and in turn to exclude the Telecommunications Building(s) from the Land of the Affected Party, by excluding from the scope of section 31 and 35(2)(a) of the PA 2008 a use (as in function) "for commercial telecommunications" of the 13 bundles by means of a provision so as to prevent happenstance operation of section 157 of the PA 2008. See the Table of Interconnectors where that exclusion of a commercial telecommunications has been also variously grappled with and excluded in England by expressly confining the use of FOC "for" a monitoring purpose. By that means, operation of section 157 is excluded.

SECTION C – can the notional "spare capacity" comprising 180 be used for commercial telecommunications authorised by the PA 2008 for that particular use?

- 19. No. It is implicit in the Theoretical Position that the ExA seeks to consider *how* the "spare" capacity falls to be treated in the context of the PA 2008. In essence, the so-called "spare" capacity is the wrong start point because it circumvents a logically prior situation of the material in a cable desired to *have* capacity *per se*.
- 20. The Theoretical Position is not unprecedented in the DCO sphere and nor is consideration of the scope of the PA 2008 or what it may lawfully encompass. In the Tidal Bay Swansea Bay Lagoon DCO, the applicant proposed an "offshore building" situated upon the lagoon wall, desired its use as a potential lagoon control room and as an education centre, asserting that, for those genuinely held reasons, that it was thereby (in some way) "part" of the development for which consent was "required" by section 31 of the PA 2008 "to the extent that the development is or forms part of an [NSIP]". But it could not be. On analysis, the ExA properly excluded that building structure from the scope of the DCO, as not forming "part" of that NSIP, whilst recognising that it may be permitted on further application under the Town and Country Planning Act 1990 by the local planning authority and allowing for a part of the wall to be strengthened to accommodate such a building, if subsequently permitted, to avoid retrofitting. Thus, as in the instant Application, and recognising the particular approach of the PA 2008 to "associated development" in devolved nations, that ExA also grappled with, and considered, the question of whether the "offshore building" could lawfully qualify a "part" of the NSIP proposal and determined that it could not be but may be permitted under other legislation. See extracts from the ExA Report in Appendix E hereto where it considered guidance, the statutory wording, and formulated its own tests by which to consider the applicant's position that it was part of the NSIP.
- 21. By analogy with that DCO, the "offshore building" was also asserted as desirable and beneficial for various amenity and educational purposes but nevertheless fell to be excluded from the scope of the DCO as not able to form a "part" of that NSIP (but could be permitted on application to the local planning authority), so too here does the desired functional use of the 13 bundles and part of an ORS and also Telecommunications Building(s) "for commercial telecommunications" fall to remain excluded from the scope of the NSIP (in line with the Secretary of State's Section 35 Direction made on the Applicant's application to him describing the development proposed to be made subject to a direction as not so including such 13 bundles of fibres in the described "elements" comprised in the proposed development in relation to which a direction was sought).

22. See Appendices B and D hereto.

SECTION D: Applicant's evidence of "FOC" Cable Design: functional and physical

- 23. The Deadline 7 Submissions of the Affected Party included a number of Appendices comprising extracts from the Applicant's evidence that illustrated the actual nature, and also the purpose, of the various types of cable envisaged for the Interconnector. The Applicant has submitted helpful evidence on "essential" functioning of the 3 bundles of fibre optic cable in the Monitoring Cables. See **Appendix D** hereto.
- 24. It is evident from the *illustration* in **Appendix NSPAD 5** and Plates 3.2, 3.3 and 3.5 of **[APP-118]** the Description of Development, ES, Volume 1, Chapter 3, and **Appendix NSPAD 6**, that:
 - a) the conveyance of electricity through the Interconnector would be *through* two premanufactured cables ("the Electricity Cables"); and;
 - b) a further single cable situated near to the two cables would bear data transmission signals along its length within the core part of that cable that would be comprised of fibre optic material actually functionally intra-related to the Converter Station equipment at each end ("the Monitoring Cable").
- 25. The evidence of the nature and purpose of the Cables before the ExA and the Secretary of State includes:
 - a) The Design and Access Statement at [REP6-026];
 - The Scoping Report of the Applicant and the Scoping Opinion of the Planning Inspectorate [APP-366];
 - c) The Statement in relation to Aquind Interconnector requesting a direction pursuant to Section 35 of the Planning Act 2008 [AS-040];
 - d) The Description of Development, ES, Volume 1, Chapter 3 [APP-118], and
 - e) Statement in relation to FOC [REP-127].

The Design and Access Statement at [REP6-026]

- 26. EN-1, paragraph 4.5.1 concerns "function". The Design and Access Statement at [REP6-026] includes the Applicant's design thesis: (Emphasis added)
 - 2.1.7.3 The DAS describes how the design has evolved to reflect the <u>functional and operational</u> <u>requirements</u> of the Proposed Development, ...
 - 5.1.1.5 ... the size of the Converter Station and heights of the Converter Buildings are derived from functional ... requirements ...
 - 5.2.2.1 ... The <u>function</u> of <u>each electrical component</u> within the Converter Station <u>dictates</u> the layout and arrangement of buildings and equipment...

- 5.3.1.1 The compound siting and layout (refer to indicative plans Plates 5.3) is <u>derived from the operational and functional requirements</u> of the Converter Station to meet relevant guidelines and maintain electrical and magnetic separation....
- 5.3.1.1 The final height will be subject to confirmation once the design of the electrical installation is complete which may result in a lower building height...
- 27. "[D]esign of the ... electrical infrastructure [is] dictated to a high degree by their function" (see 3.6.3.39 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]). Paragraphs 3.5.3, Marine Cable System and Design, and paragraphs 3.5.3.3 3.5.3.8, and 3.6.2.4 3.6.2.12 address "cable design" in [APP-118]. See also below. For example:
 - 3.6.3.4 The Converter Station consists of a number of interconnected components which need to be connected sequentially, with the built form for each <u>dictated to a high degree by their function</u>...
 - 3.6.3.36 The identification of the zones in which the buildings and infrastructure may be located dictate to a degree the layout of the electrical equipment, which as identified previously is constrained by the need for the individual components to be connected sequentially, with the built form for each <u>dictated to a high degree by their function</u>...
 - 3.6.4.6 The number of joint bays along the length of the cable route is <u>dictated by</u> the length of cable that can fit on a cable drum (the drum-shape reel on which the cable is stored prior to installation) <u>and limits to the pulling tension required to pull</u> the cable through the ducts. Joint Bays are likely to be required every 600m to 2000m along the HVDC Circuits and will be positioned in highway verges, fields or car parks, where possible, to limit the need for road closures ...

The Scoping Report of the Applicant and the Scoping Opinion of the Planning Inspectorate [APP-366]

- 28. In relation to the Monitoring Cable function, requirements for such functions, and the type of function, these appear evidenced as follows.
- 29. In October 2018, after the request was made to the Secretary of State for a Section 5 Direction, the Applicant requested a Scoping Opinion from the Secretary of State and his Planning Inspectorate provided the same. See Appendix 5.3 EIA Scoping Opinion of the ES [APP-366]. Prior to the Opinion and the direction request, the Applicant undertook consultation about its development. On page 132 of that Opinion there is a letter from Havant Borough Council (25th April 2018) predating the Applicant's request for a direction and that includes: (Emphasis added)

There will be four DC cables, laid as two separate pairs of cables (in most cases), with each cable pair located within a separate trench. Each trench will also include a separate duct to facilitate installation of fibre optic cables along the underground cable route. The submission outlines that these are essential for converter station control systems and communication.

- 30. The Request for a Scoping Opinion from the Secretary of State was preceded by a Scoping Report by the Applicant that post-dated the July 2018 Section 35 Direction.
- 31. Figures 2.1 and 2.2 in the EIA Scoping Report (October 2018) at Appendix 5.2 EIA Scoping Report of the ES [APP-365] illustrated the Monitoring Cable (described in the Scoping Report as "FOC"), on page 32. Pages 384-386 show the situation in cross-section of the FOC within ducts, including below fields. In

October 2018, the EIA Scoping Report by the Applicant has in mind the "operational requirement" design thesis at an early stage and said this about the Monitoring Cable: (Emphasis added)

- 2.1.58 The installation of FOC <u>as part of</u> the Proposed Development is <u>essential</u> for operation. They will be <u>utilised</u> for condition <u>monitoring</u> of the marine cables as well as <u>transmitting</u> <u>operational</u> and other data...
- 2.2.35 A typical cross-section of the cable trench arrangement in the highway is shown in Figure 2.5 (attached) showing each pair of DC cables in its own trench, along with <u>a separate</u> duct for the FOC. The cross section based on a <u>standard design</u> and is subject to detailed design and may change to take into account local conditions e.g. navigation around or cross existing utilities that are encountered. Such modifications may include increasing the cable burial depth and spacing...
- 2.2.49 There will be two ducts per trench to accommodate the DC cables, and <u>one duct for the FOC</u>. The installation of ducts minimises the duration of trenching operations, and allows highways to be reinstated more quickly. The cables are pulled through the ducts in sections. The cable ducts would be uPVC push-fit or HDPe welded. The ducts are usually supplied to site in 6m lengths...
- 2.2.61 Due to a much smaller diameter, fibre optics cables <u>can</u> be installed in longer <u>segments</u>. The installation of the FOC will be undertaken concurrently with the installation of the power cables...
- 2.2.74 There is also a requirement for one FOC to be installed alongside the AC cable in each trench for control and protection purposes. A typical cross-section is shown in Figure 2.6 (attached), this may be subject to change based on local conditions and will be confirmed during the detailed design stage...
- 2.2.81 Two FOC will be installed, one for each circuit. The FOC is used for <u>inter-station</u> communications, which are <u>needed</u> for control and protection systems <u>hence</u> the FOC are required in both the AC and DC trenches. Additionally, it also allows <u>for condition monitoring</u> of the cables, using Distributed Temperature Sensing (DTS). Spare strands of fibre <u>may</u> be leased to third parties for commercial telecoms purposes...
- 2.2.82 For the onshore cable route, the FOC will be installed in a 35-45mm diameter duct. For the marine cable route, the FOC will be bundled with the DC marine cables.
- 2.2.82 A suitable building (approximately 20m x 20m footprint) will be required within 1km of landfall to house amplification equipment associated with the FOC. This ensures the signal is strong enough to reach the remote converter station. This may be a new or existing structure.
- 2.2.84 <u>The converter station will act as the FOC termination point</u>. This will <u>require telecommunications equipment</u> to be housed <u>at the converter station</u>. <u>Some equipment</u> may belong to third party providers who lease additional FOC capacity. <u>This</u> third party equipment <u>may</u> be segregated <u>within the proposed converter station buildings</u> or housed separately in a building that is adjacent to the main converter station compound. In <u>both</u> cases, separate access will be provided to this equipment to allow 24hr third party access without the need to access the converter station <u>itself</u>
- 2.2.97 Regular access to the telecommunicatio [sic] equipment at the proposed converter station will be required and FOC amplification equipment near the coast will be be [sic] required...
- 32. Early on, therefore, the Applicant considered and differentiated between "operational requirements" and mere potential availability ("may"). What is clear from paragraph 2.2.84 is that the Monitoring Cables can and would run exclusively between the actual Convertor Station buildings themselves, which would contain necessary related equipment, and that it was not necessary for the functioning of the Electricity Cables to separately accommodate any of that related equipment discretely from the

- Convertor Station building itself nor to have a discrete cable to the (so-called) Telecommunications Building(s).
- 33. Rather, the genesis of the "Telecommunications Building(s)" is not as may otherwise in isolation appear

 the intra-Converter Station communications but is exclusively related to the "commercial telecommunications" provision arising from such spare capacity in the Monitoring Cables as may be authorised. Paragraph 5.4 of the subsequent [Rep1-127] affirmed that positon:
 - 5.4 The Telecommunications Buildings are required solely in connection with the commercial use...
- 34. It follows that the Telecommunications Building(s) cannot be said to be a "part" of anything other than the "commercial use" of spare fibres, themselves not necessary nor required nor being essential to operation of the Electricity Cables. See below.
- 35. (In passing, the Affected Party notes that the Applicant's own evidence in its paragraphs 2.2.16 and 2.2.84 of Appendix 5.2 EIA Scoping Report of the ES [APP-365] precluded (as it must have known) the potential for compulsory acquisition of the Affected Party's Land for both cabling between the Electricity Cable route and the Telecommunications Building(s) (and its related parking) because, on the basis of that evidence, neither section 122(2)(a) nor (b) "required" can have been satisfied from the outset. This reinforces the Affected Party's Representations at CAH 2 on the lawfully required reduction in extent of land take advanced at that ISH).
- 36. Following the Section 35 Direction and the Request for a Scoping Opinion, the Secretary of State consulted on the Scoping Report including as follows. On page 201 of Appendix 5.3 EIA Scoping Opinion of the ES [APP-366] there is a letter from Historic England (28th November 2018) that includes: (Emphasis added)
 - The proposed development, as relevant to determination within the UK (including inshore and offshore marine planning areas), also comprises High Voltage Alternating Current (HVAC) underground cables, <u>fibre optic data transmission cables</u> and a new HVDC converter station (the "Proposed Converter Station") adjacent to the existing National Grid substation in Lovedean ...
- 37. Similarly, on page 225 of Appendix 5.3 EIA Scoping Opinion of the ES [APP-366] there is a letter from Natural England (28th November 2018) that includes: (Emphasis added)
 - ... HVDC cable route (including fibre optic <u>data transmission</u> cables) from the AQUIND converter station to the UK landfall at Eastney (approximately20km)....
- 38. Similarly, on page 266 of Appendix 5.3 EIA Scoping Opinion of the ES [APP-366], is the Opinion of Winchester City Council (28th November 2018) that includes: (Emphasis added)
 - SCOPING OPINION Development of a new underground High Voltage Direct Current power cable transmission link between Normandie (France) and the South Coast, including fibre optic <u>data transmission</u> cables and the erection of converter stations...

THIS SCOPING OPINION SETS OUT WHAT INFORMATION SHOULD BE INCLUDED IN AN ENVIRONMENTAL STATEMENT TO BE SUBMITTED WITH THE PLANNING APPLICATION FOR Development of a new underground High Voltage Direct Current power cable transmission link between Normandie (France) and the South Coast, including fibre optic data transmission cables and the erection of converter stations.

- 39. Returning to the Scoping Opinion issued by the Secretary of State's Planning Inspectorate, on page 12 of Appendix 5.3 EIA Scoping Opinion of the ES [APP-366], paragraphs 1.1.9 and 2.2.4 include: (Emphasis added)
 - 1.1.9 This Opinion should <u>not</u> be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are <u>without prejudice</u> to any later decisions taken (eg on submission of the application) that <u>any</u> development identified by the Applicant <u>is necessarily to be treated as part of</u> a Nationally Significant Infrastructure Project (NSIP) or Associated Development <u>or development that does not</u> require development consent...
 - 2.2.4 The <u>Proposed Development</u> comprises two pairs of High Voltage Direct Current (HVDC) subsea and underground cables, two pairs of High Voltage Alternating Current (HVAC) underground cables, one HVDC convertor station and permanent access road, and <u>two</u> fibre optic <u>data transmission</u> cables...
- 40. Thus, the element of the proposed development comprised of fibre optic cables for data transmission (rather than the 13 bundles "for commercial telecommunications") was consulted upon.

The Description of Development, ES, Volume 1, Chapter 3 [APP-118]

- 41. In contrast with the stated functions of the Monitoring Cables and the related stated requirement or need for such functions, the Description of Development includes no evidence that the "provision of commercial telecommunications services" is a function of the Monitoring Cables that relates to the Electricity Cables or is required or is necessary for the operation or performance of the Electricity Cables or is otherwise "essential". At its highest, the presence of an excess amount of material within the Monitoring Cables comprised of "fibre optic strands" has a passive role to play in ensuring the outer diameter of the Monitoring Cables remains at the pre-manufactured diameter gauge. But, if asking the question: if no use is specified, the "use for the purpose for which it is designed" of the Monitoring Cable, the answer could only be that it is specified in dDCO Article 2(1), under (i) and the law and evidence shows that (ii) cannot be lawfully included "as part of" the development.
- 42. Subsequently, the expressed purpose of the Monitoring Cable is stated in paragraphs 3.5.3.7 and 3.6.3.21 of the Description of Development, ES, Volume 1, Chapter 3 [APP-118]: (Emphasis added)
 - 3.5.3.7 ... fibres <u>for</u> a Distributed Temperature Sensing ("DTS") system as well as protection, control and communications ...
 - 3.6.3.21 FOC Infrastructure will be used <u>for</u> communications between the French and UK Convertor Stations <u>in connection with</u> the control and protection systems, and <u>hence</u> the FOC <u>is required</u> to be installed with both [the Electricity Cables].

- 43. "Cable design" is described in paragraphs 3.5.3.3 to 3.5.3.8, 3.6.2.8-9, 3.6.2.12, and 3.6.3.21 and 3.6.3.39 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118], together with paragraph 1.1.3.12 of [APP-359], Environmental Statement Volume 3 Appendix 3.5 Additional Supporting Information for Onshore Works.
- 44. "Design of the ... electrical infrastructure [is] dictated to a high degree by their function" (see 3.6.3.39 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]).
- 45. The actual diameter of the Monitoring Cable and the *purpose* of that diameter is evidenced by the Applicant to derive from an asserted need for it to be of sufficient diameter to withstand impacts including, for example, "anchors" and "likely" impacts upon the cable together with their *necessary* functional purpose as described by the Applicant:
 - a) "Cable systems are reliable and do not tend to require intrusive maintenance". See paragraph 1.1.3.10 of ES, Volume 3, Appendix 3.5 Additional Supporting Information for onshore Works [APP-359].
 - b) The Electricity Cable and Monitoring Cable cross-section and diagram are shown in Plate 3.6 [sic, 3.5]" (see paragraph 3.6.2.8 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]); and on page 2 of Appendix NSAPD 6 Extract 1 Data Cable accompanying the Deadline 6 Submissions of the Affected Party that show a diagram of the Monitoring Cable;
 - c) "Each individual Marine Cable will have a diameter of approximately 140 mm and an approximate weight of 50 kg/m (in air) where a copper conductor is used. Plate 3.2 illustrates the cross section of a typical marine XLPE cable", (see paragraph 3.5.3.4 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
 - d) "In addition to the four Marine Cables, two FOCs, each 35-55 mm in diameter will be laid together with the Marine Cables within a shared trench (one FOC per HVDC Circuit). Each FOC will include fibres for a Distributed Temperature Sensing ('DTS') system as well as protection, control and communications", (see paragraph 3.5.3.7 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
 - e) The Monitoring Cable would have "sufficient fibres to accommodate levels of *redundancy* for failures", and would contain 192 fibre strands of which 180 would be "dark" fibres, i.e. 180 would qualify as redundant fibres. See paragraph 5.2 of the FOC Statement [REP1-127], and page 1 of Appendix NSPAD 6 to the Deadline 6 Submissions of the Affected Party. The ordinary meaning of "redundancy" is "superfluous; a surplus amount", and, in engineering, ordinarily

means "the presence of *more* structural components than are needed to confer rigidity"; in computing: "the incorporation of extra components to permit continued functioning in the event of failure"; The ordinary meaning of "surplus" is "what remains in excess of what is needed; more than is needed or used" (see Shorter Oxford English Dictionary, 6th Edition);

- f) "the depth to which the ... Cables will be buried is dependent on local seabed characteristics, hydromorphological conditions and the risk and probability of likely hazards (i.e. snagging by fishing gear/anchors)" (see paragraph 3.5.6.13 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
- g) "Where it is not possible to bury the cable under the seabed to the target depth, non-burial protection will be required to protect the cables from anthropogenic (i.e. fishing and vessel anchoring) and natural hazards (i.e. currents and mobile sediments)" (see paragraph 3.5.6.20 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
- h) "The Marine Cables have been <u>designed</u> so that routine maintenance to the Marine Cables is not required during their operational lifetime. However, there may be the requirement to undertake unplanned repair works, due to the following events: ... exposure of, or damage to, the cables as a result of fishing activities and/or vessel anchoring", (see paragraph 3.5.9.3 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
- "the FOC will monitor the operational performance of the Marine Cables. Temperature and vibration monitoring will be undertaken to monitor the performance of the cable, particularly in areas known to be at risk from interference i.e. areas of known mobile sediment, shipping grounds, anchoring ground and commercial fishing areas. In the event that anomalies are recorded, further investigation and, if necessary, corrective action will be undertaken", (see paragraph 3.5.9.9 of ES, Volume 3, Appendix 3.5 Additional Supporting Information for onshore Works [APP-118]);
- j) In relation to the Electricity Cables on land, "it is anticipated that the HVAC Cables will utilise a ducted and troughed installation method, with ducts installed underground between the Convertor Station and Lovedean Substation prior to HVAC Cables being pulled through" and "the design and configuration of the HVAC Cables will be subject to detailed design and may be impacted upon by elements such as soil conditions, length of the HVAC Cable Route, impact from the environment and existing infrastructure", (see paragraph 3.6.2.11 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);

- K) "Electric fields from HVAC Cables will be contained by the cable's protective metal sheath", (see Plate 3.2 and paragraph 3.6.2.9 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]);
- "there is also a requirement for a [Monitoring Cable] to be installed *alongside* each HVAC Cable Circuit *for* control and protection and *cable monitoring* purposes. An indicative cross-section is shown in Plate 3.6 [sic, 3.5]" (see paragraph 3.6.2.8 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118]). See also Appendix NSAPD 6 Extract 1 Data Cable accompanying the Deadline 6 Submissions of the Affected Party that show a diagram of the Monitoring Cable;
- m) The purpose of the Monitoring Cable is expressed by the Applicant as being to "ensure protection against fishing and anchor damage as well as natural hazards" in Appendix NSAPD 6
 Extract 1 Data Cable accompanying the Deadline 6 Submissions of the Affected Party that show a diagram of the Monitoring Cable;
- n) "To withstand the various physical impacts which the fibre optic cables are likely to be subject to associated with transportation, installation and operation in the marine and underground environment and protect the glass fibres located within it, the fibre optic cables are required to be of an adequate outer diameter. Within the required outer diameter for the fibre optic cables, 192 glass fibres may be installed... [T]he outer diameter must be of sufficient size to withstand the impacts to which it is likely to be subject. [I]t would be possible to install a cable with fewer glass fibres (and thus less spare capacity), [but] this would not reduce the impacts to any degree.", see paragraph 5.2 of the FOC Statement [REP1-127]. The Shorter Oxford English Dictionary, 6th Edition, defines "spare" as "in excess of present requirements; superfluous".
- 46. The admissions in Appendix D hereto from the Applicant, and Appendix NSPAD 6, confirm that the material within the copper tube inside of the Monitoring Cable does not contribute to the structural integrity of the wider out cable. The external diameter is maintained by the copper tube and not by the fibre optic bundles situated within that outer protective cable tube.
- 47. Consistent with this, the Statement in relation to FOC [REP-127] includes the following:
 - 5.2 To withstand the various physical impacts which the fibre optic cables are likely to be subject to associated with transportation, installation and operation in the marine and underground environment and protect the glass fibres located within it, the fibre optic cables are required to be of an adequate outer diameter. Within the required outer diameter for the fibre optic cables, 192 glass fibres may be installed. Each fibre optic cables is required to include a sufficient amount of glass fibres for its use in connection with the primary use of the interconnector and as redundancy for this purpose in the event of individual glass fibre failures. The number of glass fibres required in connection with the primary use of the interconnector and as redundancy for this purpose is less than

192, though this is a multiple of fibres that is commonly produced by manufacturers of such cables. Noting that the outer diameter must be of sufficient size to withstand the impacts to which it is likely to be subject, and the use of standard size cable components for this purpose, the size of the cable itself would not change if the number of glass fibres within it was reduced from 192 to a lesser multiple. Therefore, whilst it would be possible to install a cable with fewer glass fibres (and thus less spare capacity), this would not reduce the impacts to any degree. Accordingly, there is no benefit to such an approach being taken, and it is considered this would limit the overall benefits to be provided by the Proposed Development.

Design: Form follows Function

- 48. Whilst the ExA at the Tidal Bay Lagoon DCO did not rest on "function" as the exclusive test, the instant DCO is different. It is evident that the Application ES, Volume 1, Chapter 3, Description of Development expressly states the design rationale as "dictated" by "function" and that the particular purpose of the Monitoring Cables is necessary to support the ongoing performance of the Electricity Cables whilst being intrinsically capable of withstanding such "likely" external "impacts" as may bear upon such cables during their installation and operation. The design rationale includes express recognition that the inclusion of "spare" fibre optic cable material within the Monitoring Cables results exclusively from the need for the Monitoring Cable diameter to be able to withstand external impacts during installation and operation and presently remains otherwise devoid of current purpose. The absence of functional purpose of spare fibre optic material is consistent with the presence of the "spare" fibres within the Cable as exclusively to maintain the outer diameter of the Cable so as to sufficient or adequate to protected the functionality of certain fibre optic cable material within that Cable. The FOC Statement, paragraph 5.2 expressly confirms that the Cable could contain fewer fibre optic cables with no effect on Cable monitoring functionality nor effect on the impact protection of the diameter.
- 49. Thus, the "spare" fibres can have (without more) no more present relevance or purpose or design beyond material comprising an integral part within the pre-manufactured Monitoring Cable for passive packing material required to maintain (but no more) the outer dimeter of the Monitoring Cable in order to protect the active functional material against external direct impacts. By contrast, the "spare" fibres cannot be lawfully be said to be necessary (being evidenced by the Applicant as "spare") and remain actually otherwise functionally use-less other than to maintain that diameter. In that sense, as in the Lagoon DCO where additional lagoon wall thickness below the excluded "offshore building" was included lawfully as part of the lawful development whereas that offshore building could not be (however desirable it might have been to have included it), the inclusion of "spare" fibres exclusively to maintain a particular outer Cable diameter against impacts is the purpose for their presence within the Monitoring Cable.

- 50. So far, on the Application evidence, there can be no other purpose of the 3 bundles (of the 16 bundles) in the Monitoring Cables than exclusively for "essential" monitoring of the Electricity Cables, and no purpose beyond mere filler or spacer material of any other fibre optic cables in the Monitoring Cables.
- 51. Thus, considering Plate 3.2 of ES, Volume 1, Chapter 3, Description of the Proposed Development [APP-118] and Appendix NSPAD 6 Extract 1 Data Cable accompanying the Deadline 6 Submissions of the Affected Party that show a diagram of the Monitoring Cable, the purpose or design of such Cables is:
 - a) to enable each Cable type to withstand likely external impacts bearing upon it;
 - b) to enable the Electricity Cables to convey electricity;
 - c) to enable monitoring of the Electricity Cables by the Monitoring Cables;
 - d) to enable the visual identification from hardware within the Convertor Station relating to the Monitoring Cables of potential performance issues along the Electricity Cables; and
 - e) to enable intra-Convertor Station communication (if not already covered by the foregoing paragraph).
- 52. Turning to section 157(2) of the PA 2008, it is engaged if "no purpose" <u>is</u> specified by the consent. Here, by specifying the purpose of the wider Monitoring Cables as being "for monitoring" purposes, that description would exclude the automatic operation of section 157 of the PA 2008 bearing on the 13 bundles of filler fibre optic cable.
- 53. "The Fibre Optic Cable" ("FOC") Infrastructure will also be operated remotely (i.e. unmanned). However, [it is <u>asserted</u> by the Applicant] regular access to the proposed *equipment*, both within the Telecommunications Building(s) at the proposed Convertor Station Area and the proposed FOC amplification *equipment* within the ORS near the coast, will be required during the Operational Stage". See paragraph 1.1.3.8 of ES, Volume 3, Appendix 3.5 Additional Supporting Information for onshore Works [APP-359]. Consistent with its admissions in Appendix D, that access is confined to access "for commercial telecommunications".
- 54. It is difficult to see how the expressed purpose of the Monitoring Cable could be actually performed in the absence of actual continuation of the Cable to the actual footprint of each Convertor Station, whether or not there may also be a connection along the length of that Cable to other buildings (such as a Telecommunications Building(s) or an ORS. i.e. it is implicit in the expressed purpose of the Cable that it physically connects in some way to each Station structure (not wider area) and the Cable length coincides with the length of the Electricity Cables for their whole length as between the two Station structures (not areas). It is also expressly stated in paragraph 1.1.3.12 of ES, Volume 3, Appendix 3.5 Additional Supporting Information for onshore Works [APP-359] that the "hardware" related to the

Monitoring Cable would be situated "within" the Convertor Station and not the Convertor Station Area. Therefore, the function of the Monitoring Cable appears to be supplied by "hardware" situated in the Convertor Station that would engender the data transmission along the 12 fibre optic cables within the Monitoring Cable and along their length to and from the French Convertor Station. The admissions in Appendix D reinforce this and explain that 3 bundles of 12 cables would be electronically terminated in the Converter Station.

55. In so far as there is *further* hardware or equipment related to the DTS function or to the intra-Convertor Station communications required for that function but chosen by the Applicant to not be situated within the Convertor Station, there remains no rational reason why it could not be situated in the Station nor also visually inspected together with the DTS hardware there. The "equipment" (as described by the Applicant in its ES "Development Description") in the Telecommunications Building(s) cannot engender a "requirement" under the PA 2008 for the location of that "equipment" in that building. This is because section 235(1) of the PA 2008 adopts the meaning of "building" from section 336(1) of the TCPA 1990. Section 336(1) defines "building" to include "structures" but to exclude from its scope: "plant or machinery comprised in a building". The ordinary meaning and scope of "plant" includes "machinery, fixtures, and apparatus; a single machine or large piece of apparatus; the premises, fittings, and equipment of a business". The ordinary meaning of "apparatus" includes "the things collectively necessary for the performance of some activity or function; the equipment used in doing something. Therefore, some of the "equipment" desired to be situated in the Telecommunications Building(s) is outside of the scope of "development" for the purposes of the PA 2008. Consequently, and given that it would be "unmanned", it is rationally assumed that such "equipment" could be (and absent a Telecommunications Building, would be) situated within the Convertor Station Parameter Volume together with the DTS hardware for the expressed purpose of communications between the Stations.

"Desired" purpose of the "spare capacity" of excess fibres within the pre-manufactured Monitoring Cable

- 56. The actual diameter of the Monitoring Cable chosen by the Applicant from the industry standard size can (but is not required to) include excess or additional fibre optic material. See paragraph 5.2 of [REP1-127].
- 57. The evidence of this material and its desired purpose includes as follows.
- 58. Beginning with the logically prior "essential" cable diameter evidence, and the (most recently dated 6th October 2020) Statement in relation to FOC [REP1-127] includes the following about the nature of the Monitoring Cables and their actual diameter:

- 5.2 ... The <u>number</u> of glass fibres <u>required in connection</u> with the primary use of the interconnector and as redundancy for this purpose <u>is less</u> than 192, though this is a multiple of fibres that is <u>commonly produced by manufacturers of such cables</u>. Noting that the <u>outer diameter</u> must be of sufficient size to withstand the impacts to which it is likely to be subject, <u>and</u> the <u>use of standard size cable components</u> for this purpose, the size of the <u>[outer diameter]</u> cable itself would not change if the number of glass fibres within it was reduced from 192 to a lesser multiple. Therefore, whilst <u>it would be possible to install a cable with fewer glass fibres</u> (and thus less spare capacity), this would not reduce the impacts to any degree...
- 59. The Applicant's most recent evidence, therefore, affirms the previous evidence that the *purpose* of the additional fibre optic material within the Monitoring Cables (over and above the fibre optic material for the purpose of monitoring and control of the Electricity Cables) is <u>not</u> essential nor required in relation to or in connection with the Section 35 Direction "proposed Development".
- 60. Further, [REP1-136], Needs and Benefits Addendum Report, paragraphs 5.1.1.1-.2, evidences:
 - 5.1.1.1. As set out in the Statement in Relation to Development Associated with AQUIND Interconnector (document reference 7.7.1) the industry standard single Fibre Optic Cable (FOC) has up to 192 fibres, <u>but</u> the number of fibres <u>required for cable protection purposes is less</u> than this. There will <u>therefore</u> be spare capacity on the fibre cables forming part of the Proposed Development.
 - 5.1.1.2 ... [I]t would be possible to install a cable with fewer fibres in connection with the operation of the Project only (and therefore less spare capacity) this would not alter the appearance, characteristics or impacts to any degree...
- 61. Rather, in contrast to either an "essential" function relating to the Electricity Cables, or to the use of the "spare fibre optic" material being "necessary" or "required" for such function, as the Applicant explained and evidenced in [REP3-014], Deadline 3, Applicant's Response to Deadline 2 Submissions, "Comments on Responses to the ExA's first Written Questions (i.e to the ExA First Questions ("ExQ1") [PD-011]), under column 2, row 2, paragraph 17, on page 2-9 (and re-stated on page 2-29 in column 2, row 2, paragraph "Conclusion": (Emphasis added)
 - ... The Proposed Development is an Interconnector, and the Applicant is <u>desiring</u> of utilising the Proposed Development to its full design <u>capacity</u> and benefit. For this reason, an application for code powers was made for future connections, <u>should</u> the <u>commercial use</u> of the FOC within the Proposed Development be authorised.
- 62. Further, the evidence in **Appendix D** hereto reinforces the "essential" role of the 3 bundles of fibre optic cables in the Monitoring Cable but the absence of any essential role in relation to the proposed insertion of a further 13 bundles within the copper tube as packing or filler or spacers made of fibre glass instead of plastic.

63. This evidences that:

a) the "commercial use" of the "spare" capacity resulting from the choice to include additional fibre optic material within the Monitoring Cables is a "desire" and, in express contrast with the expressed "essential" purpose of the fibre optic cables for data transmission concerning

- protection and monitoring of the Electricity Cables and the inter-Convertor Station communications;
- b) Code powers are contingent on authorisation under section 120 of the PA 2008 of the "commercial use" of spare capacity (if such spare capacity were to be actually available in the authorised Monitoring Cables and also along their length);
- c) The Applicant differentiates between "design" as in the essential function of the Monitoring Cables which is "dictated by function". See paragraphs 2.1.3 and 5.1.1.5, and 5.2.2.1 ("electrical component" design of equipment layout [REP6-026], Deadline 6 Submission 5.5 Design and Access Statement Tracked Rev003.
- 64. By contrast, paragraph 5.1 of [REP1-127] evidences this the Statement at In the :
 - 5. Spare Capacity
 - 5.1 ... there will be spare capacity within the fibre optic cables, so as to realise the full benefit of the Proposed Development and to ensure it operates effectively to its design capacity the intention is for the spare capacity to be used for commercial telecommunications purposes...
- 65. Further, in response to the ExA First Questions, Question CA1.3.3: (Emphasis added)

The Needs and Benefits Assessment **[APP-115]** makes no reference at all to the use (or otherwise) of fibre optic cables. Can the need and benefits of the fibre optic cables be explained in greater detail and <u>whether</u> the commercial use of the operational fibre optic cables is part of revenue stream taken into account within the Funding Statement.

66. Further, in response to the ExA First Questions, Question DCO1.5.2: (Emphasis added)

Would the <u>separate</u> Telecommunications Building at the Converter Station site <u>be necessary</u> if there were no commercial usage of the surplus fibre optic cable capacity, and thus no requirement for access by third parties? (i.e. <u>could</u> the interconnector <u>monitoring functions</u> be accommodated within the main Converter Station buildings?)

The Applicant responded in [REP1-091] to ExA's first Written Questions (i.e to the ExA First Questions [PD-011] but appeared to give no direct response to DCO1.5.2 and instead provided a response in its Table 1.5:

The Applicant has produced a <u>Position Statement</u> in relation to Associated Development (document reference 7.7.1) <u>in relation to</u> the proposed commercial use of the spare capacity in the fibre optic infrastructure required to be provided as part of the Proposed Development and why this constitutes associated development in accordance with the relevant law and guidance in response to this ExA written question.

- 67. In fact, whilst described as a "Position Statement", that document 7.7.1 is in fact entitled "- Statement in Relation to FOC" at [REP1-127]. The Statement in Relation to FOC Rev 001 [REP1-127] does not in fact directly answer ExA Question DCO1.5.2. The closest response one can recognise from [REP1-127] is:
 - 5.1 there will be spare capacity within the fibre optic cables, ...

- 5.2 ... it would be possible to install a cable with fewer glass fibres (and thus less spare capacity), this would not reduce the impacts to any degree ...
- 68. Nowhere in the Statement in Relation to FOC Rev 001 [REP1-127] does the Applicant evidence that commercial use of any spare capacity resulting from the choice of increase fibre optic material is "necessary" or "required" or "essential" for the proposed Development or the Proposed Development. The absence of such evidence remains consistent with the Applicant expressly "desiring" (but no higher) to make future use of such spare capacity but not itself considering such use necessary or essential.
- 69. That is, the *purpose* of the desired "commercial use" of any "spare capacity" can be reasonably concluded as <u>not</u> necessary nor essential to, nor thereby could such a function be a part of, the proposed Development nor of the Proposed Development.
- 70. Further, the Applicant's evidences that the Monitoring Cables actually connect directly with the Convertor Station and equipment in that building:
 - a) In Appendix 3.5 Additional Supporting Information for Onshore Works of the ES [APP-359], paragraph 1.1.3.12:
 - "Visual inspection of the output of the Distributed Temperature Sensing ("DTS") hardware which is located within the Convertor Station would be required";
 - b) In Appendix 5.2 EIA Scoping Report of the ES [APP-365], paragraph 2.2.84:
 - "The converter station will act as the FOC termination point. This will require telecommunications equipment to be housed at the converter station. Some equipment may belong to third party providers who lease additional FOC capacity. This third party equipment may be segregated within the proposed converter station buildings or housed separately in a building that is adjacent to the main converter station compound. In both cases, separate access will be provided to this equipment to allow 24hr third party access without the need to access the converter station itself..."
- 71. Therefore, the rational and direct response to the terms of ExA Question DCO1.5.2 (see above) must be (meshing that question terms and the evidence relating to it): "No. A <u>separate</u> Telecommunications Building at the Converter Station site would <u>not be necessary</u> if there were no commercial usage of the surplus fibre optic cable capacity, and thus no requirement for access by third parties. And yes, the interconnector <u>monitoring functions could</u> be accommodated within the main Converter Station buildings and would be so".
- 72. This response is reinforced by the Applicant's evidence in the Statement in Relation to FOC Rev 001 [REP1-127] that: (Emphasis added)
 - 5.4 The Telecommunications Buildings are required solely in connection with the commercial use...
- 73. In relation to the function of the Monitoring Cables and the ORS, in response to the ExA First Questions, Question DC01.5.2: (Emphasis added)

Is the ORS at the landfall <u>needed</u> if the fibre optic cable is <u>required only</u> for interconnector monitoring and not commercial data usage?

If the Optical Regeneration Station is required nevertheless, what difference to building dimensions would the removal of commercial <u>surplus</u> capacity make?

The Applicant referred also to DCO1.5.2 in Table 1.5 of the Statement in Relation to FOC - Rev 001 [REP1-127]

- 74. In its Statement in Relation to FOC Rev 001 [REP1-127], the Applicant responded as follows:
 - 5.3 There is a direct connection between the proposed commercial use of the FOC Infrastructure and the size of the ORS ... [A]pproximately two thirds of the cabinets within the ORS will be available for commercial use.10 The <u>remaining cabinets</u> [i.e. 1/3rd] in the ORS will house <u>key control equipment</u> that <u>are required</u> to support the primary function of the fibre optic cable (i.e. control and monitoring)...
 - 7.1 The ORS are <u>required to maintain the signal strength</u> across the entire route and to ensure the signal strength is adequate <u>between</u> the UK and France <u>Converter Stations</u>.
 - 7.2 Based on the design of the Proposed Development and the distance between the Converter Stations in France and the UK, an ORS in some form would be required to support the primary function of the Proposed Development were the commercial use not proposed.
- 75. By contrast, it responded as follows in relation to its desired use of the spare capacity of fibre optic material:
 - 5.3 There is a <u>direct connection between the proposed commercial use</u> of the FOC Infrastructure <u>and</u> <u>the size of the ORS</u>. Whilst it is not possible to state with absolute certainty the extent to which the size of the ORS is dictated by the proposed commercial use, it is anticipated that approximately two thirds of the cabinets within the ORS will be available for commercial use...
 - 7.1 The ORS are required to maintain the signal strength across the entire route and to ensure the signal strength is adequate between the UK and France Converter Stations.
 - 7.2 Based on the design of the Proposed Development and the distance between the Converter Stations in France and the UK, an ORS in some form would be required to support the primary function of the Proposed Development were the commercial use not proposed...
 - 7.4 ... the size of the ORS is solely attributable to the use of surplus capacity for telecommunication purposes, however it is anticipated that approximately two thirds of the cabinets within the ORS will be available for commercial use. The illustrations in section 5.5 of the updated Design and Access Statement (APP-114 Rev 002) have been provided to assist in understanding the key components that drive the size and design of the ORS...

76. It is evident that:

- a) 1/3rd of the ORS is "required" for the functioning of the Monitoring Cables *purpose* as it relates to the Electricity Cables whereas;
- b) 2/3rds is, by necessary inference, <u>not</u> "required". Again, the evidence shows that the *purpose* of certain equipment is not necessary, required nor essential to the "Proposed Development".

Funding and Function and Purpose

- 77. The Affected Party cross-refers to the Funding Note for Deadline 7 from the Affected Party.
- 78. In relation to funding, the Applicant made no reference to the desired use of the spare capacity as necessary or required to fund (on the Applicant's terms) the "Proposed Development" in the Statement in Relation to FOC Rev 001 [REP1-127] nor is there any evidence of the same before the ExA or Secretary of State. Mr Jarvis on behalf of the Applicant orally confirmed to the ExA that, in relation to the "commercial use" of spare capacity for the provision of commercial telecommunications, the resources from that use did <u>not</u>, and by necessary inference, were <u>not</u> necessary to, cross-subsidise (on the Applicant's terms) the "Proposed Development".
- 79. It can be reasonably concluded that the resources (theoretically) engendered by the "provision of commercial telecommunications services" do not have the function of subsidizing the delivery of the "Proposed Development".
- 80. In its most recent Funding Statement [Rev 02] at **[REP6-021]** includes evidence on resources that includes "typical" streams of revenues for "interconnectors" in paragraphs 6.3.1-6.3.3. Thereafter, paragraph 6.4 separately identifies: (Emphasis added)
 - 6.4 In addition, the revenues from the commercial use of the FOC within the Project <u>may</u> contribute an additional 5% of total revenues.
- 81. It is evident that the "additional 5%" has no purpose to ensure delivery ("may") of the Proposed Development, and (consistent with the Applicant's oral evidence to the ExA in CAH2) cannot be said to be a part of the financial resources necessary to ensure delivery of the "Proposed Development".

SECTION E: Practical Approach and Monitoring Cable Lengths

- 82. In the Tidal Bay Lagoon DCO, the ExA was cogniscent of a degree of support for the "offshore building" whilst simultaneously recognising that that building could only fall outside of the scope of the PA 2008 for being unable to satisfy the "is or forms part of" test that it applied to ascertain whether that building could be said to qualify within the scope of "is or forms part of" the particular development for which development consent is required. See section 31 that uses the same phraseology as section 35(2)(a)(i).
- 83. To that end, that ExA evaluated that the thickening of the lagoon wall (to contain the incoming sea water) could be part of the development for the reasons given at paragraphs 4.1.39-46 and of **Appendix E** ("sufficiently related"; "integral part" as "promoted as mitigation"), and that, in consequence, the "retrofitting" of an "offshore building" that might be permitted under the Town and Country Planning Act 1990 could be erected on that previously thickened part (authorised under the DCO) without additional works to the lagoon wall erected under the PA 2008 (whilst the thickening) remaining lawful under the latter Act.
- 84. By analogy with that position, the Affected Party recognises that in this Application:
 - a) On the Applicant's evidence at [REP1-127], paragraph 5.2:
 - "To withstand the various physical impacts which the fibre optic cables are likely to be subject to associated with transportation, installation and operation in the marine and underground environment and protect the glass fibres located within it, the fibre optic cables are required to be of an <u>adequate outer diameter</u>. Within the required outer diameter for the fibre optic cables, 192 glass fibres may be installed... [T]he <u>outer diameter must be of sufficient</u> size <u>to</u> withstand the impacts to which it is likely to be subject. [I]t <u>would be possible</u> to install a cable with fewer glass fibres (and thus <u>less</u> spare capacity), [but] this would not reduce <u>the impacts</u> to any degree."
 - b) On the Applicant's evidence at Appendix NSPAD 6 Extract 1 Data Cable [REP6-111], the "data cable":

"up to 180 [of the 192] fibres in each of the two data transmission cables may be available \dots "

Therefore, the Monitoring Cable only 'needs' 12 fibre optic cables to sustain its essential function that relates to the necessary or essential data transmission in relation to the Electricity Cables;

c) The balance of 180 fibre optic material appears thereby to be exclusively for 'packing out' the diameter of the pre-manufactured fibre optic cable. There is no evidence to suggest that a narrower diameter cable also able to withstand relevant impacts could not be laid onshore

within ducting nor on the Land of the Affected Party. That is, there is no evidence that a premanufactured narrower diameter cable could not withstand likely impacts;

- d) On the Applicant's evidence at Appendix 5.2 EIA Scoping Report of the ES [APP-365], paragraph 2.2.61, the Monitoring Cables are:
 - "2.2.61 Due to a much smaller diameter, fibre optics cables <u>can</u> be installed in longer <u>segments</u>. The installation of the FOC will be undertaken concurrently with the installation of the power cables..."

Therefore, the evidence shows that the Monitoring Cable can be subdivided into segments of different diameters so long as there are at least 12 fibre optic strands in throughout that Cable. i.e. it matters not that there may be a diameter mismatch between a 192 strand diameter and a 12 strand diameter cable;

- e) On the Applicant's evidence at Figure 24.2 Illustrative Cable Route, HDD sites and Joint Bays for noise and vibration assessment [APP-336], Figure 24.2, Sheet 2 of 15, the nearest jointing bay between "segments" is a little to the South of the Land of the Affected Party shown on Sheet 1 and shows on Sheet 2 the location (by a green triangle) where the most northerly extent of an industry standard pre-manufactured Monitoring Cable containing 192 fibres theoretically could be situated without intruding into the Land of the Affected Party. Thereafter, the extent of Monitoring Cable remaining functionally able to perform its evidenced "essential" function is a smaller diameter cable containing 12 fibre optic cables directly connecting to the "hardware" in the Convertor Station, and enabling visual inspection of data transmitted between that Station and its French counter-party, as well as communications between those two Stations.
- f) The same logic applies to the ORS. See [REP1-127];
- g) In due course, as in the Tidal Bay Lagoon DCO, the Applicant may apply for planning permission for both "development" of the Affected Party's Land by a structure situated on it comprised of Telecommunications Building and a structure comprised of a cable containing fibre optic cables situated under that Land together with the engineering operation to install that development. This is because, in the absence of authorisation of that commercial telecoms use of the fibre optic cables, it is difficult to see how the Applicant might then be a telecommunications provider able to benefit from permitted development. Certainly, it has not before relied on automatic permitted development to date of Deadline 7. Similarly, in the absence of agreement with the relevant landowners, and which it cannot be said would not be forthcoming in light of the facilitative relationship of the Affected Party with other parties concerned with electricity provision North East of the Land, it would remain open to the Applicant to ascertain at that time whether (in contrast with the present no doubt strong "desire") any objective public interest for

the particular project at that future time might support the compulsory acquisition of relevant parts of the Land and whether there was, at that future time, a compelling case for such acquisition. That would be for Winchester City Council to evaluate at that time and to resolve to make a compulsory purchase order, and also require an appropriate development agreement between the Council and the Applicant. (It being also not suggested that the Applicant could rely on statutory Code powers absent authorisation of the commercial use of the 180 fibres for commercial telecommunications services);

h) Alternatively, but similarly to (f) above, a further jointing bay could be installed adjacent to the Affected Party's Land to its south, a smaller diameter monitoring cable (of 3 bundles of 12 fibres) could continue from that bay to the Convertor Station, and, in due course, an application for planning permission might be made for the development of the Land of the Affected Party to change that cable to 13 bundle fibre cable in due course, and, absent an agreement, the Applicant might approach Winchester City Council in relation to any compulsory purchase order if then envisaged after any (if any) negotiations were unconcluded.

Needs and Benefits, and Function

- 85. The Applicant has submitted a Needs and Benefits Report at [APP-115] and an Addendum to that Report at [REP1-136]. The Affected Party has referred (below) to a theoretical compulsory purchase order by Winchester City Council if they evaluate there to then be a public interest and a compelling case.
- 86. The Needs and Benefits Report [APP-115] is silent on any need or any benefit engendered by the "provision of commercial telecommunications services" and a search for such phrase or "commercial telecommunications" discloses that the Applicant's first (and strongest) case for "need" or "benefit" is exclusively reliant on the Electricity Cables. This evidence reinforces that the "provision of commercial telecommunications services" is not functionally related to, nor essential to the operation of, those Cables nor to the "Proposed Development".
- 87. Analysis of the Reports shows that the Applicant has demonstrated a need for, and a benefit from, the "proposed Development" (i.e. elements (A) to (D) and (A)) as properly understood by the Affected Party and reflected in these Representations to Question ExA. However, contrasting the evidence of that demonstrated need and benefit with the asserted need and benefits of the "commercial telecommunications" reveals that such commercial telecommunications are privately "desired" by the Applicant limited company (understandably in light of a 5% revenue stream), but, for example, those private desires have not presently translated into the objective public interest nor to the national interest nor has the Secretary of State's Section 35 Direction encompassed "commercial telecommunications" as having the national interest behind it in relation to this particular Application or

- at all. For example, whilst there is reference in the Needs and Benefits Report [APP-115] to OfGem, and in Box 3-2 to the "Urgent Need for New Electricity NSIPS", there is no reference to an NPS "need" for "commercial telecommunications".
- 88. Analysis of Chapter 21 of the ES, Heritage and Archaeology [APP-136] discloses that it concerns "energy", with Section 3 concerning the "national need" for electricity and Appendix 1 concerning "Average UK Household savings" in relation to electricity savings per household. See page 32: (Emphasis added)

GB wholesale price projections from Baringa Market scenario from 2024 to 2033, have been used to calculate the potential annual cost saving to residential consumers. These wholesale price projections were produced with and without the addition of AQUIND Interconnector in the economic modelling. These were then compared to calculate AQUIND Interconnector's impact on wholesale prices in GB. This provides the reduction in wholesale prices that AQUIND Interconnector provides. ...

The reduction in wholesale cost is then applied to average customer consumptions⁵². Consumption differs by region, sometimes fairly significantly, so regional consumption figures were used in the calculations. The analysis was done for every year in a 10 year time span from commissioning in 2024, to understand how this differs with projected wholesale prices. This resulted in savings of ~£3.15 per residential consumer per year in the South East region — above an average UK saving of ~£2.88. The average saving in the South West was ~£2.19, and the Southern region as a whole ~£2.17. ...

- ... customers will benefit more from reduced wholesale prices ...
- 89. By contrast, there remains no such particularised evidence of savings to the ordinary public at this time from the desired use of "spare capacity" by the Applicant of the 13 bundles of packing, filler or spacer material.

Section F: The Section 35 Direction and its Lawful Scope

- 90. The Affected Party has made previous representations about the scope of section 35 of the PA 2008 in its Deadline 5 Submissions. In these Deadline 7 Submissions, the focus of the ExA is on the question of whether the desired use of fibre optic <u>material</u> in the Monitoring Cables can be said to "form part of" the NSIP having regard to the Section 35 Direction of the Secretary of State when it is not necessary to be used for the purpose of monitoring the Electricity Cables' function nor for intra-Converter Station communications. In essence, the answer is "no" because the Section 35 Direction cannot be rewritten after the event to encompass development not expressed by Applicant nor the Secretary of State as forming part of the development described before him; and nor could it have been because of the scope of section 35 *itself* and the application description made to the Secretary of State.
- 91. Whereas Parliament has specified types of project that automatically qualify as NSIP "to the extent that" development falls within the scope of section 31 ("or forms part of") and the descriptions of 14 of the PA 2008, it has provided a power to the Secretary of State under section 35 to direct that ""development be treated as development for which development consent is required" "only if a) the development is or forms part of (i) a project ... in the field of energy...". Because sections 31 and 35 use the term "development", and section 32 defines that by reference to the TCPA 1990, sections 31 and 35 interface with the scope of the TCPA 1990 through these provisions. Both section 31 and 35 define the scope of their jurisdictional compass by reference to the terms of their provisions: section 31 ("required ... to the extent that the development forms part of an [NSIP]"); section 35(2) ("may give a direction ... only if ... forms part of a project in the field of energy"). Thus, development not forming part of the NSIP in a section 14 description, or not forming part of a project in the field of energy, would remain development and be require planning permission by operation of section 57(1) of the TCPA 1990. See also the Affected Party's Deadline 5 Submissions.

The Scope of Section 35

92. The touchstone of the legal *scope* of section 35(2)(a)(i) are the stated "field[s]" specified by Parliament and "only if". Like section 14, section 35(2)(a)(i) refers to specified fields and does not expressly refer to "commercial use" nor to "telecommunications" nor to "commercial telecommunications" nor to such a field or even a type of such "development" *per se*. Section 35(2)(a) *also* confines the scope of what may be treated by the Secretary of State as "development requiring development consent" by use of the phrase "only if" in addition to the specified fields. Thus, whilst section 35(1) provides a discretion, the discretion is not unlimited and cannot include anything in any type of field that he may envisage regardless of the stated fields. Furthermore, Parliament has expressly recognised the *potential* for "commercial" type of project in the terms of section 35(2)(a)(ii). The *absence* of the term "commercial"

in section 35(2)(a)(i) (and its presence in section 35(2)(a)(ii)) recognises that the scope of section 35(2)(a)(i) lawfully cannot encompass a "commercial" project nor "development" "if the development is or forms part of (ii) a business or commercial project". If it were otherwise, Parliament could have included "commercial" or "commercial telecommunications" within the terms of section 35(2)(a)(i). But it did not. Instead, Parliament expressly differentiated between the "commercial" and the "fields". Thus, to be able to form part of a "commercial project", development would need to be in some way "commercial". Thereby, development that is in some way "commercial" falls to be excluded from the scope of section 35(2)(a)(i) because such development is already recognised as ("only") able to fall within the scope of section 35(a)(ii) ("is or forms part of (ii) a business or commercial project"). Here, since dDCO Article 2(1) defines "marine HVDC cables" to mean "together with ... (i) fibre optic data transmission cables ... and for commercial telecommunications uses ...", the presence of "for" and "commercial" excludes the development described as "commercial telecommunications" from the scope of section 35(2)(a)(i) on its own terms. By contrast, the dDCO definition under (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" properly "forms part of" the project in the field of energy.

93. Lastly in respect of the scope of section 35 and "forms part of", as the Tidal Lagoon DCO ExA properly recognised, there is also no stated concept of "primary" or "principal" development under the PA 2008. There are only its terms. Sections 14, 31 and 35 do not state "primary development", "principal development".

SECTION G - The Section 35 Direction Made

- 94. The Secretary of State's Section 35 Direction (30th July 2018) was made under section 35 of the PA 2008.
- 95. The Section 35 Direction resulted from the exercise of the section 35(1) and (2) discretions premised on the application material submitted by the Applicant and no other material.
- 96. Once so made, no person can rewrite the terms of that Direction.
- 97. The "development" described in that Direction is not the same as the "development" described by the Applicant in its Application (and related ES documents) and the "proposed Development" or the "Proposed Development" that was before the Secretary of State is not the same as the "proposed Development" or the "Proposed Development" in the Application Form (and related ES documents). In particular, the Applicant has used the phrase "Proposed Development" in the Application Form (and related ES, Chapter 3, Description of Proposed Development) to equate with "proposed Development" (lower case "p"), and has also used "Proposed Development" (upper case "P") to equate with the "proposed Development". i.e. the Applicant has used the phrase used by it and the Secretary of State interchangeably with its subsequent Application (and related ES documents) notwithstanding the difference between the Section 35 Direction development and the Application development. The Affected Party has made Representations about this in its Deadline 5 Representations and amplifies them here.
- 98. The Application Form, paragraphs 4 and 5, refer to the submission of a request for a direction for the "Proposed Development" to be treated as development requiring development consent. The phrase "Proposed Development" (upper case "P") derives from paragraph 5 of the Form ("Non-technical description of the Proposed Development"). Paragraph 4 properly states that the Secretary of State directed that "the proposed Development..." be treated as development requiring consent. However, paragraph 5 then goes on to describe in a non-technical explanation "the Proposed Development" and by reference to ES, Chapter 3 and also describes: "The components of the Project located within the UK and the UK Marine Area for which development consent is sought are referred to as the Proposed Development" (upper case "P"). The phrase (as so defined) "Proposed Development" is also in paragraph 4. A reader may be forgiven for inferring that the Section 35 Direction related to the same development referred to in each of paragraphs 4 and 5, and, in particular, that the components "of the Project" were the same and were so directed by the Secretary of State to be treated as "development for which development consent is required". But the components are not the same.
- 99. The Section 35 Direction is at **[APP-111]** submitted with the Application Form in isolation. It is a public document to which the usual rules of its appreciation apply. In his Direction, the Secretary of State expressly refers to the "proposed Development" (lower case "p") and by way of *his own* definition of the

scope of that development that he describes as "the proposed UK *elements of* the AQUIND Interconnector". The Secretary of State then uses his own definition in the body of his Direction, for example, under the first two bullet points, and in the operative part ("The Secretary of State directs that the proposed Development ..." (lower case "p").

- 100. The Secretary of State's reasons for his Direction include that: "the proposed Development [(lower case "p", and as he has defined it)] by itself is nationally significant, for the reasons set out in the Annex Below".
- 101. The Annex provides "Reasons for the Decision to Issue the Direction" and these too use his definition "the proposed Development [(lower case "p").
- 102. The Direction reasons expressly refers to related or connected documents in his phrase "as set out in the Direction request" and the Annex Reasons also refer to his definition: "the proposed Development [(lower case "p")]". Thereby, whilst not referred to in its operative part, those documents lawfully fall to be treated as interpretative aids to the scope of "the proposed Direction" (lower case "p") because the operative part relies on the definition used by the Secretary of State. See **Appendix B**. Conversely, without more, there is no evidence as to *what* was "Proposed" or what "the proposed UK elements" comprised. That would result, without more, in the Direction containing no evidence at all of the content of the "proposed Development".
- 103. As so related, the Request for the Direction was submitted after the Application was made and did not accompany the S35 Direction [APP-111]. Rather, it followed later and is in [AS-040] "Statement in support of an application for a Direction pursuant to Section 35 of the Planning Act 2008" ("the Section 35 Statement"); and the accompanying letter.
- 104. The Section 35 Statement terms are set out in **Appendix B** attached hereto for convenience. Paragraph 1.2 confirmed that the purpose of the Statement "is to provide the Secretary of State with <u>all</u> necessary information to satisfy him that the relevant legal requirements for a direction pursuant to Section 35 of the Act are met by the Development [(capital "D")], to <u>allow</u> issue of the direction". The Applicant defined "Development" in paragraph 1.1 to mean: (Emphasis added)
 - $\underline{the\ elements\ of}$ AQUIND Interconnector within England and the waters adjacent to England up to seaward limits of the territorial sea \dots
- 105. Section 2 of the Statement set out the Legal Requirements for Issue of a Direction under Section 35 and summarised the terms of section 35(2)(a)(i) in paragraph 2.2.1, including, in particular, citing the "fields" referred to in that section.

- 106. Section 3 then set out "Information in relation to Aquind and Aquind Interconnector, Project Information". The Applicant itself described the Development "elements" to which it had referred in paragraph 1.1 in more detail in paragraph 3.5. Paragraph 3.5 stated (and states) this: (Emphasis added)
 - 3.5 AQUIND Interconnector <u>is comprised of three principal elements</u>, being the onshore elements in GB, the offshore elements and the onshore elements in France. <u>The three elements comprise the following:</u>
 - 3.5.1 UK onshore elements:
 - (A) works at the existing National Grid Lovedean substation in Hampshire where AQUIND Interconnector will connect to the existing GB grid;
 - (B) underground alternating current (AC) cables, connecting Lovedean substation to the proposed nearby converter station;
 - (C) the construction of a converter station comprising a mix of buildings and outdoor electrical equipment. The building roofline will vary in height but will approximately be 22m at its peak and may also include lightning masts; and
 - (D) two pairs of underground high voltage direct current (DC) cables together with smaller diameter fibre optic cables for data transmission from the proposed landfall site in Eastney (near Portsmouth) to the converter station at Lovedean, approximately 20km in length. The intention is to locate the cables within existing highway or road verges where practicable. Signal enhancing and management equipment may also be required along the land cable route in connection with the fibre optic cables.
- 107. Paragraph 3.5.2 described the "Offshore elements": (Emphasis added)
 - (A) four submarine cables between England and France, which can be bundled in pairs, and small diameter fibre optic cables <u>for</u> data transmission. The offshore cable route can be divided into the following sections:
 - (1) approximately 47km within the UK territorial limit, i.e. 12 nautical miles from the mean high water mark;
 - (2) approximately 53km from the UK territorial limit to the boundary of the Exclusive Economic Zone (EEZ);
 - (3) approximately 58km from the boundary of the EEZ to the French territorial limit; and
 - (4) approximately 29km within the French territorial limit, i.e. 12 nautical miles from the mean high water mark.
- 108. The description in the Request Statement is clear and unambiguous on its face:
 - a) The development "comprises" "elements";
 - b) There are three "principal elements" (and they relate to geographical areas);
 - c) Of the geographical areas, within the OK Onshore "elements" are elements "(A)" to (D)", and within the Offshore elements is element "(A)";
 - d) The phrases "for commercial" or "for commercial telecommunications" or "for telecommunications" or "for the provision of commercial telecommunications services" is absent from the content of the stated elements (A) to (D) and (A) as above. There can be no need to imply such phrases to the stated elements because: those phrases appear in paragraph

- 3.12: "for the provision of commercial telecommunications services"; Herbert Smith Freehills has experience in DCO matters and may be reasonably taken to mean what it has stated, and where it has so stated what it has stated, on behalf of the Applicant;
- e) The phrases "together with" and "fibre optic cables for data transmission" appear described by the Applicant in element (D) of the principal elements' UK Onshore element and in (A) of the Offshore element the offshore elements include "small diameter fibre optic cables for data transmission" without reference to any of the phrases in paragraph (d) above and with a reference to "for data transmission". The phrase "for data transmission" is used in element (D) in the context of "together with" "fibre optic cables for data transmission". "Data transmission" (and that phrase as a stated purpose "for") does not appear in paragraph 3.12 of the Statement. Again, HSF on behalf of the Applicant may be taken to have stated the correct purpose of the fibre optic cables and its scope in elements (D) and (A) above. The term "for" confines the scope of the use of fibres to "data transmission" and precludes their wider use "for" "commercial telecommunications";
- f) UK Onshore geographical element, element (D) describes "signal enhancing and management equipment" as may be being required "along the land cable route in connection with the fibre optic cables". As above, the phrase "fibre optic cables" only appears in (D) and only in the stated phrase "small diameter fibre optic cables <u>for</u> data transmission" and not "<u>for</u> the provision of commercial telecommunications services".
- g) The third geographical element (French Onshore) mirrors that of UK Onshore element (D) and includes: "together with" and "fibre optic cables for data transmission" and does not state any part of that element as being "for the provision of commercial telecommunications services".
- 109. The Statement then submits under a Heading: "The Development and how this meets the legal requirements for a Direction", at paragraph 3.8, that "the Development" (as defined by the Applicant in its paragraph 1.1 to be "the elements of AQUIND Interconnector within England and the waters adjacent to England up to seaward limits of the territorial sea ... ") "being a part of an electricity interconnector, forms part of a proposed project within the field of energy... being the Development".
- 110. Paragraphs 3.5 and 3.6 cannot have been clearer as to the *content* of the Development (as defined by the Applicant), and what it did and did not encompass.
- 111. By contrast, the only place where "spare fibre optic cable capacity for the provision of commercial telecommunications services" appears, and for the first time, is in paragraph 3.12, both *after* the Applicant's submission as to satisfaction of section 35(2)(a), and after the Applicant's representations on the "elements" of the Development (defined in its paragraph 1.1) have been concluded. Only then, does

the Applicant introduce a different part of the PA 2008 (section 115), with its test of "associated" and not "forms part of" and then itself categorises the "spare fibre optic cable capacity for the provision of commercial telecommunications services" as both "development" and also as "associated" development (in contradistinction to it being advanced as qualifying as "forms part of" the Development).

- 112. So far as paragraph 3.5.1(D) refers to "signal enhancing and management equipment". The Affected Party made submissions above about the scope of "development" under the PA 2008 excluding "plant or machinery" in a building or structure. Such equipment is, therefore, understood to mean equipment not within a building or structure. If it is taken, in some way, to mean also the structures around such equipment so as to qualify as "development" or development forming "part of" the development requiring consent, then the description in (D) expressly refers to such equipment being "in connection with the fibre optic cables", and those are referred to earlier in the same element (D) description as being "fibre optic cables" "for data transmission" (and without any express reference to "spare fibre optic cable capacity for the provision of commercial telecommunications services"). On its face, therefore, the equipment referred to can only sensibly refer to what became more particularly described as the relevant equipment within the "Optical Regeneration Station" ("ORS"). Further, Distributed Temperature Sensing ("DTS") hardware "equipment" for visual inspection of the data transmission outputs is more particularly described in paragraph 1.1.3.12 of [APP-359], "ES, Volume 3, Appendix 3.5 Additional Supporting Information for Onshore Works" so enabling "management". Conversely, the Telecommunications Building(s) equipment could not fall within the last sentence of element (D) because that Building is concerned with "the provision of commercial telecommunications services" and encompasses equipment relating to that purpose.
- 113. Lastly, paragraph 4.2.5 of the Section 35 Statement also addressed (so called) "ancillary services to *the* nation grid" and referred to "black start" capability and frequency response without express mention of "provision of commercial telecommunications services". Further, "the national grid" concerns the provision of electricity and not "commercial telecommunications services".
- 114. That the Section 35 Statement concerned the "elements" of the Development is reinforced further by paragraph 5.2 that adverts to the need for CPO powers "to facilitate the Development" (i.e. as defined by the Applicant in paragraph 1.1 to be the "elements", and as particularly described in paragraph 3.5), together with reliance on "their Electricity Interconnector Licence". See also paragraphs 5.5-5.8.
- 115. Thus, returning to the Section 35 Direction, it is evident that it directs exclusively that "the proposed Development", being "the proposed UK *elements of* the AQUIND Interconnector ("the proposed Development") as set out in the Direction request", referred to by the Secretary of State in paragraph 1

of his Direction document, is to be treated as "development requiring development consent" pursuant to section 35(1). His decision having been taken, it cannot be rewritten to change the content of "the proposed Development" (lower case "p") now deletion or change of the term "elements of" in paragraph 1 of that Direction document to either not expressly appear or to in some way be wider than the "elements" stated by the Applicant in paragraphs 1.1 and 3.5 of its Section 35 Statement.

116. With respect to the ExA, it is not entitled to unilaterally rewrite the Section 35 Direction to state and to mean what the Applicant (or they) would like it to mean.

SECTION H - The "Proposed Development" (upper case "P") and its "elements"

- 117. Following issue of the Section 35 Direction, the Applicant then changed the description of the "proposed Development" described in its Request for the Direction to a description of the "Proposed Development" but changed the content of the "elements" in paragraph 3.5(A)-(D) and (A) to seek to widen them to include commercial telecommunications provisions where there was none within the lawful scope of the "elements" described in the Request made for the "elements" falling to be directed by the Secretary of State. This is surprising. Similarly, most recently, the Applicant has evinced an intention to add the further element of a National Grid substation element to its Application "elements" notwithstanding that that too was not before the Secretary of State in the Request made in Summer 2018.
- 118. In respect of the change from "proposed Development" to "Proposed Development", the Application Form describes the "Proposed Development" and by reference to the [APP-118], "ES, Volume 1, Chapter 3, Description of the Proposed Development".
- 119. In essence, in steps, the Applicant re-described or incorrectly described the content of the Section 35 Direction definition of the "proposed Development" so as to widen it to include as a separate "element" itself now encompassing fibre optic cable as *both* data transmission and also telecommunications, describing that "element" as "FOC Infrastructure".
- 120. However, regardless of its re-describing its own Application "elements" and their iteratively evolving content, it too remains not entitled to rewrite the terms of the Section 35 Direction so as to encompass as an "element" "spare capacity for the provision of commercial telecommunications services". The "proposed Development" "elements" of the particular energy project that were subject to the Section 35 Direction remain *all* that has been directed to be *treated* as an NSIP and all that can be so treated. This is notwithstanding their re-description by the Applicant or being supplemented by additional "elements" not requested to have been elements of the proposals, or "elements" re-described by reference to the "Project" (instead of by reference to the "proposed Development"). Nor can a new "element", "element (F)" be simply written in to the Request for the Direction "elements (A) to (D) and (A)" that were in law and fact all that were encompassed by, and remain all that can be, and are encompassed by, the Section 35 Direction.
- 121. In particular, the Applicant has made various footnote links to the Section 35 Direction" (but <u>not</u> to the important and related Section 35 Statement) that in isolation result in making it appear to the reader that the "elements" cited by the Applicant mirror those of in paragraph 3.5 (A) to (D) and (A) of the Section 35 Direction, and, in turn, *appear* to thereby have been *directed* to be treated as "development requiring development consent". But the extended "elements" cannot and are not within the scope of

the Section 35 Direction. For example, the extent of new "element (E)", being "telecommunications infrastructure at the Converter Station known as the 'FOC Infrastructure'" "for the provision of commercial telecommunications services".

- 122. No amount of dispersal of documents and their re-descriptions of the particularised elements in the Section 35 Direction can result in law or fact to unilaterally rewrite the terms of the Secretary of State's Section 35 Direction as it was applied for by the Applicant and granted by him in July 2018.
- 123. For example, in [APP-022], Statement of Reasons, the Applicant says this seeking to justify CPO of the Affected Party's land in the public interest: (Emphasis added)
 - 1.1.3 AQUIND Interconnector (the 'Project') is a new 2,000 MW subsea and underground High Voltage Direct Current ('HVDC') bi-directional electric power transmission link between the South Coast of England and Normandy in France...

1.2 The Proposed Development

- 1.2.1 The Application seeks development consent for <u>those elements</u> of the <u>Project</u> located in the UK and the UK Marine Area (<u>the 'Proposed Development'</u>). The <u>Proposed Development includes</u>:
- (A) HVDC marine cables from the boundary of the UK exclusive economic zone to the UK at Eastney in Portsmouth;
- (B) Jointing of the HVDC marine cables and HVDC onshore cables;
- (C) HVDC onshore cables;
- (D) A Converter Station and associated electrical and telecommunications infrastructure;
- (E) High Voltage Alternating Current ('HVAC') onshore cables and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation; and
- (F) Smaller diameter fibre optic cables to be installed together with the HVDC and HVAC cables and associated infrastructure (together with the telecommunications infrastructure at the Converter Station known as the 'FOC Infrastructure').
- 1.2.2 Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') (Document Reference 6.1) contains a detailed description of the Proposed Development for which development consent is sought by the Applicant.
- 1.2.3 On 19 June 2018 the Applicant submitted a request to the SoS for a direction pursuant to section 35 of the Act that the Proposed Development is to be treated as development for which development consent is required.
- 1.2.4 The SoS, being satisfied that the relevant legal requirements were met and of the view that the <u>Proposed Development</u> is by itself nationally significant, issued a direction on 30 July 2018 directing that the Proposed Development, together with any development associated with it, is to be treated as development for which development consent is required.
- 124. In fact, and left uncorrected, paragraphs 1.2.3 and 1.2.4 are incorrect and potentially misleading. The Applicant did <u>not:</u>

"submit... a request to the SoS for a direction pursuant to section 35 of the Act that the Proposed Development is to be treated as development for which development consent is required."

The Secretary of State did <u>not</u>:

Issue... a direction on 30 July 2018 directing that <u>the Proposed Development</u>, together with any development associated with it, is to be treated as development for which development consent is required.

See the terms of the Section 35 Statement by the Applicant and Section 35 Direction.

The terms of the "proposed Development" (as then previously defined by the same Applicant entity, advised by the same advisors as today, and, in turn, by the Secretary of State to comprise "elements" of the Aquind Interconnector), expressly encompassed (as defined by the Applicant in paragraph 3.5), "elements" "(A) to (D)" and "(D)" of which no elements includes express reference to (so-called) element now described as: "telecommunications infrastructure at the Converter Station known as the 'FOC Infrastructure'" and expressly described "telecommunications" development in a completely different part of the Request and after it had been made in respect of the "elements" of the "proposed Development" (lower case "p").

- 125. That incorrect and rewritten scope of the Section 35 Direction is re-asserted at paragraph 4.1.3 (elements (A) to (F)).
- 126. The same mismatch between the "proposed Development" whose compass was defined by the Section 35 Direction and the "Proposed Development" described by the Applicant appears in all of the Application documents. In particular, cross-referring from the CPO Statement of Reasons, [APP-118], Environmental Statement Volume 1 Chapter 3 Description of the Proposed Development:
 - 3.1.1.1 <u>This chapter provides a description of the Proposed Development</u> for the purposes of undertaking an environmental impact assessment ('EIA') in relation to it, the findings of which are set out in chapters 6-30 of Volume 1 to this Environmental Statement ('ES') (document references 6.1.3-6.1.30).
 - 3.1.1.2 The Proposed Development is shown on the Works Plans (Document Reference 2.4) that accompany the application for development consent for the Proposed Development (the 'Application') and described in Schedule 1 to the draft Development Consent Order (the 'Order') (Document Reference 3.1)...
 - 3.2.1.1 The Applicant is proposing to construct and operate an electricity interconnector between France and the UK known as AQUIND Interconnector ('the Project').
 - 3.2.1.2 The Project comprises a new marine and onshore HVDC cable transmission link between Normandy in France and Eastney, Hampshire, Converter Stations in both England and France and infrastructure necessary to facilitate the import and export of electricity between the High Voltage Alternating Current ('HVAC') electricity transmission networks of both countries as well as Fibre Optic Cables ('FOC') and associated infrastructure necessary for their operation.
 - 3.2.1.3 The Project will be approximately 238 km in length and comprise the following Marine and Onshore components in France and UK: ☐ HVDC Cables (Marine); ☐ HVDC Cables (Onshore); ☐ Converter Stations; ☐ High Voltage Alternating Current ('HVAC') Cables (Onshore) ☐ Fibre Optic Cables (Marine and Onshore); and ☐ Associated Infrastructure...
 - 3.3.1.1 The Proposed Development comprises the elements of the Project in the UK and the UK Marine Area for which development consent is sought by the Application. The Proposed Development is broadly comprised of the Marine Components and the Onshore Components...
- 127. Further, in [APP-115], Needs and Benefits Report, the Applicant said this: (Emphasis added)

Once operational, AQUIND Interconnector ('the Project') would add to the existing capacity by providing an additional 2,000 MW3 of interconnection between France and Great Britain...

Whilst Interconnectors are not directly listed among the types of energy infrastructure that are assigned the status of Nationally Significant Infrastructure Project ('NSIP') under the Planning Act 2008, the UK Government has directed⁸ that the Overarching National Policy Statement for Energy (NPS EN-1) should apply to the Project. As such, the Project "is to be treated as development for which development consent is required"...

3.2.2.1 AQUIND Interconnector does not currently fall within the existing definition of an NSIP, but the Overarching National Policy Statement for Energy (NPS EN-1) has effect.28 The Secretary of State ('SoS') has directed that:²⁹

- <u>the Proposed Development</u> "is to be treated as a proposed application for which development consent is required"; and
- "the Overarching National Policy Statement for Energy (EN-1) has effect in relation to an application for development consent under this Direction in a manner equivalent to its application to development consent for the construction and extension of a generating station within section 14(a) of the Act of a similar capacity as the proposed project so far as the impacts described in EN-1 are relevant to the proposed Development".
- 128. The same deliberate mismatch between the "proposed Development" whose compass was defined by the Section 35 Direction and the "Proposed Development" described by the Applicant appears in [APP-108] "Planning Statement" which includes this:

The <u>Proposed Development comprises</u> the following elements:

- High Voltage Direct Current ('HVDC') Marine Cables from the boundary of the UK Exclusive Economic Zone ('EEZ') to the UK at Eastney in Portsmouth;
- Jointing of the HVDC Marine Cables and HVDC Onshore Cables at the Landfall;
- HVDC Onshore Cables;
- Optical Regeneration Station(s) ('ORS'). These are structural unit(s) housing telecommunication equipment for the Proposed Development and responsible for optical signal amplification purposes. They will be located at the Landfall Eastney within a triangular car park;
- A Converter Station;
- High Voltage Alternating Current ('HVAC') Onshore Cables and associated infrastructure connecting the Converter Station to the UK Grid at the existing National Grid substation at Lovedean; and
- Smaller diameter Fibre Optic Cables ('FOC') installed together with the HVDC and HVAC Cables and associated infrastructure ('FOC Infrastructure')....

On 19 June 2018, the Applicant submitted a request to the Secretary of State ('SoS') for a direction pursuant to Section 35 of the Planning Act 2008 (the 'PA 2008') that the Proposed Development is to be treated as development for which development consent is required.

The SoS, being satisfied that the relevant legal requirements were met and of the view that the Proposed Development is by itself nationally significant, issued a direction on 30 July 2018 directing that the Proposed Development, together with any development associated with it, is to be treated as development for which development consent is required....

1.3.1.5 A description of these elements is provided below...

1.3.6 FIBRE OPTIC DATA TRANSMISSION CABLES AND ASSOCIATED INFRASTRUCTURE

- 1.3.6.1 The FOC Infrastructure consists of two smaller diameter FOC which will be installed with each of the HVDC and HVAC Cable Circuit for data transmission. Up to two ORS will be located within the vicinity of the Landfall and up to two Telecommunications Buildings will be located within the Converter Station Area.
- 1.3.6.2 FOCs are required to control and monitor the HVDC and HVAC Cable Circuits using Distributed Temperature Sensing ('DTS') technology. It is <u>also</u> the intention that, <u>as there is spare FOC capacity,</u> that this capacity may be used <u>for commercial telecommunications purposes</u>. The industry standard for the amount of fibres within a single FOC is currently up to 192, <u>however this may increase as technology develops</u>.

Purpose of this Document ...

- 1.4.1.2 On 19 June 2018, the Applicant submitted a request to the SoS for a direction pursuant to Section 35 of the PA 2008 <u>that the Proposed Development</u> is to be treated as development for which development consent is required.
- 1.4.1.3 The SoS, being satisfied that the relevant legal requirements were met and of the view that the Proposed Development is by itself nationally significant, issued a direction on 30 July 2018 directing that the Proposed Development, together with any development associated with it, is to be treated as development for which development consent is required...
- 1.4.1.6 This Planning Statement reflects the direction that EN-1 is to have effect in relation to the Application....
- 3.2.1.3 Under Section 35(1) of the PA 2008, "[t]he Secretary of State may give a direction for development to be treated as development for which development consent is required". This is subject to the provisions of Sections 35 and 35ZA.
- 3.2.1.4 On 19 June 2018, the Applicant submitted a request for a direction pursuant to Section 35 to the SoS for BEIS for the Proposed Development to be treated as development for which development consent is required.
- 3.2.1.5 On 30 July 2018, the SoS directed that "the proposed Development, together with any development associated with it, is to be treated as development for which development consent is required"

129. As referred to above, in fact:

- a) the Applicant did not submit a request for a direction in respect of the "Proposed Development" but in respect of the "proposed Development";
- b) the Secretary of State considered the request and made his Section 35 Direction in respect of the "proposed Development" (as defined by reference to specified elements (A) to (D) and (A) of paragraph 3.5.
- 130. The Planning Statement goes on, incorrectly, to assert:
 - 3.2.1.7 In making his decision to issue the direction, the SoS confirmed his view that $\underline{\text{the}}$ Proposed Development [(upper case "P")] is of national significance:

"The two giga-watt capacity of the proposed Development [(lower case "p")] is similar in terms of electrical capacity to a generating station that would qualify to be considered under the Planning Act 2008 process as nationally significant.

By progressing the proposed Development [(lower case "p")] through the Planning Act 2008 development consent process, it would provide the certainty of a single, unified consenting process and fixed timescales...

- 3.2.1.8 A copy of the direction given by the SoS is appended to this Planning Statement at Appendix 3 (document reference 5.4.3).
- 131. Whilst the Section 35 Direction was provided in Appendix 3, the Section 35 Statement was not and so the scope of "proposed Development" could not be readily demonstrated. Without the Section 35 Statement, it can appear in isolation that the Section 35 Direction encompassed the "Proposed Development".
- 132. In fact, the Section 35 Direction only encompasses the "elements" (A) to (D) and (D) in paragraph 3.5 of the Section 35 Statement. Only those elements fall to be lawfully treated as an NSIP. No other elements can be so treated in law or fact.
- 133. The Planning Statement continues to assert the unilaterally extended scope of the "elements":
 - 3.2.1.9 As the direction confirms that EN-1 is to have effect "in a manner equivalent to its application to development consent for the construction and extension of a generating station within section 14(a) of the Act" in so far as the impacts are relevant to the Proposed Development, the SoS will be required to consider the Application under Section 104 of the PA 2008 (decisions in cases where a NPS has effect).
- 134. On its face and without more, this appears to assert that EN-1 "have effect" for "the Proposed Development" and, in consequence, section 104 of the PA 2008 has effect for the whole of that "Proposed Development". However, this presupposes that the "Proposed Development" was and is within the scope of the "proposed Development" directed by the Secretary of State to be treated as development for which development consent is required.
- 135. The Affected Party accepts that the "proposed Development", elements (A)-(D) and (A) of paragraph 3.5 of the Section 35 Statement were and remain within the scope of the Section 35 Direction. But no more.
- 136. The Applicant's recent admissions in Appendix D hereto appear to confirm the position as to what properly can fall within the scope of the Section 35 Direction, being "essential", and those 13 bundles that cannot be authorised to have a discrete function "for commercial telecommunications".
- 137. The Affected Party does not accept that, in law, the new element "(F)" can be (with a use for commercial telecommunications), or so is, within the scope of the Section 35 Direction, lawfully read with its connected or related document entitled the "Statement in relation to Aquind Interconnector requesting a direction pursuant to Section 35 of the Planning Act 2008" at [AS-040].

- 138. In fact, *because* the scope of the "Proposed Development" is wider than the "proposed Development", EN-1 cannot have effect to all of the Applicant's new element (E) (being the use of "spare fibre optic cable capacity for the provision of commercial telecommunications services"), section 104 cannot apply to that "development". The position can be tested: if (theoretically and contrary to the Affected Party's case) that "development" theoretically qualified in some way as within the scope of the PA 2008, it is not covered by the Section 35 Direction and so would instead fall to be treated under section 105.
- 139. Recognising that it had not originally requested inclusion of the 13 bundles as an element in its original Request for the Section 35 Direction and that the scope of that Direction excludes that inclusion, it has sought to categorise the 13 bundles instead as "associated development". The Planning Statement mis-addressed "associated development" in section 3.3:
 - 3.3.1.4 The Applicant's intention to seek development consent to use the spare FOC capacity for the provision of commercial telecommunications services was outlined in the request to the SoS for the direction pursuant to Section 35 of the PA 2008 that the Proposed Development be treated as development for which development consent is required.
- Development" (upper case "P") falls within the scope of the "proposed Development" (lower case "P"), the assertion remains incorrect. The scope of the "Proposed Development" in the Section 35 Statement requesting the Direction did not include a request that "spare FOC capacity for the provision of commercial telecommunications services" comprised an "element" within paragraph 3.5, elements (A) to (D) and (A). Left as written, and in isolation, the Applicant seeks here to unilaterally rewrite the express terms of the Section 35 Direction (and its own definition of the "proposed Development" (lower case "p")) so as to extend the compass of the "proposed Development" in the Direction to include wider development not within that logically prior compass.
- 141. (In the context of the Applicant's assertion in paragraph 3.3.1.5, the assertion remains also incorrect).
- 142. In the Planning Statement, the Applicant further asserted in paragraph 3.3.1.5 that the Secretary of State's use of the term "any" in the phrase "any associated development" in some way writes the Applicant a 'blank cheque' to include such development ("any") as the Applicant may consider subjectively consider satisfies the scope of "associated development" and, in turn, to then present that subsequently considered development as having been previously directed by the Section 35 Direction to be treated as "development requiring development consent". Such a statement only has to be written down to appreciate its absurdity. The inclusion of the term "any" by the Secretary of State in his Direction merely leaves open the evaluative gateway for the ExA to itself test in law and fact the then

expressed intention (but no more) by the Applicant to seek development consent "for commercial telecommunications".

CONCLUSIONS

143. As in the Lagoon Bay DCO, the use for commercial telecommunications of 13 bundles of fibre optic packing filler spacers inside of a copper tube wrapped in armoured cable material cannot qualify within the scope of sections 31 or 35(2)(a) of the PA 2008 as being the development for which the Section 35 Direction directed be treated as an NSIP or form a functioning or useful part of the energy project here sought to be consented. As in the Bay DCO where an amenity and educational "offshore building" was desirable but of a use different to and outside of the scope of the energy field, so too the potential sue, however desirable, cannot fall within the scope of either sections 35(2)(a) nor 31.

APPENDIX A

ExA Further Written Questions, Question DCO2.5.1

144. On the 7th January 2021, the ExA issued Further Questions that include Question DCO2.5.1:

In relation to the proposed commercial use of the surplus capacity of the fibre optic cable, the Examining Authority notes that there are a number of opinions as to whether any associated works can be authorised by any DCO, and also which works would constitute the development and which would be Associated Development.

The Applicant, the local planning authorities, and Mr Geoffrey and Mr Peter Carpenter are requested to comment on the following interpretation.

For any project that was not the subject of a s35 direction, the development requiring consent would be listed in s14 of the Planning Act 2008 (PA2008) and <u>described</u> in one or more of the relevant subsequent sections (for example, s16 for an electric line), together with any Associated Development that falls within the definition set out in s115(2) of PA2008.

This project does not fall within one of the s14 categories, but instead it is to be treated as a Nationally Significant Infrastructure Project by virtue of the Secretary of State's s35 Direction. Therefore, in this case, it is the s35 Direction that defines the Nationally Significant Infrastructure Project, the development requiring consent.

Looking at the Direction, the wording is that 'THE SECRETARY OF STATE DIRECTS that the proposed Development, together with any development associated with it, is to be treated as development for which development consent is required.' (Our emphasis.)

The 'proposed development' is defined as 'the proposed UK elements of the AQUIND Interconnector ("the proposed Development"), as set out in the Direction request'.

The Direction request is this document. Therefore, the project would appear to consist of the elements <u>described</u> in that document, including the offshore data cables (paragraph 3.5.2(A)), the onshore data cables (paragraph 3.5.1(D)) and the 'construction of a converter station comprising a mix of buildings and outdoor electrical equipment' (para 3.5.1(C)). The project description also states that 'Signal enhancing and management equipment may also be required along the land cable route in connection with <u>the fibre optic cables'</u> (3.5.1(D)).

Paragraph 3.12 refers to the use of 'the <u>spare</u> fibre optic cable capacity for the provision of commercial telecommunications services' as Associated Development. However, the s35 direction states that 'any development associated with' the Proposed Development is to be treated as development for which consent is required. Therefore, the Examining Authority is minded to consider that <u>this use</u>, although <u>described</u> as 'Associated Development', would actually be <u>part</u> of the proposed project, and not Associated Development for the purposes of s115 of PA2008.

The Examining Authority also notes the effect of s157(2) of PA 2008, which means that consent is taken to 'authorise the use of the building for the purpose <u>for</u> which it <u>is</u> designed' where <u>no</u> purpose is specified.

APPENDIX B

SECRETARY OF STATE'S DIRECTION UNDER SECTION 35 & THE REQUEST STATEMENT FOR THE DIRECTION

DIRECTION BY THE SECRETARY OF STATE UNDER SECTION 35 OF THE PLANNING ACT 2008 RELATING TO THE AQUIND INTERCONNECTOR

By letter to the Secretary of State received on 19 June 2018, AQUIND Limited formally requested that the Secretary of State exercise the power vested in him under section 35 of the Planning Act 2008 ("the Act") to direct that the proposed UK elements of the AQUIND Interconnector ("the proposed Development"), as set out in the Direction request, be treated as development for which development consent under the Act is required.

The Secretary of State is satisfied that:

- The proposed Development is in the field of energy and will be wholly within England, waters adjacent to England out to the seaward limits of the territorial sea and the Renewable Energy Zone when completed;
- The proposed Development does not currently fall within the existing definition of a "nationally significant infrastructure project" and therefore it is appropriate to consider use of the power in section 35 of the Act; and
- AQUIND Limited's request constitutes a "qualifying request" in accordance with section 35ZA(11) of the Act.

Having considered the details of AQUIND Limited's proposals as set out in their letter of 19 June 2018, the Secretary of State decided to request further justification for the inclusion of certain requests that are outside of the usual direction process. This information was requested by the Secretary of State on 28 June 2018. A response was received on 3 July 2018, re-starting the statutory deadline of 28 days from the receipt of this further information.

The Secretary of State is of the view that the proposed Development by itself is nationally significant, for the reasons set out in the Annex below.

The Secretary of State has taken the decision within the conditions as required by sections 35A(2), (4) and (5) of the Act, and issues this Direction accordingly under sections 35(1) and 35ZA of the Act. The Secretary of State has decided that the additional requests sought in the letter for the section 35 Direction should not be included in this Direction as the Secretary of State considers that insufficient reasons were given for the Secretary of State to exercise the discretion in section 35ZA(5) in the manner requested.

The Secretary of State has decided to exercise the discretion in section 35ZA(5) to direct that the Overarching National Policy for Energy (EN-1) should apply to the application as it would to a generating station of a similar generating capacity as the capacity of the interconnector. The Secretary of State considers that doing so would assist in ensuring that the application was treated in a manner consistent with that which governs other applications for Nationally Significant Energy Projects considered under the Planning Act 2008.

THE SECRETARY OF STATE DIRECTS that the proposed Development, together with any development associated with it, is to be treated as development for which development consent is required.

The Secretary of State further directs in accordance with sections 35ZA(3)(b) and (5) of the Act that:

- An application for a consent or authorisation mentioned in section 33(1) or (2) of the Act for development identified in, or similar to that described in, the Request to the Secretary of State for Business, Energy and Industrial Strategy for a Direction under Section 35 of the Planning Act 2008 made by AQUIND Limited on 19 June 2018 is to be treated as a proposed application for which development consent is required; and
- That the Overarching National Policy Statement for Energy (EN-1) has effect in relation to an application for development consent under this Direction in a manner equivalent to its application to development consent for the construction and extension of a generating station within section 14(a) of the Act of a similar capacity as the proposed project so far as the impacts described in EN-1 are relevant to the proposed Development.

This Direction is given without prejudice to the Secretary of State's consideration of any application for development consent which is made in relation to the proposed Development.

Signed by

Gareth Leigh
Head of Energy Infrastructure Planning
For and on behalf of the Secretary of State for Business, Energy and Industrial
Strategy

30 July 2018

ANNEX

REASONS FOR THE DECISION TO ISSUE THE DIRECTION

The Secretary of State is of the opinion that the proposed Development, known as the AQUIND Interconnector, is of national significance having taken into account in particular that:

- The two giga-watt capacity of the proposed Development is similar in terms of electrical capacity to a generating station that would qualify to be considered under the Planning Act 2008 process as nationally significant.
- By progressing the proposed Development through the Planning Act 2008 development consent process, it would provide the certainty of a single, unified consenting process and fixed timescales.
- It will reduce the need to apply for separate consents from the Marine Management Organisation and local planning authorities.



Statement in relation to AQUIND Interconnector requesting a direction pursuant to Section 35 of the Planning Act 2008

Herbert Smith Freehills LLP

1. INTRODUCTION

- 1.1 This statement is produced by Herbert Smith Freehiils LLP on behalf of AQUIND Limited with the registered office at OGN House, Hadrian Way, Wallsend, NE28 6HL and registered number 06681477 ("AQUIND") in connection with the application to the Secretary of State for Business, Energy & Industrial Strategy pursuant to Section 35 of the Planning Act 2008 (the "Act") for a direction that the elements of AQUIND Interconnector within England and the waters adjacent to England up to seaward limits of the territorial sea (the "Development") is to be treated as development for which development consent is required.
- 1.2 In that regard, the purpose of this statement is to provide the Secretary of State with all necessary information to satisfy him that the relevant legal requirements for a direction pursuant to Section 35 of the Act are met by the Development, to allow the issue of the direction.
- 1.3 In addition, this statement provides information in relation to the Development which it is considered will assist the Secretary of State to understand more fully the Development and the progress made to date in relation to it.

2. LEGAL REQUIREMENTS FOR THE ISSUE OF A DIRECTION PURSUANT TO SECTION 35 OF THE ACT

- 2.1 Section 35(1) of the Act provides that "the Secretary of State may give a direction for development to be treated as development for which development consent is required".
- 2.2 Section 35(2) of the Act provides that such a direction may only be issued if:
 - 2.2.1 development is or forms part of a project (or proposed project) in the field of energy transport, water, waste water or waste;
 - 2.2.2 will (when completed) be wholly located in England or waters adjacent to England up to the seaward limits of the territorial sea; and
 - 2.2.3 the Secretary of State thinks the project (or proposed project) is of national significance by itself.
- 2.3 Further, Section 35ZA(1) provides that the power in section 35(1) of the Act to give a direction is only exercisable in response to a qualifying request if no application for a consent or authorisation mentioned in Section 33(1) or (2) of the Act has been made in relation to the development to which the request relates.
- 2.4 A qualifying request for the purpose of Section 35ZA(1) means a written request, for a direction under Section 35(1), that:
 - 2.4.1 specifies the development to which it relates; and
 - explains why the conditions in Section 35(2)(a) and (b) (set out at paragraphs 2.2.1 and 2.2.2 above respectively) are met in relation to the Development.
- 2.5 Accordingly, where the above requirements are satisfied the Secretary of State may give the direction requested.

3. INFORMATION IN RELATION TO AQUIND AND AQUIND INTERCONNECTOR Project Information

- 3.1 The proposals for AQUIND Interconnector are being developed and promoted by AQUIND.
- 3.2 AQUIND Interconnector is a proposed High Voltage Direct Current (HVDC) subsea and underground electric power transmission link between the south of England and Normandy in France, with the capacity to transmit up to 2,000 MW of electricity between the France and Great Britain net of transmission losses (**GB**).
- 3.3 It is estimated that AQUIND Interconnector will have sufficient capacity to transmit up to 16,000,000 MWh of electricity annually between GB and France, accounting for

1

- approximately 5% and 3% of their respective total electricity consumption and enough to keep the lights on in up to 4 million British households¹.
- 3.4 A plan showing an indicative location of AQUIND Interconnector is contained at Appendix 1 to this statement.
- 3.5 AQUIND Interconnector is comprised of three principal elements, being the onshore elements in GB, the offshore elements and the onshore elements in France. The three elements comprise the following:
 - 3.5.1 UK onshore elements:
 - (A) works at the existing National Grid Lovedean substation in Hampshire where AQUIND Interconnector will connect to the existing GB grid;
 - (B) underground alternating current (AC) cables, connecting Lovedean substation to the proposed nearby converter station;
 - (C) the construction of a converter station comprising a mix of buildings and outdoor electrical equipment. The building roofline will vary in height but will approximately be 22m at its peak and may also include lightning masts; and
 - (D) two pairs of underground high voltage direct current (DC) cables together with smaller diameter fibre optic cables for data transmission from the proposed landfall site in Eastney (near Portsmouth) to the converter station at Lovedean, approximately 20km in length. The intention is to locate the cables within existing highway or road verges where practicable. Signal enhancing and management equipment may also be required along the land cable route in connection with the fibre optic cables.

3.5.2 Offshore elements:

- (A) four submarine cables between England and France, which can be bundled in pairs, and small diameter fibre optic cables for data transmission. The offshore cable route can be divided into the following sections:
 - (1) approximately 47km within the UK territorial limit, i.e. 12 nautical miles from the mean high water mark;
 - (2) approximately 53km from the UK territorial limit to the boundary of the Exclusive Economic Zone (EEZ);
 - (3) approximately 58km from the boundary of the EEZ to the French territorial limit; and
 - (4) approximately 29km within the French territorial limit, i.e. 12 nautical miles from the mean high water mark.

3.5.3 French onshore elements:

- (A) works to an existing switching station/substation at Barnabos, to be carried out by Reseau de Transport d'Electricite (RTE);
- (B) AC cable planning, installation and connection, undertaken by RTE;
- (C) the construction of a converter station near Barnabos, which will be similar in nature to the UK equivalent; and
- (D) two pairs of underground high voltage direct current cables together with smaller diameter fibre optic cables for data transmission from the landfall

¹ Based on the average household electricity consumption of 4MWh/year, DECC, Energy Consumption in the UK (2015), Chapter 3, p. 7,

http://webarchive.nationalarchives.gov.uk/20160510033717/https://www.gov.uk/government/statistics/energy-consumption-in-the-uk.

on the French shore to the newly built converter station near Barnabos switching station/substation, approximately 35km in length. It is proposed that the landfall site in France will be near Dieppe or Pourville-sur-Mer, with the exact location to be confirmed subject to further environmental and technical assessments. Data cables may require installing signal enhancing and management equipment along the land cable route.

3.6 Further information in relation to the project can be located within the Non-Technical Summary produced in connection with the requirements of the TEN-E Regulations (EU 347/2013) (discussed further at Section 6 below), a copy of which is provided with this statement at Appendix 4 and may also be located at the following web address: https://aquindconsultation.co.uk/wp-content/uploads/sites/13/2018/03/Aquind-Non-Technical-Summary-PUBLICATION-VERSION-FINAL.pdf

The Development and how this meets the legal requirements for a Direction

- 3.7 AQUIND is seeking a direction pursuant to Section 35(1) of the Act in relation to only that part of AQUIND Interconnector located in England and within the waters adjacent to England up to the UK territorial limit, being the Development.
- The Development, being a part of an electricity interconnector, forms part of a proposed project within the field of energy. The Development is not and does not form part of a project of the types listed in Section 14 of the Act, and therefore does not currently fall within the definition of a "nationally significant infrastructure project". Accordingly, the Development meets the requirement provided for at Section 35(2)(a) of the Act.
- Once completed, the Development will be wholly located within England and the waters adjacent to England up to the seaward limits of the territorial sea. As such, the Development meets the requirement provided for at Section 35(2)(b) of the Act.
- 3.10 A plan showing the indicative location of the Development onshore in England is located at Appendix 2 to this statement.
- 3.11 A plan showing the indicative location of the Development offshore within the UK seaward limits is located at Appendix 3 to this statement.

Associated Development

3.12 It is also the intention of AQUIND when seeking development consent for AQUIND Interconnector to seek development consent to use the spare fibre optic cable capacity for the provision of commercial telecommunications services. Development consent for this commercial telecommunications use would be sought on the basis that it is associated development in accordance with Section 115 of the Act.

4. INFORMATION RELATING TO THE NATIONAL IMPORTANCE OF AQUIND INTERCONNECTOR

- 4.1 As is noted above at Section 2 to this statement in addition to meeting the requirements addressed above in Section 3 it is also necessary for the Secretary of State to consider that the project, of which the Development forms part, is of national significance.
- 4.2 In order to assist the Secretary of State in his determination of whether the Development forms part of a project which is of national significance, we set out below the reasons why it is considered AQUIND Interconnector is a project of national significance:
 - 4.2.1 As outlined at Section 3 to this statement, AQUIND Interconnector will have a capacity of 2,000 MW and it is estimated will transmit up to 16,000,000 MWh of electricity between GB and France, accounting for approximately 5% of GB's total electricity consumption. It is considered that AQUIND Interconnector will make a significant contribution to improving GB's security of electricity supply and achieving greater affordability by improving competition, making the GB energy

3

² 356.7 TWh in 2016, BEIS, Digest of United Kingdom Energy Statistics 2017, July 2017, p. 134, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643414/DUKES_2017.pdf

- market more efficient and enabling greater energy flexibility. This should ultimately benefit consumers via increased access to lower prices due to competitive pressures on domestic energy generators.
- 4.2.2 Interconnectors are important participants of the UK capacity market. The technology AQUIND Interconnector will use will enable AQUIND to take part in capacity market tenders, which would further contribute to achieving lower prices for energy consumers while improving the security of supply.
- 4.2.3 Further, AQUIND Interconnector will help to integrate a greater proportion of non-fossil fuel energy sources and intermittent renewables generation into the GB energy mix. It is also expected that electricity imported from France will have much lower CO₂ intensity.³ This will reduce reliance on fossil fuel power generation plants and in turn reduce GB's CO₂ emissions from the burning of such fuels. AQUIND Interconnector will therefore make a significant contribution to the decarbonisation of the GB electricity grid and meeting the net UK carbon reduction targets by the year 2050, set in accordance with Section 1 of the Climate Change Act 2008.
- 4.2.4 AQUIND Interconnector has recently been awarded status as a Project of Common Interest ("PCI") as a Priority Thematic Area Electricity Highway within the Northern Seas Offshore Grid Priority Corridor pursuant to the TEN-E Regulations (EU 347/2013). In awarding AQUIND Interconnector PCI status the European Commission has acknowledged the project will have a significant cross-border impact on the capacity available for commercial electricity flows. Whilst this is recognition of the public benefits and significance of the Project at the European rather than the national level, it is considered to be strongly indicative of the project being of national significance also.
- 4.2.5 In addition to the above, AQUIND Interconnector will provide valuable ancillary services to the national grid including, but not limited to, frequency response and "black start" capabilities. These ancillary functions help ensure safe and reliable operation of national electricity transmission systems and are considered to be of national benefit and significance.

5. PROGRESS OF THE DEVELOPMENT TO DATE

Basis on which the Development has been progressed to date

- 5.1 To date, the Development has been progressed on the basis that it will be necessary to obtain up to four separate planning permissions from the relevant affected local planning authorities, together with a Marine Licence from the Marine Management Organisation ("MMO").
- In addition, it is considered highly likely that it will be necessary to compulsorily acquire land or rights to facilitate the Development and that a Compulsory Purchase Order (**CPO**) will be required to do so. In this regard it should be noted that by virtue of their Electricity Interconnector Licence AQUIND benefits from the ability to make a CPO, which would need to be confirmed by the Secretary of State.
- 5.3 Additional ancillary consents, for instance in relation to carrying out of works in highways, are also highly likely to be required.
- 5.4 In light of the numerous consents and authorisations described above that will be required it is considered the Development will greatly benefit from the single authorisation process offered by the Act.

Initial Feasibility, Connection Agreement and Licences

11/49619988_9

³ Around 30 – 45 gCO₂/kWh, https://www.rte-france.com/fr/eco2mix/eco2mix-co2, comparing to in excess of 200 gCO₂/kWh in the UK (p. 36, BEIS, Updated Energy and Emissions Projections 2017, January 2018, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/671187/Updated_energy_and_emissions_projections_2017.pdf)

- Work on the technical feasibility of AQUIND Interconnector began in May 2014, with the initial project feasibility study being completed by August 2014.
- 5.6 Following extensive studies by National Grid Plc (**NG**) to establish the optimal grid connection point, an application for a connection agreement was submitted to NG in October 2015, and the connection agreement was entered into with NG in respect of Lovedean substation on 1 June 2016.
- 5.7 An Electricity Interconnector Licence was granted to AQUIND pursuant to Section 6 (1) (e) of the Electricity Act 1989 on 9th September 2016, authorising it to participate in the operation of AQUIND Interconnector.
- 5.8 A technical and financial proposal (PTF) with RTE was signed on 6 March 2017.

Engagement with Local Planning Authorities and the MMO

- 5.9 Engagement with the Local Planning Authorities within whose administrative boundaries the onshore elements of the Development may be located or who may be affected by the Development commenced in early 2017 and continued throughout that year. The authorities who have been engaged with in this regard are as follows:
 - 5.9.1 Winchester City Council;
 - 5.9.2 East Hampshire District Council;
 - 5.9.3 Portsmouth City Council;
 - 5.9.4 Havant Borough Council;
 - 5.9.5 South Downs National Park Authority.
- 5.10 In addition, the MMO were first engaged with on the offshore elements of the Development in September 2016.
- 5.11 Engagement with all local planning authorities and the MMO is continuing as the proposals for the Development progress.

Consultation

- 5.12 AQUIND has consulted and continues to consult with stakeholders and communities who may be affected by, or interested in, the Development. As a brief overview, AQUIND has engaged with the following consultees:
 - 5:12.1 District / Borough Councils, Unitary Authorities & County Councils (in multiple capacities)
 - 5.12.2 Members of Parliament
 - 5.12.3 The Department for Business, Energy & Industrial Strategy/ relevant Government Ministers
 - 5.12.4 MMO
 - 5.12.5 Marine Safety Organisations (e.g. Maritime Coastguard Agency, Trinity House)
 - 5.12.6 Highways England
 - 5.12.7 Nature and Historic Conservation Agencies (e.g Natural England and Historic England)
 - 5.12.8 Marines users / fisheries community
 - 5.12.9 Harbour Authorities
 - 5.12.10 Parish Councils
 - 5.12.11 Landowners & Tenants
 - 5.12.12 Third Party / Community Groups
 - 5.12.13 Ofgem & other Statutory Consultees
 - 5.12.14 Members of the public and businesses located in the vicinity of the Development

- 5.12.15 General public.
- 5.13 In January 2018 AQUIND hosted a series of exhibitions to display its proposals to the local communities. These events presented the proposals as at that time, giving local residents the opportunity to ask questions and provide feedback. Feedback received at and following those exhibitions is currently being considered further as part of the process of refining the Development proposals.
- 5.14 A public consultation exercise has also been carried out in France in accordance with the decision of CNDP, which completed on 4 May 2018 and a report on such consultation was approved by CNDP on 6 June 2018. 4

Environmental Impact Assessment Regulations Applicability and Scoping

- 5.15 The Development is not of a type that is detailed within either Schedule 1 or Schedule 2 to the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ("EIA Regs"). However, due to the environmental and human sensitivities within and surrounding the Development the decision has been taken to voluntarily undertake an environmental impact assessment for the Development and to submit an environmental statement in support of any application for consent to report any likely significant environmental effects.
- 5.16 On 20 February 2018 a request for a scoping opinion was made to the MMO pursuant to regulation 13 of the Marine Works (Environmental Impact Assessment) regulations 2007 (as amended).
- 5.17 On 22 February 2018 AQUIND submitted requests for scoping opinions in connection with the Development pursuant to Section 15 of the Town and County Planning (Environmental Impact Assessment) Regulations 2017 to the relevant local planning authorities.
- 5.18 Scoping opinions have been received from the four local planning authorities within whose administrative boundaries the Development may be located. Copies of the scoping opinion requests together with copies of the responses received are provided with this statement at Appendices 5 to 10.
- 5.19 The joint scoping opinion of Portsmouth City Council and the MMO relating to the onshore Development has been issued in draft only. We understand this should be issued as a final version shortly in the same form. A copy of the final joint scoping opinion will be forwarded further to this request upon receipt.
- 5.20 A scoping opinion is awaited from the MMO in respect of the offshore aspects of the Development. This is due to be provided on 25 June 2018. A copy will be forwarded further to this request upon receipt.

Ground Investigations and Survey Works

- 5.21 Various survey and ground investigations have taken place to inform the location and technical specification of the Development. As a brief summary this has included:
 - 5.21.1 Detailed geotechnical desk studies of proposed onshore cable routes in mid-2017.
 - 5.21.2 A geophysical survey of the proposed offshore cable route, which commenced in December 2017 and concluded in March 2018.
 - 5.21.3 A first phase of preliminary ground investigations works for the options for the converter station, which commenced in April 2018 and concluded in May 2018.
 - 5.21.4 A geotechnical survey of the proposed offshore cable route, which commenced in June 2018 and is expected to conclude in August 2018.
- 5.22 A second phase of preliminary ground investigations to inform the final cable route is currently scheduled to be undertaken in July 2018.

⁴ Commission nationale du debate public, <u>https://www.debatpublic.fr/projet-aquind-dinterconnexion-electrique-entre-france-royaume-uni</u>

6. AQUIND INTERCONNECTOR AND THE TEN-E REGULATIONS

- In addition to the national consenting procedures, AQUIND Interconnector by virtue of having been awarded PCI status pursuant to the TEN-E Regulations is also subject to additional regulatory and procedural requirements.
- 6.2 We do not seek to explain the consenting requirements provided for by the TEN-E Regulations within this statement, however the need to co-ordinate the TEN-E Regulations and the consenting process for development consent is acknowledged by the AQUIND project team. Should the Secretary of State require any further information regarding these requirements please do not hesitate to inform us.

7. CONCLUSION AND REQUESTS

- 7.1 It is considered that the information provided in Section 3 of this statement is sufficient to constitute a qualifying request in accordance with Section 35ZA(11) of the Act and that Section 4 to this statement explains why AQUIND Interconnector should be considered to be of national significance.
- 7.2 Accordingly, we kindly invite the Secretary of State to issue a direction for the Development to be treated as development for which development consent is required pursuant to Section 35(1) of the Act.
- 7.3 Further, we request on behalf of AQUIND that the Secretary of State when issuing the aforementioned direction directs that any proposed application for a consent or authorisation mentioned in section 33(1) or (2) of the Act in relation to the Development is to be treated as proposed development for which development consent is required.
- 7.4 We also request with regard to the environmental statement to be submitted in support of the application for development consent, that the Secretary of State when issuing the direction confirms the environmental scoping opinions issued by the respective authorities (and yet to be issued in the case of the Marine Scoping Opinion to be provide by the MMO) may be used as the basis on which the environmental statement for the Development is based, in accordance with Regulation 14(3)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("IP EIA Regs").
- 7.5 Certain persons who are required to be consulted under the IP EIA Regs on any scoping opinion request have not been consulted pursuant to the requests made of the MMO and the local planning authorities. We invite the Secretary of State to consult any additional persons whom he considers necessary using the information provided with this statement. Should further information be required to assist identification of the additional persons the Secretary of State may wish to consult with on the scoping opinion request this firm would be happy to provide assistance.
- 7.6 We also remind the Secretary of State that there is nothing to preclude him from requiring additional information to be included with an environmental statement in connection with an application for development consent. Accordingly, where the Secretary of State confirms that the above referred to scoping opinions may be used as the basis for the environmental statement, he may request further environmental information is provided in connection with any environmental statement if considered necessary.
- 7.7 Lastly, where the Secretary of State is minded to issue a direction in relation to the Development, we kindly request that this statement is treated as a notification pursuant to Regulation 8 (2)(b) of the IP EIA Regs that AQUIND proposes to provide an environmental statement in relation to the Development and that the Secretary of State proceeds to carry out the procedural requirements provided for by Regulation 11(1) of the IP EIA Regs.
- 7.8 Should the Secretary of State require any further information in connection with this request, AQUIND Interconnector or the Development, please do not hesitate to contact Catherine Howard (020 7466 2858 / Catherine.Howard@hsf.com) or Martyn Jarvis (020 7466 2680 / Martyn.Jarvis@hsf.com) of this firm.

8.	LIST OF APPENDICES
8.1	Appendix 1: Plan showing an indicative location of the AQUIND Interconnector
8.2	Appendix 2: Plan of the indicative location of the Development onshore in England
8.3	Appendix 3: Plan of the indicative location of Development offshore within the UK seaward limits
8.4	Appendix 4: Non-Technical Summary
8.5	Appendix 5: Scoping opinion request – UK Onshore
8.6	Appendix 6: Scoping opinion request – UK Offshore
8.7	Appendix 7: Scoping opinion of East Hampshire District Council
8.8	Appendix 8: Scoping opinion of Winchester City Council
8.9	Appendix 9: Scoping opinion of Havant Borough Council
8.10	Appendix 10: Interim joint scoping opinion of Portsmouth City Council and the MMO

Herbert Smith Freehills LLP 19 June 2018

APPENDIX C

SECRETARY OF STATE'S GUIDANCE ON: PLANNING ACT 2008: CHANGES TO DEVELOPMENT CONSENT ORDERS (DECEMBER 2015)

- 145. The Secretary of State's guidance on "Planning Act 2008: Guidance on Changes to Development Consent Orders (December 2015)" includes: (Emphasis added)
 - 2. Obtaining development consent under the 2008 Act involves a front loaded process where the developer consults on a <u>proposed</u> project <u>before</u> submitting an application...
 - 3. Where the Secretary of State proposes to grant consent for a project, this will be through a Development Consent Order which is normally made as a statutory instrument <u>a form of</u> secondary <u>legislation</u>. The Development Consent Order not only provides planning consent for the project but may also incorporate other consents and include authorisation for the compulsory acquisition of land. <u>The Order will specify details of the development consented</u> and <u>its location (including plans)</u> and any requirements (conditions) that must be met in implementing the consent.
 - 4. The nature of large scale nationally significant infrastructure projects means it is likely that changes will be needed to the project either before construction of the project begins or during the construction process. Where such changes are not covered by the Development Consent Order that has been granted for the project, an application will need to be made for a formal change to the Order...
 - 19. It is expected that the power to decline to determine an application for a change will be used infrequently. It is more likely in cases where the proposed change would **in itself** constitute a nationally significant infrastructure project, or where the development as changed would constitute a different kind of infrastructure project from that which has already been given consent. ...
 - 20. Without prejudice to the need to consider applications in the light of individual circumstances, some theoretical examples of the situations where it might be used could include:
 - (ii) ... if development consent had been granted for a road and a change was proposed so that part of the route was amended such that the length of the new part of the route <u>exceeded</u> the length of what remained of the original route, the Secretary of State might consider that change should be treated as a completely new project rather than a material change to the original development consent.
 - (iii) if a gas fired power station was granted a Development Consent Order, but the applicant subsequently submitted an application <u>for changes so the plant was fired by another **fuel**</u> (eg biomass or coal), then the Secretary of State might consider that the changes to the project were so significant that the project should be subject to a new application for development consent.

APPENDIX D

EXTRACT FROM [REP6-063] 'Applicant's Response to action points raised at ISH1, 2 and 3, and CAH 1 and 2.

In [REP6-063] 'Applicant's Response to action points raised at ISH1, 2 and 3, and CAH 1 and 2, para 2.9 is Aquind's response to the following question:

Question 3.4 – What changes would be needed to dDCO to remove Fibre Optic Cable Infrastructure and the capacity split between essential operational fibres and commercial telecommunications use fibres?

Applicant's Response: (Emphasis added)

- "2.9.1 Where the commercial use of the spare capacity in the fibre optic cables is not consented, the Telecommunications Buildings will not be required. Two optical regeneration stations would still be required, for the reasons discussed further below, but these would be of a smaller scale to those required where the commercial telecommunications use of the spare capacity in the fibre optic cables is properly determined to be associated development.
- 2.9.2 To remove the ability to use the fibre optic cables for commercial purposes and the infrastructure associated with that purpose the following amendments to the dDCO would be required:
 - (A) the words "and for commercial telecommunications" would need to be removed from the definitions of "onshore HVDC cables" and "marine HVDC cables" as those terms are defined in Article 2 to the dDCO;
 - (B) the defined term "telecommunications building" at Article 2 would need to be deleted;
 - (C) the definition of "undertaking" at Article would need to amended to remove the words "and provision of telecommunications services";
 - (D) Article 7(6)(c) would need to be deleted;
 - (E) Work No.2 (u) "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 and associated fibre optic
 - (F) the rows of Table WN2 at requirement 5 at Schedule 2 to the dDCO which relate to the telecommunications buildings, telecommunications building compound and the telecommunications buildings security perimeter fence would need to be deleted;
 - (G) the words "and in accordance with the maximum dimensions in that table shown for the buildings and compound" and Table WN5 would need to be deleted from Requirement 5(3) at Schedule 2 to the dDCO;
 - (H) at requirement 6(4) the words "confirming how those details accord with the design principles for the optical regeneration stations" would need to be deleted and replaced with "confirming how those details provide for an optical regeneration stations of a scale which is necessary for the operation of the authorised development and how those details accord with the design principles for the optical regeneration stations";
 - (I) at requirement 6(9) the words ", the telecommunications buildings" would need to be deleted in the three instances where this appears; and
 - (J) the words "and commercial telecommunications uses with" would need to be deleted and replaced with "for" at the definition of "marine HVDC cables" at Part 1 of the Deemed Marine Licence at Schedule 15 to the dDCO.
- 2.9.3 With regard to any implications for the design of the Converter Station where the commercial use is not permitted and the Telecommunications Buildings removed, <u>each pair of power cables has a dedicated FOC</u>, <u>which contains cores which are essential to the operation of the interconnector</u> and cores which are 'spare' and which are <u>proposed to be used for commercial telecommunications purposes</u>. The <u>essential cores are terminated within the control building in the Converter Station</u> site. This situation would remain unchanged in respect of the spare cores with those also terminating at the control building. Accordingly, there would be no change to the control building design or dimensions.

- 2.9.4 The ORS are required to boost the optical signal strength due to the distance of approximately 250km between the two converter stations. Without sufficient signal boosting equipment reliable communication between the two Converter Stations necessary for their continued safe operation would be put at risk. Accordingly, the ORS are required for essential communication for the Project, in addition to providing signal boosting for the spare fibre which are proposed to be used for commercial telecommunications purposes.
- 2.9.5 If the use of the spare fibres for commercial telecommunications purposes is not permitted by the DCO, the ORS would nonetheless still be required, but on a smaller scale to house the facilities required for the fibres used for essential communication purposes only.
- 2.9.6 With regard to the capacity split between the glass fibres used for operation of the interconnector and those used for commercial telecommunications purposes, it is anticipated that the FOC to be installed with each pair of DC cables will contain sixteen (16) bundles of fibres, with <u>each bundle containing twelve (12) fibres</u>. Three (3) of these bundles are required for the essential operation of the interconnector and thirteen (13) bundles are available for commercial use. Thus the capacity split is 20% for essential use in connection with the safe operation of the Project and 80% for commercial telecommunications purposes.
- 2.9.7 As explained in the Statement in relation to FOC (REP1-127), to withstand the various physical impacts which the fibre optic cables are likely to be subject to associated with transportation, installation and operation in the marine and underground environment and protect the glass fibres located within it, the fibre optic cables are required to be of an adequate outer diameter. The outer diameter must be of sufficient size to withstand the impacts to which it is likely to be subject and the use of standard size cable components for this purpose mean that the size of the cable itself would not change were the number of glass fibres within it was reduced from 192 to a lesser multiple."

The Applicant responded to Question 4.3 in respect of the Affected Party's Land including: (Emphasis added)

- " 3.1.4 As can be seen on sheet 2 of 3 of the Indicative Converter Station Area Layout Plans (REP1-018), it is proposed that Plot 1-32 will accommodate the following elements of permanent infrastructure:
 - (A) part of the footprint of the Converter Station Compound;
 - (B) part of the permanent Access Road, which is to be used during construction and is required during operation;
 - (C) drainage measures including two attenuation ponds, one of which is to be immediately to the south of the Converter Station Compound and one of which is located within the south-west corner of Plot 1-32, to the south of the Access Road;
 - (D) the Telecommunications Buildings Compound, and the Telecommunications Buildings located therein;
 - (E) various elements of landscaping and ecological enhancements which are to be delivered in connection with the Converter Station and the Access Road (which can be seen on the Indicative Landscape Mitigation Plan Option B(ii) (REP5-032))...
- 3.1.18 The position regarding the need for the permanent acquisition of land for the Telecommunications Buildings is clearly explained within the Applicant's Transcript of Oral Submissions for Compulsory Acquisition Hearing 1 (REP5-034), and those matters are not repeated in this post-hearing note. It should be noted however that were the Telecommunications Building omitted from the Proposed Development for any reason and therefore not required to be located on Plot 1-32,"

APPENDIX E

OTHER DCO EXAMPLES WHERE EX A HAS CONSIDERED THE SCOPE OF THE DEVELOPMENT

146. In the Tidal Lagoon Swansea Bay Tidal Lagoon DCO, the ExA considered the scope of the "development". The ExA excluded an "Offshore Building" visitor centre envisaged to be situated upon the lagoon wall and recognised that it was not "form part of the" development "for" which development consent was required: (Emphasis added)

4.1 Development Permitted under PA2008 ...

- 4.1.1. The question of whether the whole scheme as put forward by the applicant can be viewed as principal development, as the term is used in the CLG quidance 'Planning Act: associated development for major infrastructure projects' (the Guidance) for determination under the PA2008 was an important matter for the examination ...
- 4.1.3 The Panel's initial assessment of the principal issues included "Scope of works proposed as the principal development and extent of any associated development to be determined by Welsh Local Planning Authorities". The Panel's first round of questions, particularly Q1.11 invited legal submissions from the applicant to support the position that all the proposed development is properly described as principal development and from any IP who wanted to argue a contrary view.
- 4.1.4 WG took up this invitation to make legal submissions [REP-561]. After advising that careful consideration of the draft DCO was needed "to ensure the devolution settlement is respected" WG continued:
 - "In order for the development to be considered to be forming part of a NSIP, it is our view that there must be a sufficient link between the substance and purpose of such development and the "principal development" (i.e. the 'core' of the NSIP that being the generating station itself)." "It is considered that such development must be necessary to enable the operation of the principal development or "project", which involves channelling a head of water through a turbine to generate electricity to distribute on to the national grid. A test that could be applied is whether it would be possible to construct and operate a generating station without the particular element of the works in question. If the element of works in question does not satisfy the above, a further question arises as to whether such development requires devolved consent." ...
- 4.1.5 WG continued: "Therefore, where development does <u>not</u> form <u>part</u> of the NSIP for the purposes of Section 21[sic] of the PA2008, and such development would otherwise require a devolved consent in order to be lawfully carried out, consent for such development is to be sought from the appropriate devolved person or body, and <u>not</u> granted by the DCO."
- 4.1.6 WG went on to question the inclusion of a number of elements under Schedule 1 (the works) of the draft DCO. These included the <u>offshore visitor centre</u>, elements of the onshore building <u>relating to visitor and boating facilities</u>, laboratories, boat storage and associated visitor parking, highways and access, pedestrian and cycle routes, beach area, waterfront public realm, internal site roads, vehicle parking facilities, landscaping and boundary treatments and fencing.
- 4.1.7 The applicant provided a detailed response to Q1.11 [REP-517] which included the overall statement that: "TLSB considers that development forms part of the principal development (and therefore is not associated development) if it is physically part of or indistinguishable from the principal development. Similarly development which is integral and without which the principal development could not function is not associated development ...
- 4.1.8 Both CCSC and NPTCBC identified in their written representations [REP-828 and REP-750] that they considered that the Project should be delivered as put forward by the applicant. CCSC's

- view [REP-828] was "that the offshore building in its current and complete form remains principal development". This was reiterated throughout the examination. NPTCBC [REP-750] stressed broader benefits that would flow from the total scheme and concern lest there be failure to maximise the delivery of all aspects of the potential development opportunities.
- 4.1.9 The subject was tabled at an ISH on 16 September 2014 and was further discussed at the ISH on 22 October 2014. WG was represented at the ISH held on 16 September. Agenda [HE-19] item 4.1 was headed "Content of Principal Development" and at 4.1(iii) included questions for WG and other IPs on the acceptability of the scope of the principal development in the light of the devolution settlement and other factors.
- 4.1.10 Prior to the hearing WG put their position in writing in the following terms [HE-10]:
 - "The Welsh Government do not intend making oral representations at the hearings in question. <u>Ultimately, whether the Secretary of State, in light of any recommendation made by PINS, can make provision of a particular character in a DCO is strictly a matter of law, dependent on the provisions set out in statute, and is not a matter for debate at this hearing. The provisions of the 2008 Act set out the powers within which the Secretary of State must operate in making his decision as to whether or not the DCO should be granted. Our position is clear on that, and we have made those points previously. It is therefore for DCLG [sic] (in making their decision) and PINS (in providing their recommendation) to take their own legal advice in terms of the scope of those powers, and to be satisfied that the provision so made is lawful."</u>
- 4.1.13 ... some items are integral to the sea-wall structures and could not be retrofitted, that landscaping and beach areas are part of the overall coherent design and that its position was supported by both local planning authorities in whose area the Project is proposed.
- 4.1.16 There was detailed discussion of the matters raised in the agenda, particularly the offshore building. The applicant put forward alternative approaches which it considered would be likely to meet the concerns expressed by WG and put forward arguments supporting the size of the proposed offshore building. The applicant's submissions on these matters are at section 20 of the written summary of oral submissions [REP-842] and a TLSB 'Paper of Alternative Drafting' explaining alternative drafting approaches that could be taken to achieve various alternatives was produced on 28 October 2014 [REP-852]. The alternatives were put forward as 'options' for consideration by the Panel; the applicant made clear that it was not itself proposing them. The applicant stressed that for reasons of good design the Project should be delivered as a whole....
- 4.1.24 WG representations on both the 4 November 2014 iteration of the draft DCO and the Panel's consultation draft DCO were made on 25 November 2014 [REP-918]. This expressed a view that both the drafts purported to grant development consent in respect of a proportion of works, which could be described as 'amenity development' and that "the DCO cannot lawfully grant development consent in relation to such development"...
- 4.1.19 In a Rule 17 letter dated 31 October 2014 [PD-018], the Panel requested that the applicant undertake public consultation on the "Paper of Alternative Drafting". The letter indicated that: "changes to the DCO as set out in paragraphs 3.1, 4.1 and 5 of that document would be more closely aligned with what is permissible to authorise under the PA2008 in Wales"...
- 4.1.26 The 25 November 2014 draft did <u>not</u> include the proposed offshore building <u>but rather made provision for</u> "sufficient foundation areas, pilings and land form within or upon the seawall" within Work No 1a (the western wall of the lagoon) for its later construction. This would enable the integral parts of the project to be consented and built through the DCO to enable the NSIP to operate. However, the principal of building being acceptable on the site and the dimensions of the <u>building to be built upon the seawall</u>, as well as more detailed design, <u>would be left for a planning application under the Town and Country Planning Act 1990</u>. Provision was included for applications for planning permission to be made prior to physical construction of the offshore works and a proposed s106 agreement would ensure that such an application would be made. The applicant observed that operating such an arrangement would depend on inclusion of

- article 53 proposing extension of the planning jurisdiction of CCSC and NPTCBC to the relevant areas. The reasons for the need for the extension of jurisdiction for this are laid out in chapter 3.
- 4.1.27 The amended description of Work No. 6b (the onshore building) was included as a response to a note in the Panel's consultation draft DCO requesting greater clarity as to what would be encompassed by the description "visitor orientation facilities enabling way finding, exhibition and welfare to be provided to visitors, boat maintenance and storage facilities". It should be noted that provision to construct these elements of the works remained. The applicant's response was to delete that element from the authorised work. The applicant explained that "..to ensure delivery of that part of the Project which comprises leisure uses, provision has again been made in the section 106 development consent obligation with the City and County of Swansea Council"...
- 4.1.29 Notwithstanding the proceedings at the examination and changes made to the draft DCO in October and November, WG representations of 25 November 2014 [REP-918] and 4 December 2014 [REP-976] echoed the position adopted in early October with the latter stating that "Part 1A of Schedule 1 to the draft DCO continues to include a proportion of development that is outside the scope of the SoS powers under Section 115 of the 2008 Act". WG's position was more firmly expressed in later representations than at earlier stages of the examination.
- 4.1.28 ... Schedule 1 and it still contained works which WG had questioned.
- 4.1.30 The 25 November 2014 representation also included the statement that "the development in relation to which the DCO purports to grant consent <u>must be, or form part of, the NSIP itself so</u> as to be within the powers of the Secretary of State and therefore lawful." Particular exception was taken to including in a DCO "what <u>could</u> be described as <u>amenity development</u>" and to the inclusion of ancillary works in Part 1B of the DCO.
- 4.1.31 The 4 December 2014 representation [REP-976] followed a similar line of argument which was expressed as follows:
 - "As we have previously stated, if (these) aspects of development are considered to be, or form part of the NSIP itself <u>because their purpose is strictly tied to operational matters</u> associated with <u>the effective running</u> of the generating station, then <u>this needs to be clarified</u> in the drafting of the DCO.
 - "Alternatively, if such development is <u>essentially</u> proposed <u>for leisure or amenity purposes</u>, then we continue to argue that <u>the development is outside the scope of section 115</u> of PA2008 and should therefore not be included in the DCO. As such, <u>planning permission from the relevant local planning authority should be sought."</u>
- 4.1.32 WG continued to object to inclusion of landscape and park in the DCO, with the applicant's arguments relating to 'Good Design' rejected because tidal lagoons are excluded from the scope of NPS EN-1 and including them in a DCO would amount to the functions of Welsh planning authorities being supplanted by the SoS. WG's acceptance that a description of development "comprised of provision to enable construction of an offshore building" could remain was subject to detailed amendments to the wording to make it clear that it would not include structures above the ground....

The Panel's Conclusions

- 4.1.34 The words 'principal development' do **not** appear in the PA2008. The Panel does not consider that there is a clear basis in statute for determining what is and is not principal development under the PA2008 for any particular NSIP. The Panel also note that there is no particular policy quidance for tidal lagoons and that this is the first proposal for a tidal lagoon to reach examination.
- 4.1.35 The Panel are aware that there is guidance on what constitutes associated development under the PA2008, 'Planning Act 2008: associated development applications for major infrastructure'. However, this is guidance that applies to England where its purpose is to set down core principles to help define associated development in decisions to be made by the SoS on a case by case basis.

- 4.1.36 The Panel is also aware of three published decisions made under the PA2008 on generating stations in Wales: Brechfa Forest West, South Hook Combined Heat and Power station and Clocaenog Wind Farm. The DCO for Brechfa Forest West Wind Farm included an electricity substation within the principal development. That was based on the facts of the case.
- 4.1.37 Having diligently examined the question of which elements of the Project were to be regarded as principal development, the Panel put forward a consultation draft DCO with an extensive commentary in the form of panel notes [PD-020]. This included certain works as principal development and others as ancillary works, both within the DCO. The panel's judgement of what should be included was not limited to pure functionality. Other elements were included on the basis that they either contributed to ensuring that the scheme was integrated with its surroundings, secured appropriate mitigation or that they were integral elements of structures that formed essential parts of the generating station.
- 4.1.38 Elements that were part of the development of the tidal lagoon <u>as a recreational facility and visitor attraction</u> were <u>not</u> included in the panel's consultation draft of the DCO. <u>However local authority and public support for these elements at the examination was recognised by including provision within the scheme so that they could be built without requiring retrofitting.</u>
- 4.1.39 The Panel notes that in WG's representations of 4 December 2014 [REP-976], it has been accepted in principle that the Schedule 1 Part 1A work could include construction of the lagoon wall with foundations, piling and landform sufficient "to enable construction of an offshore building" and sufficient footprint within the lagoon wall to accommodate the operational and maintenance facilities required for 52 the turbines. The offshore building itself would be subject to planning permission being sought from CCSC.
- 4.1.40 WG in representations made in writing toward the close of the examination [REP-822 and REP-918] maintained a position of opposition to inclusion of certain matters within the DCO. This is expressed as a concern that the applicant's DCO, by including various elements such as landscaping that had a bearing on amenity and good design, may be supplanting local planning functions...
- 4.1.43 The starting point for the Panel's recommended version of the DCO is the applicant's 4 December 2014 draft [REP-1002] which had taken some account of responses from IPs and the panels consultation draft DCO. The Panel has considered whether <u>elements</u> of the scheme retained within the scope of that DCO should be for decision as <u>part</u> of the NSIP <u>because</u> they have <u>sufficient links with fundamental elements</u> of a tidal <u>energy</u> lagoon. In making an assessment, the Panel have had regard to the detailed responses made by the applicant [REP1026, pages 12 to 18] to WG's comments of 4 December 2014 [REP976].
- 4.1.44 The lagoon wall is a fundamental feature for the generation of tidal range energy. The lagoon wall would take the form of a bund and designing it so that it can be used by pedestrians and cyclists is a proper planning response to the opportunity that the structure presents. It would provide access for employees of the generating station and for recreational purposes. Local widening of the structure would provide refuges and provision for later addition without retrofitting of features that could include works of art. Certain facilities such as slipways and hardstanding associated with the lagoon wall would be important boating facilities that would be necessary for operational purposes.
- 4.1.45 Close to the turbine housing structure, the lagoon wall would widen and it is the Panel's view that the dimensions and structure of the wall 53 should be such as to make provision for the foundations for an offshore building and create sufficient space within the wall footprint to house operational and maintenance facilities for the turbines. The offshore building would not itself be part of the DCO but subject to approval by the relevant planning authorities. It could potentially accommodate both an alternative location for the control rooms for the generating station and a visitor attraction and educational facility for the visitors that the lagoon may attract.

- 4.1.46 The creation of a lagoon is a <u>fundamental feature</u> of this generating station. Landscaping the lagoon margins so that it fits with its surroundings and promotes its value as a nature conservation resource are all features that the Panel consider to be sufficiently related to the lagoon itself and are to be included within the development as either principal development or ancillary works. In addition it is to be noted that certain elements of the proposed works, such as the boundary treatment <u>of</u> the walls to the shore, are promoted as mitigation and for that <u>additional</u> reason are properly regarded as an integral part of the scheme put forward. Similarly elements such as habitats creation <u>of</u> the Landward Ecological Park and the treatment <u>of</u> the <u>seawall faces are <u>essential mitigation</u> for a scheme of <u>this nature</u> to comply with <u>its</u> environmental obligations and can be incorporated [APP-386].</u>
- 4.1.47 The Panel conclude that the draft DCO as put forward by the Panel [without] the offshore building] and appended to this report is in a form that the SoS could properly approve under the terms of the PA2008 subject to his satisfaction on the issues laid out at the end of chapter 8 ...
- 4.1.48 The assessments of impacts in the remainder of this chapter are on the basis of the recommended project, noting where these differ from the impacts assessed under the ES ...



The Planning Act 2008 (as amended)

Tidal Lagoon (Swansea Bay)

Examining Authority's Report of Findings and Conclusions

and

Recommendation to the Secretary of State for Energy and Climate Change

Examining Authority

Simon Gibbs Lillian Harrison John Lloyd-Jones Peter Widd

10 March 2015

This page is intentionally left blank

File Ref EN010049

The application, dated 6 February 2014 was made under section 37 of the Planning Act 2008 and was received in full by The Planning Inspectorate on 7 February 2014.

The applicant is Tidal Lagoon (Swansea Bay)

The application was accepted for examination on 6 March 2014.

The examination of the application began on 10 June 2014 and was completed on 10 December 2014.

The development proposed comprises a generating station in the form of a tidal lagoon.

Summary of Recommendation:

The Examining Authority recommends that the Secretary of State should make the Order in the form attached subject to matters set out in chapter 8.

REPORT CONTENTS

1	INTRO	DDUCTION	6
	1.0	APPOINTMENT	6
	1.1	THE APPLICATION	
	1.2	THE PRELIMINARY MEETING	7
	1.3	THE EXAMINATION PROCESS	7
	1.4	THE STRUCTURE OF THIS REPORT	. 12
2	MAIN	FEATURES OF THE PROPOSAL AND SITE	13
	2.0	DESCRIPTION OF THE PROPOSAL	. 13
	2.1	CHANGES TO THE APPLICATION	. 15
	2.2	THE APPLICATION SITE AND SITE CONTEXT	. 18
3	LEGAL	. AND POLICY CONTEXT	21
	3.1	LOCAL IMPACT REPORTS SUBMITTED	. 22
	3.2	PRESCRIBED MATTERS	. 22
	3.3	IMPORTANT AND RELEVANT MATTERS	. 22
	3.4	STATUTORY UNDERTAKERS' LAND, NATIONAL TRUST LAND, COMMONS	
		AND OPEN SPACES AND CROWN LAND	. 24
	3.5	PLANNING ACT 2008 - WHAT MAY BE INCLUDED IN A DCO	. 25
	3.6	WELSH NATIONAL POLICIES AND GUIDANCE	. 26
	3.7	GOVERNMENT OF WALES ACT 2006 (GWA 2006)	. 27
	3.8	UK LEGISLATION	
	3.9	EUROPEAN POLICIES AND RELATED UK REGULATIONS	
	3.10	OTHER LEGAL AND POLICY PROVISIONS	
	3.11	RELEVANT DEVELOPMENT PLAN AND OTHER LOCAL POLICIES	. 37
	3.12	DEVOLUTION AND JURISDICTION	
	3.13	s106 in the context of the scheme	.41
	3.14	THE SECRETARY OF STATE'S POWERS TO MAKE A DCO	. 42
4	FINDI	NGS AND CONCLUSIONS IN RELATION TO POLICY AND	
	FACTU	AL ISSUES	44
	4.0	MAIN ISSUES IN THE EXAMINATION	. 44
	4.1	DEVELOPMENT PERMITTED UNDER PA2008	.44
	4.2	RELIABLE RENEWABLE ENERGY	
	4.3	ADAPTIVE MANAGEMENT AND MANAGING UNCERTANITY	
	4.4	BIODIVERSITY, BIOLOGICAL ENVIRONMENT AND ECOLOGY INCLUDING	
		MIGRATORY AND NON-MIGRATORY FISH	. 64
	4.5	NAVIGATION, SHIPPING, PORTS AND DREDGING	
	4.6	WELSH MARINE LICENCE	
	4.7	CIVIL AND MILITARY AVIATION AND DEFENCE INTERESTS	
	4.8	CLIMATE CHANGE MITIGATION AND ADAPTION	
	4.9	COASTAL PROCESSES AND ENVIRONMENTAL CONSIDERATIONS	
	4.10	CONTAMINATED SEDIMENTS AT SEA AND ON LAND	
	4.11	ENVIRONMENTAL CONSEQUENCES IN RELATION TO CHANGES TO COAST	
		PROCESSES	
	4.12	CONSTRUCTION IMPACTS IN RELATION TO LAND-BASED RECEPTORS 1	
	4.13	CONSTRUCTION IMPACTS & THE CEMP IN RELATION TO ECOLOGICAL	
		RECEPTORS	21
	4.14	OPERATIONAL IMPACTS AND THE OEMP IN RELATION TO COMMUNITY	
		RECEPTORS	38
	4.15	OPERATIONAL IMPACTS UPON ECOLOGICAL RECEPTORS	
	4.16	EUROPEAN PROTECTED SPECIES LICENCE MATTERS	
		STATUTORY NUISANCE	
		_ = = .	

	4.18	FLOOD RISK	
	4.19	HEALTH	
	4.20	HISTORIC ENVIRONMENT	
	4.21	SEASCAPE, LANDSCAPE AND VISUAL IMPACT ASSESSMENT INCLUDING	
		LIGHTING	166
	4.22	POLLUTION CONTROL AND OTHER ENVIRONMENTAL REGULATORY	
	4 22	REGIMES	
	4.23	SAFETY AND SECURITY	
	4.24	SOCIO-ECONOMIC IMPACTS	
	4.25	FINANCIAL VIABILITY	
	4.26	DECOMMISSIONING CONCLUSION ON THE CASE FOR DEVELOPMENT	
5	4.27	NGS AND CONCLUSIONS IN RELATION TO HABITATS	195
3		ATIONS AND WATER FRAMEWORK DIRECTIVE	100
	5.0	HABITAT REGULATIONS	
	5.1	WATER FRAMEWORK DIRECTIVE	
6		JLSORY ACQUISITION AND RELATED MATTERS	
J	6.0	INTRODUCTION	
	6.1	STATUTORY AND OTHER REQUIREMENTS FOR COMPULSORY	221
	J. 1	ACQUISITION	227
	6.2	APPLICATION DOCUMENTS RELATING TO COMPULSORY ACQUISITION	
	6.3	WAS THERE A REQUEST FOR COMPULSORY ACQUISITION POWERS?	
	6.4	THE ORDER LAND	
	6.5	IS THERE A NEED FOR THE PROJECT TO BE CARRIED OUT?	
	6.6	HOW THE PANEL EXAMINED THE CASE FOR COMPULSORY ACQUISITION	
	6.7	IS THE LAND TO BE TAKEN REQUIRED FOR THE DEVELOPMENT? DOES	
		THE APPLICANT HAVE A CLEAR IDEA AS TO HOW IT WOULD BE USED?	230
	6.8	IS THE LAND TAKE NO MORE THAN IS REASONABLY REQUIRED?	233
	6.9	WILL AN ADEQUATE COMPENSATION FUND BE AVAILABLE?	235
	6.10	DOES THE CASE FOR COMPULSORY ACQUISITION IN THE PUBLIC	
		INTEREST OUTWEIGH ANY PRIVATE LOSS?	237
	6.11	IS THE ACQUISITION OF INTERESTS OF AFFECTED PERSONS WHO	
		DID NOT PARTICIPATE IN THE EXAMINATION JUSTIFIED?	238
	6.12	IS THE ACQUISITION OF INTERESTS OF AFFECTED PERSONS WHO	
		DID NOT OBJECT OR WITHDREW THEIR OBJECTIONS DURING	
		THE EXAMINATION JUSTIFIED?	238
	6.13	IS THE ACQUISITION OF INTERESTS OF AFFECTED PERSONS THAT	
		MAINTAINED THEIR OBJECTIONS OR CONCERNS JUSTIFIED?	240
	6.14	IS THE INEVITABLE INTERFERENCE WITH HUMAN RIGHTS BY THE	
		GRANT OF COMPULSORY ACQUISITION AND TEMPORARY POSSESSION	2
	C 15	POWERS JUSTIFIED?	
	6.15	TEMPORARY POSSESSION POWERS	
	6.16	SECTION 135 CROWN LAND	
	6.17 6.18	SECTIONS 131 AND 132 OPEN SPACE LAND	250
	0.18	SECTION 127 STATUTORY UNDERTAKERS (SUS) (AS NOTED IN	
		CHAPTER 3, SPECIAL CONSIDERATIONS APPLY IN RELATION TO SU'S	2 ⊏ 4
	6 10	LAND, UNDER S127 AND S138 PA 2008)	Z 21
	6.19	SECTION 138 EXTINGUISHMENT OF RIGHTS AND REMOVAL OF	252
		APPARATUS OF STATUTORY UNDERTAKERS ETC	
		MODIFICATION OF STATUTORY PROVISIONS	
	U.ZZ	OTHER LAND MATTERS	∠၁၁

7	DRAFT	DEVELOPMENT CONSENT ORDER AND RELATED MATT	
	7.0	INTRODUCTION	
	7.1	THE APPLICANT'S DCO	
	7.2	PRECEDENT ORDERS	
	7.3	DEFENCE TO PROCEEDINGS IN RESPECT OF STATUTORY NUISANCE	259
	7.4	CERTIFIED DOCUMENTS AND PLANS	259
	7.5	OTHER LEGAL AGREEMENTS	
	7.6	THE RECOMMENDED ORDER	260
	7.7	EXPANSION OF REASONING FOR CHANGES TO DCO	277
	7.8	WORKS	279
	7.9	BUILDING HEIGHTS TABLE/DIMENSIONS OF STRUCTURES	281
	7.10	REQUIREMENT 34 - TURBINES	281
	7.11	OTHER CONSENTS REQUIRED	283
	7.12	OTHER MATTERS	
	7.13	CONCLUSIONS ON DEVELOPMENT CONSENT	
8		ARY OF CONCLUSIONS AND RECOMMENDATIONS	
	8.0	INTRODUCTION	
	8.1	THE SECRETARY OF STATE'S POWERS TO MAKE A DCO FOR A REDUCED	
		SCALE OF SCHEME	
	8.2	APPRAISAL OF THE APPLICATION UNDER S105 OF THE PA2008	
	8.3	LOCAL IMPACT REPORTS	
	8.4	PRESCRIBED MATTERS	
	8.5	RELEVANT AND IMPORTANT MATTERS	
	8.6	EXTENSION OF LOCAL AUTHORITY JURISDICTION	-
	8.7	OTHER LICENCE MATTERS	
	8.8	FINANCIAL VIABILITY	
	8.9	CROWN LAND	
	8.10	MANAGING UNCERTAINTY: THE ROLE OF ADAPTIVE MANAGEMENT	
	8.11	EVALUATION OF THE PROJECT	
	8.12	BIODIVERSITY	
	8.13	PLANNING BALANCE SUMMARY	
	8.14	COMPULSORY ACQUISITION AND RELATED MATTERS	
	8.15	OTHER LAND MATTERS	
	8.16	OTHER MATTERS	
	8.17	RECOMMENDATION	300

Appendices Contents

APPENDIX A: RECOMMENDED DEVELOPMENT CONSENT ORDER

APPENDIX B: EXAMINATION LIBRARY

APPENDIX C: REPORT ON THE IMPACT ON EUROPEAN SITES (RIES)

APPENDIX D: EVENTS IN THE EXAMINATION

APPENDIX E: LIST OF ABBREVIATIONS

4 FINDINGS AND CONCLUSIONS IN RELATION TO POLICY AND FACTUAL ISSUES

4.0 MAIN ISSUES IN THE EXAMINATION

- 4.0.1 The Panel's initial assessment of principal issues was attached at Annex C to the Rule 6 letter issued on 15 May 2014 [PD-003]. The principal issues covered a broad spectrum of matters which had either been raised through RRs or raised directly by the Panel in their reading of the application. These ranged from the wide ranging matter of law and policy relating to the first ever tidal lagoon to specifics on construction techniques.
- 4.0.2 These issues formed the basis for the first round of written questions [PD-010] and subsequent hearings. The examination of these and other matters raised through the course of the examination are reported on in chapters 4 and 5 in this report.

4.1 DEVELOPMENT PERMITTED UNDER PA2008

BACKGROUND

- 4.1.1 The question of whether the whole scheme as put forward by the applicant can be viewed as principal development, as the term is used in the CLG guidance 'Planning Act: associated development for major infrastructure projects' (the Guidance) for determination under the PA2008 was an important matter for the examination. The subject has been one that has particularly engaged WG.
- 4.1.2 At every stage from their RRs of 7 March 2014 [REP-252] up to 4 December 2014 [REP-976], the written representations from WG have questioned whether the DCO as drafted reflects the devolution settlement. In addition, in written representations, WG has expressed a view on what is required for development to be principal development under the PA2008 and which elements of the proposed development should not be so considered.
- 4.1.3 The Panel's initial assessment of the principal issues included "Scope of works proposed as the principal development and extent of any associated development to be determined by Welsh Local Planning Authorities". The Panel's first round of questions, particularly Q1.11 invited legal submissions from the applicant to support the position that all the proposed development is properly described as principal development and from any IP who wanted to argue a contrary view.
- 4.1.4 WG took up this invitation to make legal submissions [REP-561]. After advising that careful consideration of the draft DCO was needed "to ensure the devolution settlement is respected" WG continued:

"In order for the development to be considered to be forming part of a NSIP, it is our view that there must be a sufficient link between the substance and purpose of such development and the "principal"

development" (i.e. the 'core' of the NSIP that being the generating station itself)."

"It is considered that such development must be necessary to enable the operation of the principal development or "project", which involves channelling a head of water through a turbine to generate electricity to distribute on to the national grid. A test that could be applied is whether it would be possible to construct and operate a generating station without the particular element of the works in question. If the element of works in question does not satisfy the above, a further question arises as to whether such development requires devolved consent."

"The preservation of the devolution settlement is extremely important. Paragraph 7.31 of the UK Government's explanatory memorandum to the Infrastructure Planning (Miscellaneous Prescribed Provisions) Regulations 2010 describes the intention that PA2008, and the provision made under it, should preserve the devolution settlement, and discusses how this is to be achieved by ensuring that powers over devolved consents are not relinquished in the absence of the express consent of the appropriate devolved person or body."

- 4.1.5 WG continued: "Therefore, where development does not form part of the NSIP for the purposes of Section 21[sic] of the PA2008, and such development would otherwise require a devolved consent in order to be lawfully carried out, consent for such development is to be sought from the appropriate devolved person or body, and not granted by the DCO."
- 4.1.6 On this basis, WG went on to question the inclusion of a number of elements under Schedule 1 (the works) of the draft DCO. These included the offshore visitor centre, elements of the onshore building relating to visitor and boating facilities, laboratories, boat storage and associated visitor parking, highways and access, pedestrian and cycle routes, beach area, waterfront public realm, internal site roads, vehicle parking facilities, landscaping and boundary treatments and fencing.
- 4.1.7 The applicant provided a detailed response to Q1.11 [REP-517] which included the overall statement that: "TLSB considers that development forms part of the principal development (and therefore is not associated development) if it is physically part of or indistinguishable from the principal development. Similarly development which is integral and without which the principal development could not function is not associated development. Further, essential mitigation or enhancement incorporated by design within the Project forms part of the principal development."
- 4.1.8 Both CCSC and NPTCBC identified in their written representations [REP-828 and REP-750] that they considered that the Project should be delivered as put forward by the applicant. CCSC's view [REP-828] was "that the offshore building in its current and complete form

remains principal development". This was reiterated throughout the examination. NPTCBC [REP-750] stressed broader benefits that would flow from the total scheme and concern lest there be failure to maximise the delivery of all aspects of the potential development opportunities.

Discussion at Issue Specific Hearing

- 4.1.9 The subject was tabled at an ISH on 16 September 2014 and was further discussed at the ISH on 22 October 2014. WG was represented at the ISH held on 16 September. Agenda [HE-19] item 4.1 was headed "Content of Principal Development" and at 4.1(iii) included questions for WG and other IPs on the acceptability of the scope of the principal development in the light of the devolution settlement and other factors.
- 4.1.10 Prior to the hearing WG put their position in writing in the following terms [HE-10]:

"The Welsh Government do not intend making oral representations at the hearings in question. Ultimately, whether the Secretary of State, in light of any recommendation made by PINS, can make provision of a particular character in a DCO is strictly a matter of law, dependent on the provisions set out in statute, and is not a matter for debate at this hearing. The provisions of the 2008 Act set out the powers within which the Secretary of State must operate in making his decision as to whether or not the DCO should be granted. Our position is clear on that, and we have made those points previously. It is therefore for DCLG [sic] (in making their decision) and PINS (in providing their recommendation) to take their own legal advice in terms of the scope of those powers, and to be satisfied that the provision so made is lawful."

- 4.1.11 A representative of WG, Energy (Water and Flood Division) did attend the ISH and responded to matters raised by the Panel. During the hearing WG expressed the following views:
 - That in Wales, the DCO for an NSIP should be in a form that respected the devolution settlement;
 - That some of the aspects described as being part of the scheme should be for local determination on the basis that under the terms of the PA2008 they were not principal development forming part of an NSIP; and
 - That it was for the Panel to come to a decision on which elements of the project should be covered by and secure approval through the mechanism of a DCO.
- 4.1.12 WG's position was subsequently set out in a representation dated 7 October 2014 [REP-822] which included a list of works that were viewed as not forming part of the NSIP within section 31 of the

PA2008. This repeated the list included in the answer given to Q11.1 [REP-561]. Paragraphs 6, 7, and 9 to 11 set out key elements of WG's case.

- 4.1.13 The applicant also responded on 7 October 2014 to matters that had been raised by a number of parties [REP-890]. The response to WG at paragraphs 29.1-3 was that some items are integral to the sea-wall structures and could not be retrofitted, that landscaping and beach areas are part of the overall coherent design and that its position was supported by both local planning authorities in whose area the Project is proposed.
- 4.1.14 In the Updated Agenda for the ISH on 22 October 2014 [HE-40], the Panel, without prejudice to its final recommendation, identified significant potential changes to the draft DCO. These included removal from the scheduled works of various elements that might not be considered to be principal development with the expectation that these would be secured through a Development Consent Obligation, such as a \$106 agreement, and would be subject to planning approval by the local planning authority or authorities.
- 4.1.15 In addition the agenda made reference to "Ancillary Works" with the suggestion that these be listed separately from the principal development. WG was not present at this hearing [HE-47].
- There was detailed discussion of the matters raised in the agenda, particularly the offshore building. The applicant put forward alternative approaches which it considered would be likely to meet the concerns expressed by WG and put forward arguments supporting the size of the proposed offshore building. The applicant's submissions on these matters are at section 20 of the written summary of oral submissions [REP-842] and a TLSB 'Paper of Alternative Drafting' explaining alternative drafting approaches that could be taken to achieve various alternatives was produced on 28 October 2014 [REP-852]. The alternatives were put forward as 'options' for consideration by the Panel; the applicant made clear that it was not itself proposing them. The applicant stressed that for reasons of good design the Project should be delivered as a whole.
- 4.1.17 An iteration of the draft DCO produced by the applicant on the same date, [REP-844] retained references to construction of offshore and onshore buildings within the development that would be authorised but proposed a limit to the height of the offshore building and excluded boating facilities from the onshore building.
- 4.1.18 In addition, responding to questions asked by the Panel at the 22 October ISH, the 28 October 2014 iteration removed most offshore works from the principal works by dividing Part 1 of Schedule 1 into Part 1A and a new Part 1B relating to ancillary and necessary works.

Revisions to the DCO considered in the Examination

- 4.1.19 In a Rule 17 letter dated 31 October 2014 [PD-018], the Panel requested that the applicant undertake public consultation on the "Paper of Alternative Drafting". The letter indicated that: "changes to the DCO as set out in paragraphs 3.1, 4.1 and 5 of that document would be more closely aligned with what is permissible to authorise under the PA2008 in Wales".
- 4.1.20 A further iteration of the draft DCO by the applicant dated 4 November 2014 [REP-864] included further changes but none of these changes had an effect on the approach taken in relation to authorised development.
- 4.1.21 In further recognition of the significance of the devolution settlement and in light of other matters that were under examination relating to mitigation, the Panel determined to consult parties on a draft of the DCO produced by the Panel itself. This, the Panel's consultation draft DCO [PD-020], was issued on 11 November 2014 [PD-020].
- 4.1.22 The Panel's consultation draft DCO contained references to the offshore and onshore buildings within the development to be authorised under Schedule 1, Part 1A but sought to limit the scale of these to that which the Panel considered would be needed as part of delivering the NSIP. In addition, the draft included a medley of drafting points and provided detailed Panel notes outlining issues being queried on the DCO text. The Panel's notes also included reasons for the suggested changes and drew attention to other areas where further revision might be required. The Panel stressed that this draft was issued entirely without prejudice to the Panel's recommendation to the SoS.
- 4.1.23 The Panel's consultation draft did not include all the changes put forward in the representations from WG dated 7 October 2014 [REP-822]. In particular it retained as development to be authorised under Schedule 1, Part 1A some features directly associated with the lagoon wall and aspects of landscaping and mitigation including a waterfront public realm, landscaping and boundary treatments as the Panel accepted the applicant's view that these were mitigation.

Further Representations from Welsh Government

4.1.24 WG representations on both the 4 November 2014 iteration of the draft DCO and the Panel's consultation draft DCO were made on 25 November 2014 [REP-918]. This expressed a view that both the drafts purported to grant development consent in respect of a proportion of works, which could be described as 'amenity development' and that "the DCO cannot lawfully grant development consent in relation to such development".

The applicant's final drafts of the DCO

- 4.1.25 On 25 November 2014, the applicant produced a further and penultimate iteration of the draft DCO [REP-928] which was accompanied by a commentary explaining changes to their 4 November 2014 draft DCO [REP-963] and a commentary [REP-952] providing the applicant's response to the changes put forward in the Panel's consultation draft DCO [PD-020]. Significant changes were made in relation to the offshore and onshore buildings.
- 4.1.26 The 25 November 2014 draft did not include the proposed offshore building but rather made provision for "sufficient foundation areas, pilings and land form within or upon the seawall" within Work No 1a (the western wall of the lagoon) for its later construction. This would enable the integral parts of the project to be consented and built through the DCO to enable the NSIP to operate. However, the principal of building being acceptable on the site and the dimensions of the building to be built upon the seawall, as well as more detailed design, would be left for a planning application under the Town and Country Planning Act 1990. Provision was included for applications for planning permission to be made prior to physical construction of the offshore works and a proposed s106 agreement would ensure that such an application would be made. The applicant observed that operating such an arrangement would depend on inclusion of article 53 proposing extension of the planning jurisdiction of CCSC and NPTCBC to the relevant areas. The reasons for the need for the extension of jurisdiction for this are laid out in chapter 3.
- 4.1.27 The amended description of Work No. 6b (the onshore building) was included as a response to a note in the Panel's consultation draft DCO requesting greater clarity as to what would be encompassed by the description "visitor orientation facilities enabling way finding, exhibition and welfare to be provided to visitors, boat maintenance and storage facilities". It should be noted that provision to construct these elements of the works remained. The applicant's response was to delete that element from the authorised work. The applicant explained that "..to ensure delivery of that part of the Project which comprises leisure uses, provision has again been made in the section 106 development consent obligation with the City and County of Swansea Council".
- 4.1.28 There was a final iteration of the applicant's draft DCO on 4 December 2014 [REP-1002]. However, this made only one very minor change in relation to Schedule 1 and it still contained works which WG had questioned.

Welsh Government's response to the applicant's final draft DCO

4.1.29 Notwithstanding the proceedings at the examination and changes made to the draft DCO in October and November, WG representations of 25 November 2014 [REP-918] and 4 December 2014 [REP-976] echoed the position adopted in early October with the latter stating

that "Part 1A of Schedule 1 to the draft DCO continues to include a proportion of development that is outside the scope of the SoS powers under Section 115 of the 2008 Act". WG's position was more firmly expressed in later representations than at earlier stages of the examination.

- 4.1.30 The 25 November 2014 representation also included the statement that "the development in relation to which the DCO purports to grant consent must be, or form part of, the NSIP itself so as to be within the powers of the Secretary of State and therefore lawful." Particular exception was taken to including in a DCO "what could be described as amenity development" and to the inclusion of ancillary works in Part 1B of the DCO.
- 4.1.31 The 4 December 2014 representation [REP-976] followed a similar line of argument which was expressed as follows:

"As we have previously stated, if (these) aspects of development are considered to be, or form part of the NSIP itself because their purpose is strictly tied to operational matters associated with the effective running of the generating station, then this needs to be clarified in the drafting of the DCO.

"Alternatively, if such development is essentially proposed for leisure or amenity purposes, then we continue to argue that the development is outside the scope of section 115 of PA2008 and should therefore not be included in the DCO. As such, planning permission from the relevant local planning authority should be sought."

4.1.32 WG continued to object to inclusion of landscape and park in the DCO, with the applicant's arguments relating to 'Good Design' rejected because tidal lagoons are excluded from the scope of NPS EN-1 and including them in a DCO would amount to the functions of Welsh planning authorities being supplanted by the SoS. WG's acceptance that a description of development "comprised of provision to enable construction of an offshore building" could remain was subject to detailed amendments to the wording to make it clear that it would not include structures above the ground.

The applicant's final response to Welsh Government

4.1.33 The applicant responded to the 4 December 2014 representation by setting out the individual elements of WG's concerns, alongside the applicant's response. These are items 33 to 43 of the Annex to the Response to Representations made at Deadline VII [REP-1026]. Some of the arguments raised are broad questions of what can be consented by the SoS. For example in item 33, the applicant argues that features required for essential safety and maintenance operations may be permitted by the SoS and there is no reason to preclude the use for example of a jetty for leisure purposes. Item 34 relates to "development comprised of landscape and park" with the applicant arguing, that this is mitigation and an integral part of the NSIP and

that this Project, like "any generating station should take account of its landscape setting".

The Panel's conclusions

- 4.1.34 The words 'principal development' do not appear in the PA2008. The Panel does not consider that there is a clear basis in statute for determining what is and is not principal development under the PA2008 for any particular NSIP. The Panel also note that there is no particular policy guidance for tidal lagoons and that this is the first proposal for a tidal lagoon to reach examination.
- 4.1.35 The Panel are aware that there is guidance on what constitutes associated development under the PA2008, 'Planning Act 2008: associated development applications for major infrastructure'. However, this is guidance that applies to England where its purpose is to set down core principles to help define associated development in decisions to be made by the SoS on a case by case basis.
- 4.1.36 The Panel is also aware of three published decisions made under the PA2008 on generating stations in Wales: Brechfa Forest West, South Hook Combined Heat and Power station and Clocaenog Wind Farm. The DCO for Brechfa Forest West Wind Farm included an electricity sub-station within the principal development. That was based on the facts of the case.
- 4.1.37 Having diligently examined the question of which elements of the Project were to be regarded as principal development, the Panel put forward a consultation draft DCO with an extensive commentary in the form of panel notes [PD-020]. This included certain works as principal development and others as ancillary works, both within the DCO. The panel's judgement of what should be included was not limited to pure functionality. Other elements were included on the basis that they either contributed to ensuring that the scheme was integrated with its surroundings, secured appropriate mitigation or that they were integral elements of structures that formed essential parts of the generating station.
- 4.1.38 Elements that were part of the development of the tidal lagoon as a recreational facility and visitor attraction were not included in the panel's consultation draft of the DCO. However local authority and public support for these elements at the examination was recognised by including provision within the scheme so that they could be built without requiring retrofitting.
- 4.1.39 The Panel notes that in WG's representations of 4 December 2014 [REP-976], it has been accepted in principle that the Schedule 1 Part 1A work could include construction of the lagoon wall with foundations, piling and landform sufficient "to enable construction of an offshore building" and sufficient footprint within the lagoon wall to accommodate the operational and maintenance facilities required for

- the turbines. The offshore building itself would be subject to planning permission being sought from CCSC.
- 4.1.40 WG in representations made in writing toward the close of the examination [REP-822 and REP-918] maintained a position of opposition to inclusion of certain matters within the DCO. This is expressed as a concern that the applicant's DCO, by including various elements such as landscaping that had a bearing on amenity and good design, may be supplanting local planning functions.
- 4.1.41 Changes have been made to the DCO during the course of the examination to meet the intent of the devolution settlement. Further decisions on both the onshore and offshore buildings could become the subject of planning applications to the local planning authorities. Such decisions will affect how the lagoon, if approved as part of a generating station, might develop as a recreational facility and visitor attraction. These changes have been made with the particular purpose of enabling decisions that are primarily of concern to local people to be made by their local representatives.
- 4.1.42 The Panel consulted on a draft DCO [PD-020] raising the question of the inclusion of works and powers and both the applicant and interested parties have responded. Hence, potential changes in the recommended draft DCO have been consulted on and the SoS can take account of these processes in his conclusions on the recommendations.
- 4.1.43 The starting point for the Panel's recommended version of the DCO is the applicant's 4 December 2014 draft [REP-1002] which had taken some account of responses from IPs and the panels consultation draft DCO. The Panel has considered whether elements of the scheme retained within the scope of that DCO should be for decision as part of the NSIP because they have sufficient links with fundamental elements of a tidal energy lagoon. In making an assessment, the Panel have had regard to the detailed responses made by the applicant [REP-1026, pages 12 to 18] to WG's comments of 4 December 2014 [REP-976].
- 4.1.44 The lagoon wall is a fundamental feature for the generation of tidal range energy. The lagoon wall would take the form of a bund and designing it so that it can be used by pedestrians and cyclists is a proper planning response to the opportunity that the structure presents. It would provide access for employees of the generating station and for recreational purposes. Local widening of the structure would provide refuges and provision for later addition without retrofitting of features that could include works of art. Certain facilities such as slipways and hardstanding associated with the lagoon wall would be important boating facilities that would be necessary for operational purposes.
- 4.1.45 Close to the turbine housing structure, the lagoon wall would widen and it is the Panel's view that the dimensions and structure of the wall

should be such as to make provision for the foundations for an offshore building and create sufficient space within the wall footprint to house operational and maintenance facilities for the turbines. The offshore building would not itself be part of the DCO but subject to approval by the relevant planning authorities. It could potentially accommodate both an alternative location for the control rooms for the generating station and a visitor attraction and educational facility for the visitors that the lagoon may attract.

- 4.1.46 The creation of a lagoon is a fundamental feature of this generating station. Landscaping the lagoon margins so that it fits with its surroundings and promotes its value as a nature conservation resource are all features that the Panel consider to be sufficiently related to the lagoon itself and are to be included within the development as either principal development or ancillary works. In addition it is to be noted that certain elements of the proposed works, such as the boundary treatment of the walls to the shore, are promoted as mitigation and for that additional reason are properly regarded as an integral part of the scheme put forward. Similarly elements such as habitats creation of the Landward Ecological Park and the treatment of the seawall faces are essential mitigation for a scheme of this nature to comply with its environmental obligations and can be incorporated [APP-386].
- 4.1.47 The Panel conclude that the draft DCO as put forward by the Panel and appended to this report is in a form that the SoS could properly approve under the terms of the PA2008 subject to his satisfaction on the issues laid out at the end of chapter 8.
- 4.1.48 The assessments of impacts in the remainder of this chapter are on the basis of the recommended project, noting where these differ from the impacts assessed under the ES but sitting within the envelope of the ES. The overall nature of the recommendation version of the project is considered in chapters 7 and 8.

4.2 RELIABLE RENEWABLE ENERGY

4.2.1 The proposed tidal lagoon would generate renewable energy in the form of electricity using the large tidal range (the difference between high and low water) which is a distinguishing feature of Swansea Bay. The installed turbines would have a rated capacity of 240 Megawatts (MW) and generate a minimum 500GWh per year [REP-518]. This figure is higher than the 400GWh put forward in February 2014 which was based on conservative assumptions but the model predicting output has been independently checked and validated and the prediction has been confirmed by potential suppliers of turbines [REP-518]. Variation in output due to storm surges would be less than 3% (higher or lower) on a yearly basis and regular planned and unplanned maintenance and machine outages would amount to no more than 2% of potential output [REP-518].

Planning Act 2008

- 147. By section 160 of the Planning Act 2008: (Emphasis added)
 - 1) A person commits an offence if the person carries out, or causes to be carried out, <u>development</u> for which development consent is required at a time when no development consent is in force in respect of the development.
 - 2) A person guilty of an offence under this section is liable on summary conviction, or on conviction on indictment, to a fine.
- 148. By section 161, Breach of terms of order granting development consent:
 - 1) A person commits an offence if without reasonable excuse the person
 - a) carries out, or causes to be carried out, development in breach of the terms of an order granting development consent, or
 - b) otherwise fails to comply with the terms of an order granting development consent.
 - 2) ...
 - 3) It is a defence for a person charged with an offence under this section to prove that
 - a) the breach or failure to comply occurred only because of an error or omission in the order, and
 - b) a correction notice specifying the correction of the error or omission has been issued under paragraph 2 of Schedule 4.
 - 4) A person guilty of an offence under this section is liable on summary conviction, or on conviction on indictment, to a fine.
- 149. By section 31: (Emphasis added)

Consent under ... ("development consent") is required for development to the extent that the development is or forms part of a nationally significant infrastructure project.

- 150. By section 32, "development" has the same meaning as it has in TCPA 1990. By section 55(1) of the TCPA 1990:
 - 1) Subject to the following provisions of this section, in this Act, except where the context otherwise requires, "development," means the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land...
 - 2) The following operations or uses of land shall not be taken for the purposes of this Act to involve development of the land
 - a) the carrying out for the maintenance, improvement or other alteration of any building of works which
 - i) affect only the interior of the building

- ii) do not materially affect the external appearance of the building, and are not works for making good war damage or works begun after 5th December 1968 for the alteration of a building by providing additional space in it underground; ...
- 151. By section 336(1), "building" includes any structure or erection, and any part of a building, as so defined, but does not include plant or machinery comprised in a building.
- 152. By section 35 of the PA 2008: (Emphasis added)
 - 1) The Secretary of State may give a direction for development to be treated as development for which development consent is required...
 - 2) The Secretary of State may give a direction under subsection (1) only if
 - a) the development is or forms part of
 - i) a project (or proposed project) <u>in the field of</u> energy, transport, water, waste water or waste, or
 - ii) a business or <u>commercial</u> project (or proposed project) of a prescribed description,
 - b) the development will (when completed) be wholly in one or more of the areas specified in subsection (3)...
 - 3) The areas are
 - a) England or waters adjacent to England up to the seaward limits of the territorial sea; ...
 - 4) The Secretary of State may give a direction under subsection (1) only with the consent of the Mayor of London if
 - a) all or part of the development is or will be in Greater London, and
 - b) the development is or forms part of a business or commercial project (or proposed project) of a description prescribed under subsection (2)(a)(ii).
 - 5) ...
- 153. By section 115 of the PA 2008: (Emphasis added)
 - 1) Development consent may be granted for development which is
 - a) development for which development consent is required, or
 - b) associated development ...
 - 2) "Associated development" means development which
 - a) is associated with the development within subsection (1)(a) (or any part of it),
 - b) ...
 - C) is within subsection (3) ...
 - 3) Development is within this subsection if it is to be carried out wholly in one or more of the following areas
 - a) England;
 - b) waters adjacent to England up to the seaward limits of the territorial sea; ...
- 154. By section 120:
 - 3) An order granting development consent may make provision relating to, or to matters ancillary to, the development for which consent is granted...
- 155. By section 153, a development consent order may be changed. See Schedule 6.
- 156. By section 157, Use of buildings in respect of which development consent is granted:

- 1) If development consent is granted for development which includes the erection, extension, alteration or re-erection of a building, the order granting consent may specify the purposes for which the building is authorised to be used.
- 2) If no purpose is so specified, the consent is taken to authorise the use of the building for the purpose <u>for</u> which it is designed.
- 157. So far as relevant, in the Public Bill Committee on the Bill for this Act the Parliamentary Under-Secretary of State for Transport (Jim Fitzpatrick) (Hansard, Public Bill Committee, 13th Sitting, col.505 (January 29, 2008)) said as follows:

Where the development consent order is silent about this matter, it is to be assumed that the building will be used for whatever purpose it was designed. That provision ensures that the IPC can specify, in the terms of a development consent, what a building will be used for and thereby ensure that, subject to the applicant receiving any necessary operational or safety consents from the appropriate regulator, there will be no regulatory gap preventing him from using the building for the purpose for which consent was granted. In response to my right hon. Friend, the nature or purpose of a building will be determined and defined by the application. In response to the hon. Lady, a building can be used for the purpose for which it was intended or designed, but not only for that purpose. I must confess that on reading clause 129, I consulted my officials because it is the last clause that I am responsible for in this sitting. I sensed that this was the elephant trap because it did not look very convincing to me. I am assured very strongly that this provision is for legal clarity in respect of an application that is submitted for consent. It will ensure that there is no gap at the end of the application and that, as I have explained, the building can be used for the purpose for which it was designed or for that which is stated in the application ...

If the application does not say that it will be an extraction room, but it is clearly an extraction room because of the nature of the equipment that is in it, the fact that the application is silent on that issue will give some certainty to those who are watching the construction as to the nature of the building.

The MP for Beckenham, Mrs Lait, went on to ask:

So that I have got it on the record, <u>if a building subsequently becomes redundant, can somebody apply for it to be used for another purpose</u>? I would like just a quick yes or no.

To which Jim Fitzpatrick replied:

The answer is a clear <u>yes</u>, as I tried to explain.

- 158. By section 235(1): ""building" has the meaning given by section 336(1) of TCPA 1990".
- 159. By Schedule 6, provision is made for changes to development consent orders. Paragraph 2 provides for a change which is not material. Paragraph 3 provides for a change to a development consent order.

Case Law

160. In *Trump International Golf Club Scotland Ltd v Scottish Ministers* [2016] 1 WLR 85, the Supreme Court considered a wind farm consent under the Electricity Act 1989 which also made it an offence to breach the consent terms. The Court considered the terms of a condition of the consent that were said to result in the consent being invalid. Rejecting that claim, the Court interpreted the condition as

including an obligation that the construction of the development be in accord with the design statement. In doing so, it held:

- 33. Whether words are to be implied into a document depends on the interpretation of the words which the author or authors have used. The first question therefore is how to interpret the express words, in this case the section 36 consent... Differences in the nature of documents will influence the extent to which the court may look at the factual background to assist interpretation. Thus third parties may have an interest in a public document, such as a planning permission or a consent under section 36 of the 1989 Act, in contrast with many contracts. As a result, the shared knowledge of the applicant for permission and the drafter of the condition does not have the relevance to the process of interpretation that the shared knowledge of parties to a contract, in which there may be no third party interest, has. There is only limited scope for the use of extrinsic material in the interpretation of a public document, such as a planning permission or a section 36 consent... It is also relevant to the process of interpretation that a failure to comply with a condition in a public law consent may give rise to criminal liability. In section 36(6) of the 1989 Act the construction of a generating station otherwise than in accordance with the consent is a criminal offence. This calls for clarity and precision in the drafting of conditions...
- 34. When the court is concerned with the interpretation of words in a condition in a public document such as a section 36 consent, it asks itself what a reasonable reader would understand the words to mean when reading the condition in the context of the other conditions and of the consent as a whole. This is an objective exercise in which the court will have regard to the natural and ordinary meaning of the relevant words, the overall purpose of the consent, any other conditions which cast light on the purpose of the relevant words, and common sense. Whether the court may also look at other documents that are connected with the application for the consent or are referred to in the consent will depend on the circumstances of the case, in particular the wording of the document that it is interpreting. Other documents may be relevant if they are incorporated into the consent by reference (as in condition 7 set out in para 38 below) or there is an ambiguity in the consent, which can be resolved, for example, by considering the application for consent...

APPENDIX G

EXTRACT FROM SHORTER OXFORD DICTIONARY, 6TH EDITION

161. The Shorter Oxford English Dictionary, 6th Edition, defines the ordinary meaning of "part" to include:

(As a noun) Any of the manufactured objects that are assembled together to make a machine or instrument, especially a motor vehicle; a component ...

An <u>essential</u> or integral <u>constituent</u> ...

Shorter Oxford English Dictionary

ON HISTORICAL PRINCIPLES

Sixth edition

VOLUME 2 · N-Z



parsimony / passimani/ noun, L15:

ORIGIN Latin parsimonia, parci-, from pars- pa, ppl stem of parcere refrain, spare: see -MONY.]

The careful or sparing use of money or other material resources. 115. b Stinginess, niggardliness, M16.

2 fig. Economy in the use of abstract things; spec. in PSYCH-

ology, the principle that organisms tend towards economy of action in learning or in fulfilling their needs M17. >b In full law of parsimony. = Occam's razor. M19.

parsley /'pa:sli/ noun.

- Oracin Old English petersilie, corresp. to Middle Dutch petersilie (mod.-selle), Old High German petersilia (German Petersilie), and Old French peresil (mod. persil), from Proto-Romance var. of Latin petroselinium from Greek petroselinon, from petra rock + selinon
- parsiey.] I An umbelliferous plant, Petroselinum crispum, much grown for its finely divided, usu. curled, aromatic leaves, which are used to flavour or garnish dishes; the leaves of this plant. Also, any other plant of the genus Petroselinum.
- 2 With specifying words: any of various umbelliferous plants related to parsley or resembling it in their finely divided leaves, F16.

cow parsley, fool's parsley, hedge parsley, milk parsley, stone parsley, etc.

- parstey, etc.

 COMB: parsley bed a bed of parsley, esp, as a supposed place
 where babies are born (cf. COOSEBERRY bush); parsley
 breakstone = PARSLEY PIERT; parsley caterpillar the larva of
 the anise swallowtail butterfly, Papillo zelicion, which is a pest of
 umbelliferous plants in western N. America; parsley fern a fern

 """. umbelliterous plants in western N. America; parsley fern a fern of mountain screes, Cryptogramma cripa, with finely divided fronds like parsley leaves; parsley frog a western European spadefoot toad, Pelodyres punctatus, with green spots on its back; parsley-leaved elder a cultivated variety of elder with laciniate leaves, Sambiaus nigra 'laciniata'; parsley sauce a white sauce flavoured with parsley; parsleyworm the larva of the black swallowtail butterfly, Papillo polyxenes outerius, which is a pest of umbelliferous plants in eastern N. America.

 parsleyed adjective (of food) cooked or served with parsley \$20.

parsley piert /pasli 'piet/ noun. L16.
[ORIGIN App. popular alt. of French percepierre lit. 'pierce-stone' (cf. breakstone s.v. Break-), infl. by Parsley. See also Percepier.] Either of two dwarf plants of the rose family, Aphanes arvensis and A inexspectata, of dry or stony ground, cornfields, etc., with fan-shaped trifid leaves and minute green axillary flowers. Formerly also (by confusion), the knawel, Scleranthus annuus,

parsnip /'pg:snip/ noun. LME. [ORIGIN Old French pasnaie (mod. panais), with assim. to NEEP: cf. TURNIP...

- 1 An umbelliferous plant, Pastinaca sativa, with pinnate leaves and yellow flowers, grown for its pale yellow sweet fleshy root; this root, eaten as a vegetable, LME, before you can say parsnips collog, very rapidly.
- 2 With specifying word: any of various umbellifers allied to or resembling the common parsnip. M16. cow parsnip, meadow parsnip, water-parsnip, wild parsnip, etc.
- parson /'pais(a)n/ noun. Also tperson. See also PERSON noun. ME.

[ORIGIN Law French parsone var. of Old French persone: see PERSON

- ► I 1 ECCLESIASTICAL (now hist.). A holder of a parochial bene fice in full possession of its rights and dues, ME.
- parson imparsones.
 2 gen. Any beneficed member of the clergy, a rector, a vicar; colloq any (esp. Protestant) member of the clergy.

3 fig. A signpost. Chiefly dial. 118,

4 [From the black dress of a clergyman.] a An animal or bird which is black or partly black in colour, as a black lamb, a black rabbit, a puffin, or a cormorant. E19. *b spec. In full parson-bird. = TUI. M19.

► †II See PERSON noun.

- fII See PERSON noun.

 COMB.: parson-bird: see sense 4b above; parson-in-the-pulpit dial. [from the shape of the flowers] cuckoo pint, Arum maculatum; Parson Jack Russell (terrier) Parson Russell (terrier) (an animal of) a breed of fox terrier, usu, white with black or brown markings, similar to the smaller Jack Russell; parson's freehold hist the life tenure of a parson in his benefice; parson's nose the fatty extremity of a fowl's rump; parson's table 05 a simple square-topped wooden table; parson's-week a holiday period (usu, of 13 days) calculated to include only one Sunday.
- Sunday.

 parsondom noun (joc) = PARSONRY E19. parsoness noun (colloq. now nire or obsolete) the write of a parson 118. parsonhood noun the state or condition of a parson 118. parsonic odjective of, pertaining to, or characteristic of a parson or parsons mis. par'sonical adjective = PARSONIC 117. par'sonically odverb mis. parsoning noun acting as or doing the work of a parson or parson E19. parsonly adjective (rare or obsolet) belonging to or belitting a parson or parsons 118. parsonry noun parsons collectively 119.

- parsonage / pots(a)nid3/ noun, LME, [ORIGIN Anglo-Norman & Old French personage from medieval Latin personaticum, from Latin persona: see PARSON, PERSON houn, -AGE.]
- hist The benefice or living of a parson. LME.
 The church-house provided for a parson, Later also, the house of any (esp. beneficed) member of the clergy. Also parsonage-house. L15.

3 *scorтisн ніsтоку.* The proportion of a parish tithe formerly due to a parson. Also parsonage teinds, 116.

Parsonian /po: 'səuntən/ adjective. M20.
[ORIGIN from Talcott Parsons (1902–79), Amer. sociologist + -IAN.] sociology. Of, pertaining to, or designating Parsons' theory ies of action and change within a society or culture, or his structural-functional method of analysing a social system.

Parsonianism noun M20

pars pro toto /pa:z prou 'toutou/ noun phr. E17.

A part taken as representative of the whole. Freq. attrib.

part /pa:t/ noun & adverb. OE.

[ORIGIN Orig. from Latin part., pars; in Middle English reinforced by Old French & mod. French part (= Provençal part., Spanish, Italian parte) from Latin.]

• A noun. I Portion or division of a whole.

= part of speech below. OE-M17

2 A quantity which together with others makes up a whole (whether actually separate from the rest or not); an amount, but not all, of a thing or a number of things: a portion. When denoting a number of items also treated as pl. Also without article. oe. **b** A division of a book usu, larger than a chapter; spec. each of the portions of a book issued at intervals in paper covers with a view to being subsequently bound together. Also, a division of a poem or other literary or musical work; an episode of a television or radio serial. LME. PC A portion of a human or animal body; spec. in pl., the genitals (freq. with specifying word). LME, >d Any of the manufactured objects that are assembled together to make a machine or instrument, esp a motor vehicle; a component 119.

Instrument, esp. a motor vehicle; a component 119.

Robert Johnson The greater part of his men were idle. J. Wans Pill do part of it myself. Anne Stevenson Erect, steaming chimneys. / part of the steel works. W. Raffer The sum of his works is greater than its . parts b Gramophone Part Two—a massive setting of the Te Deum—requires four soloists. G. Auten All parts which are seldom . exercised tend to atrophy. S. A. Grau The young girls giggled and felt a hot touch in their parts. d. G. Williamson, S. C. transformers . have no moving parts. Scientific American Industry mass-produces parts in great variety. Nature It was built entirely from used parts.

c natural parts, private parts, privy parts, secret parts, shameful parts, etc.

- 3 (With numeral.) Any of a number of equal portions into which a thing is or may be divided; an exact divisor, a submultiple; spec. (a) orch, with preceding ordinal numeral, denoting the number of equal portions as would make up a whole; (b) with preceding cardinal numeral, denoting the proportionate division of a whole, the remainder being specified or contextually implied. ME. *| b With preceding cardinal numeral, expr. multiplication: times, LME-E17.
- P. HEYUN Retaining a third part of the profits to himself.
 L. Strachey He was one part blackguard... and three parts buffoon R. B. Parker I put five parts of vodka... into a pitcher.

eighth part, fifth part, twelfth part, etc.

- ticular, a respect, Mn6-E18. >b An essential or integral constituent. Also without article. Mn8.
- **b.F.A. KEMBLE** That formed no part of our discussion. J. B. MOZLEY Affection is part of insight. G. VIDAL He felt himself to be a part of something large and opulent.
- †5 A particle of matter E18-E19.
- ► II Allotted portion, share.

 6 A portion of something that is allotted or belongs to a articular person; a share; (without article) involvement, interest, concern, MF.
 - S. Dobell Death can have no part in Beauty
- 7 a A person's share in some action; what one has to do; a person's function, business, or duty; a function per-formed by a thing, LME. * b A character sustained or assumed or feigned by a person, esp. for a special purpose; HEATRICAL a character assigned to or represented by an actor in a play, etc.; the words assigned to or spoken by an actor in such a character; a written or printed copy of these. Freq. in play a part below. LME.
- a A. Inollofe Was it not a brother's part to go to a sister in affliction? b J. Gay The man of ... simple heart Thro' life disdains a double part. P. Scorr One day at rehearsals ... I had to speak her part.
- 8 Music. The sequence of notes to be sung by a particular voice or played by a particular instrument in music for two or more performers; the voice or instrument itself; a written or printed copy of this for the use of a particular performer, E16.

Crescendo Many drummers ... never see a drum part.

- †9 A piece of conduct, an act. Usu, with qualification expr.
- praise or blame, mis-EiB.

 10 A personal quality or attribute, esp. of an intellectual kind; an ability. Usu. in pl. mis.
- LO MACAULAY Some of them were indeed ... men of parts.
- ► III Region; side.

- 11 ja A party, a body of adherents; a faction. ME-L16. >b A side in a contract, contest, question, or any relation of opposite people or groups of people, LME.
- **b** 5. LEACOCK Are they degenerate enough to bring an action ... indicting the express company as a party of the second part?
- 12 ln pl. A portion of a country or of the world; a region,

R. Hill Do you come from these parts?

†13 A (physical) side; a direction in space. LME-L18.

T. Hutchinson [Norwich] is on every part walled in.

► IV [from the verb.] Parting, †14 Parting, leave-taking rare. Only in £17.

15 = PARTING NOUN 2b. US. L19.

R. MACDONALD The part in her hair was white and straight

- R. MACDONALD The part in her hair was white and straight,

 PHRASES: act a part: see BEAR web': for my part art or part: see ART noun', bear a part: see BEAR web': for my part etc., as regards my etc. share in the matter; as far as I etc. am concerned. for the most part: see MOST adjective, have no part nor lot in, have neither part nor lot in: see to noun. In good part favourably, without offence; chiefly in take in good part in ill part unfavourably, with offence; chiefly in take in ill part integration by parts MAII. Integration using the formula in(Adylaylak, etw In(Adylaylak, where u and v are functions of the same variable x. look the part have the appearance befitting a particular character in a play etc. MANIN coll parts. In the part of, for my part etc. = on the part of below, on the other part of, as regards (a person), as far as (a specified person) is concerned; (b) (of behaviour) proceeding from (**specified person) or party), part and parcel an essential part of, part of speech each of the several categories to which words are assigned in accordance with their grammatical and semantic functions (in English usually reckoned as noun, adjective, pronoun, verb, adverb, preposition, conjunction, and interjection), play a part (a) participate (in, have an assigned or expected function (in, play the part of represent the character of in a play etc. principal parts: see PRINCIPAL adjective, quantal part: see QUANTAL 1. Spare part: see SPARE adjective, standing part: see SPARE adjective, take part (a) have a share in or in an activity, participate (in); (b) take part with, side with, range oneself on the side of, take the part of support, back up, (a contestant), the more part: see MORE adjective au top one's part: see to rever.

 B adverb. In part, partly, to some extent. 115.
- ▶ B adverb. In part, partly, to some extent. 115.

J. TRAPP The ship that is part in the water, and part in the mud. W. MOTHERWELL I watched those cold part-opened lips. Mind The culture-hero has a vague complex status, part man, part demi-

god

COMM: part-book a book containing one part for a number of parts printed separately) of a harmonized musical composition; part-bred (of a horse) having an unspecified but authenticated proportion of pure-bred stock in its ancestry; part-exchange noun & verb (a) noun a transaction in which the owner of an article exchanges it for another one (usu. new) and pays a sum of money to cover the difference between the value of the two; (b) verb trons, exchange in this way; part-load a load that is carried as part of a larger load; part-own verb trons, own jointly with another or others; part-owner a person who owns something jointly with another or others; part-payment payment in part; part-playing playing of music in parts; part-inging singing in parts; part-song a song for three or more voice-parts, often without accompaniment, in simple harmony (not with the parts independent as in the glee, or contrapuntally treated as in the madrigal); part-time odjective & odverb (employed, occurring, hours in a week; part-time a part-time worker, student, etc.; part-work odjective & noun (a) odjective designating a system of part-time work; (b) noun a book etc. published in parts; part-wirking composition of music in parts; the combination of parts in musical composition.

part /pa:t/ verb. Pa. pple parted, (obsolete exc. HERALDRY) part.

IORIGIN Old French & mod, French partir from Proto-Romance from

- Latin partire partiri, from part: see PART noun & adverb.]

 ► I 1 verb trans. a Divide into parts (by physical separation, by assigning boundaries, or merely in thought); break, sever. Now rare, ME, >b Divide (the hair) along a parting with a comb etc. E17. >c NAUTICAL Break, or allow the breaking of, (a rope, cable, etc.) so as to come loose from an anchor, mooring, etc. M18.
- a AV Lev. 2:6 Thou shalt part it in pieces. b W. Boyn His pale brown hair was cut short and parted neatly in the middle
- 2 verb trans. Make a separation between (two or more persons or things); separate (one) from another; keep separate (from), form a boundary between; techn. separate (gold and silver) from each other by means of an acid. ME.

b Break up (a gathering), rare, LME.

- J. Howell A fool and his money is soon parted. C. Kingsley The women shrieked to their lovers to part the combatants. J. R. GREEN The peninsula which parts the Baltic from the North-ern seas. W. MARCH Ah odd, hesitant smile that parted her lips.
- 3 verb intrans. Become or be separated or detached from; come off. Also, proceed from rare. ME.

Pope Ev'n thought meets thought, ere from the lips it part

4 verb intrans. (Of two or more persons or things) go away from each other, separate; (of one) depart, ME

T. GRAY The curfew tolls the knell of parting day, B. MONTEOMERY We parted good friends, B. NEE Do you remember the day, we parted.

5 a verb intrans. Take one's leave; set out; (usu. with hence or other qualification) die. arch. ME. *|b verb trans. Depart from, leave. E16-E19.

H. F. CARY Agect and poor he parted thence.

6 verb intrans. Undergo division; break in two or in pieces.

Uses in reflex his lips parted ... but he stopped the words..., Moreoco As the clouds were parting, small puddles ... were being rouched by the ... sun.

7 verb intrans. Make or cause separation, division, or dis-Linction orth, E17.

AV Prov. 18:18 The lot causeth contentions to cease, and parteth betweene the mighty.

8 verb trans. Give up, part with. dial. E19. >b verb intrans. Give or pay money. slang. Also (Austral. & NZ colloq.) foll. by up.

b P. C. Woodhouse He has the stuff in sackfuls, but he hates to

▶ II 9 verb trans. Divide among a number of recipients (foll. by between); apportion; share (out, with). Now arch.,

110 verb intrans. Make division into shares; give, take, or have a share; participate, partake. ME-L17. †11 verbiruns. Give a part of; give away, bestow. LME-E16.

HI 12 verb trans. Side with, take the side of rare.

HI 12 Verb trans. Side with, take the side of the MIT-EIS.

MIT-EIS.

PHRASES, & WITH ADVERDS & PREPOSITIONS IN SPECIALIZED SENSES: part brass rags: see BRASS adjective. part company break an association or relationship (with), part fair, see PAR adverb, part from (a) go away from, leave; (b) (now rare) = part with (a), part hence see sense 5a above. part off separate (a piece) from a block in wood or metal turning part with (a) case to keep possession of, give up; (of a body or substance) give off (heat, a constituent part), (b) (now rare) = part from (a) above.

Partaga/po:'to:ga/ noun, Also p-, M19. [origin Unknown.] (Proprietary name for) a Havana cigar.

partage/partatz/noun, Pl. pronounced same, LME.

[ORIGIN French, from partir PART verb: see -AGE.]
A part, a portion, a share. LME.

2 The action of dividing something; division, partition.

- NOTE Formerly fully naturalized.

partake/po:'teik/verb. Pa. t. -took /-'tok/; pa. pple -taken -- Luik(a)n/, M16.
[ORIGIN Back-form, from Partaker, Partaking,]

► I verb trans. †1 Give a part of (a thing) to another; share with impart; make known, M16-E17.

12 Make (a person) a sharer of information or news; inform of M-116.

3 Take a part or share in, participate in. 116. * | b Share in (information, news), be informed of 116-M17. *C Consume (a meal); eat, drink. Now rare or obsolete. E17.

A. W. Kriglake Adventurers who were willing to partake his fortunes. A. E. Housman It partakes the solidity of its indestructible foundations, the sloth of man. ► II verb intrans. 4 Take a part or share in an action or con-

dition, have a portion or lot in common with others. Cf. PARTICIPATE 4. (Foll. by in, of a thing.) U.G. > b Receive or get a part or portion of something, esp. food or drink: eat, drink. Freq. foll. by of. E17.

Notare Leptons . do not partake in the strong interactions. L. Gondon Elliot with a solitary who yet sawit as his dury to partake of the world. b J. P. SMITH Chris could not touch anything, but the widow partock with ... relish E. BOWEN Vast meals were spread and partaken of. Jo GRIMONO It was customary to partake of a high tea.

5 Have some of the qualities or characteristics of a person of thing; possess a certain amount of a quality or attribute. Formerly also, have an admixture of a sub-stance. (Chiefly & now only foll, by of) 116.

P. KAMANAGH His farm partook of some of the qualities of a Louth farm.

16 Take part with a person, take sides. Only in 116.

**partakable adjective †(a) capable of partaking; (b) rare able to be partaken of 1417.

partaker/po:'teika/noun. Also (earlier) †part taker. LME. [OMGIN from PART noun + TAKER, after Latin particips.]

1. A person who takes a part or share, a participator, a sharer (Foll law of in Law).

sharer (Foll. by of, in.) LME.

H. Binning Let be a spirit who is a partaker of a divine nature D. H. Lyweisece She was . . an onlooker, whilst Ursula was a narraba.

12 A person who takes another's part or side; a supporter.

partaking /pa: terkin/ noun. LME. ORIGIN from PART noun + TAKING noun, after late Latin puricipation.] PARTICIPATION.] 1 Sharing participation the.

12 The action or an act of taking sides in a dispute or contest. M16-M17.

partan /'past(a)n/ noun, Scot, & N. English, LME. | ORIGIN App. Celtic (Gaelic, Manx partan, Irish partón, partán), perh.
ult. from Old Irish partaing red.|
1 A crab; esp. the edible crab, Cancer pagurus, LME.

2 An ugly or bad-tempered person. Lis

parted /'posted/adjective'. LME. [ORIGIN from PART verb + -ED1.]

1 to Variegated, pied. LME-E17. >b Chiefly HERALDRY. = PARTY adjective 2. LME.

2 That has parted or been parted; divided; separated, 115. b Departed, gone away; spec. dead. with M16.

parted / partid/ adjective³, E17. [ORIGIN from PART noun+-ED³.]

†1 Having abilities or talents of a specified kind; talented, accomplished. Only in 17.

2 Given a dramatic part or character, rare exc. in overparted, E17.

Parter / posts/noun', LME.
[ORIGIN from PART Verb+-ER'.]
A person who or thing which parts something, a divider, a separator.

parter/'pa:ta/noun2. M20.

[OBIGIN from PART 10681+-ER³.]
Something having a specified number of parts, spec. a radio or television production in a specified number of episodes. Only as 2nd elem. of comb. four-parter, two-parter, etc.

parterre /po:'te:/ noun. E17.
[ORIGIN French, use as noun of parterre on or along the ground.] 1 A level space in a garden occupied by an ornamental arrangement of flower beds, £17.

2 A level space on which a house or village stands. 117.
3 The part of the ground-floor of the auditorium of a theatre behind the orchestra; US the part beneath the galleries; the occupants of this. E18.

parthenian /po: '0i:man/ adjective, rare, E17.
[ORIGIN from Greek parthenios, formed as PARTHENO-: see -IAN.]
Of or pertaining to a virgin.

parthenic /-'0sn-/ adjective (rore) [Greek parthenikos] = PARTHENIAN; fig. unviolated; M19.

partheno-/'pa:0mao/combining form.

[ORIGIN from Greek parthenss virgin; see -o-.] Chiefly MODON, Forming nouns (and derived adjectives & adverbs) denoting an absence of fertilization or conjugain reproduction, as parthenocarpy, parthenogenesis, etc.

 parthenocarpy / pα:θmako:pi/ noun. E20.

 [ORIGIN German Purthenocarpie, formed as PARTHENO- + Greek kurpos fruit + γ².]
 BOTANY. The development of a fruit without prior fertiliza-

tion. m partheno'carpic odjective (of a fruit) produced without prior fertilization 120. partheno'carpically odverb M20.

parthenogenesis / po:@no:d3enisis/noun. M19.
[onicin from Partheno + - GENESIS.]

wotoov. Reproduction from a gamete without fertilization, esp. as a normal process in invertebrates and lower plants. Formerly also, asexual reproduction, as by fission or budding.

'parthenogen noun (a) a parthenogenone: (b) a parthenogenetic individual: M20. parthenoge netic adjective pertaining to, of the nature of, or characterized by parthenogenesis; reproducing by parthenogenesis; M19. parthenoge netically adverb in a par-thenogenetic manner, in the way of or by means of partheno-genesis; U2, parthenogenic adjective (we) parthenogenetic U29. parthenogenone noun an organism of parthenogenetic origin, with an become noun an organism of parthenogenetic origin, with only one parent M20.

Parthenopean /, po:0mo/pi:on/adjective. M17.
[ORIGIN from Italian Partenopea, from Latin Parthenopeius, from Parthenope Naples: see -AN.]

 NEAPOLITAN adjective, spec. (hist.) designating the short-lived republic established in Naples by French revolutionary forces in 1799.

parthenospore /'pa:0ino,spo:/ noun. 119.

[ORIGIN from PARTHENO-+ SPORE.]
BOTAIN. A thick-walled spore resembling a zygospore, but produced without conjugation by certain primitive algae and fungi

parthenote / pa:0mout/ noun, M20,

incapable of developing beyond the early embryonic

Parthian / pa:9mm/ noun & adjective. ME.

[ORIGIN from Parthia (see below) + -AN.]

A noun. 1 A native or inhabitant of Parthia, an ancient kingdom in the north-east of present-day Iran. ME.

2 The Iranian language or script of the Parthians. M20

▶ B adjective. 1 Of or pertaining to Parthia or the Parthians, us.

2 [After the custom of Parthian horsemen of firing missiles backward while in real or pretended retreat.] Designating a glance.

remark, etc., delivered by a person at the moment of departure. Cf. PARTING shot, up.

C. Hare And with this Parthian shot the historian withdrew.

parti (pl. same)/ noun. L18.
[Orugin French = choice, formed as PARTY adjective. Cf. PARTIE.] A person (esp. a man) considered in terms of eligibility for marriage on grounds of wealth, social status, etc.

parti-/pa:ti/combining form. Now rare. E16. [ORIGIN from PARTI(COLOURED.]

1 Particoloured, as parti-coat.
2 Partly in one way and partly in another, diversely, as parti-decorated.

Partial / pa:ʃ(ə)l/ adjective & noun. LME.
[ОВІСІN Old French partial (mod. partial in the senses of branch I, partial in those of branch II) from late Latin partialis, from Latin part-OUT PART HOUR: See -IAL. A udjective I 1 a Inclined beforehand to favour one

party in a cause, or one side of a question, more than the other, prejudiced, biased. Opp. IMPARTIAL 1. LME. 16 Favouring a particular person or thing excessively, favourably disposed. Foll. by to obsolete exc. as passing into other senses. us. 1c Foll. by to having a liking for, fond of, (esp. something inanimate), colloq. u17.

a S. Johnson The duty of criticism is neither to depreciate nor dignify by partial representations. G. M. Tetveryaw He proceeded to reply with a feeble and partial argument. b). Gw By partial fondness shown, Like you, we doat upon our own. c.C. McCullers Mick was very partial to hot chocolate.

➤ II 2 Pertaining to or involving a part, not the whole; constituting only a part; incomplete. LME. >b Constituent, component. LIS. >c Particular, individual, personal, L15-L16.

D. LOOSE After the weekend's partial thaw, the weather has turned bitterly cold again.

D. LOOCE After the weekend's partial thaw, the weather has timed bitterly cold again.

3 ASTRONOMY. Of an eclipse: in which only part of the disc of the eclipsed object is covered or darkened. Fis.

5 SPECIAL COLLOCATIONS: partial counsel stors law (now hist.) advice or communication to any of the parties in a cause which excluded the party giving it from being a wimess in that cause; purge of partial counsel see Purge veb 4, partial denture: that replaces some but not all of a person's natural teeth, partial derivative mam, a derivative of a function of two or more variables with respect to one of the variables, the other(s) being treated as constant, partial differentiation mam, the process of obtaining a partial derivative, partial dislocation consumments of a dislocation in which the displacement is not an integral multiple of the lattice spacing (Shockusy partial dislocation), partial fraction mam, each of two or more simpler fractions as the sum of which a compound fraction can be expressed, partial involucre some the involucte of a partial umbel, partial ordering mam, a transitive antisymmetric relation among the elements of a set, which does not necessarily apply to each pair of elements, partial pressure the pressure that would be exerted by a constituent gas of a mixture if it alone occupied the space, partial product mam, (a) the product of one term of a multiplicand and one term of its multiplic, (b) the product of the first n terms of a series, where n is a finite integer (including 1), partial sum mam, the sum of the first n terms of a series, partial tone = sense B.1 below, partial umbel: see umme. 1, partial valency onemen (now hist.) a partially unsatisfied valency formerly attributed to some atoms in unsaturated compounds to account for the addition reactions of olefins and the stability of the benzen ering, partial verdict a verdict finding a person guilty of part of a charge.

> B noun. 1 Acoustics, Each of the simple or sinusoidal components of a complex musical sound, 119.

ponents of a complex musical sound, 119.

2. CRYSTALLOGRAPHY. A partial dislocation. M20.

2 CHYDALLOGARTH, IT PARTIALS ASSOCIATED THE PARTIAL SHOCKEY PORTION.
SHOCKLEY PORTION.
(a) (the holding of) a partial theory or view, which does not take into account all the facts; (b) mission (ure) particularism: Mile. Partialist noun (a) a partial person; (b) a person who holds a partial theory or view; (c) mission (ure) a partial theory or view; (d) mission (ure) a partial theory or view.

partial /'po:ʃ(o)l/ verb trans. Infl. -ll-. E20.
[ORIGIN from PARTIAL adjective & noun.]
Foll, by out: eliminate or remove the influence of (a factor or variable) during statistical analysis when considering the relationship between other variables.

partialise verb var. of PARTIALIZE.

 The quality or character in a person of being partial; prejudice, bias, unfairness; an instance of this. LME. Fondness; a predilection. u6.

A. FRANCE A personal view, with all the partiality that that implies, **b** N. Annan He developed a partiality for dried figs.

†2 Party-spirit, rivalry; factiousness, t15-M18. →b A party, a faction M16-E17.

Partialize /ˈpɑːʃ(ɔ)lʌrz/verb. Also -ise. L16.
[ORIGIN French partialiser, from partial partial adjective & noun: see -ize.]

1 verb trans. Make partial or one-sided; bias 116.

†2 verb intrans. Favour one side unduly or unjustly. 116-M17. 3 verb trans. Make partial as opp. to universal, 119

a cat, α: arm, ε bed, ε: her, τ sit, i cosy, i: see, n hot, ε: saw, λ run, α put, u: too, ε ago, λτ my, αυ how, α day, ευ no, ε: hair, ιε near, ει boy, υε poor, λτε tire, ασε sour

Span-new /'spannju:/ adjective, Now Scot. & dial. ME.
[ORIGIN Old Norse span-nyr, from spann chip + nýr new. Cf. spander-new, Spang adverb, spick and Span.] Completely new

spanspek / spanspek/ noun. S. Afr. 119. [ORIGIN Afrikaans.] = CANTALOUPE.

Spansule /'spansju://noun. M20.

TORIGIN from SPAN noun' + CAP)SILLE noun. PHARMACOLOGY. (Proprietary name for) a capsule that when swallowed releases a drug steadily for several hours, or releases several drugs sequentially.

spanwise /'spanwarz/ odjective, M20.
[ORIGIN from SPAN noun1 + -WISE.]

AERODYNAMICS. Following the direction of the span of a wing or other aerofoil

Oracin Old Norse sperra, or aphet, from Old French sparre (mod. epar(e)) or its Germanic source (of unknown origin), repr. by Middle Low German, Middle Dutch sparre (butch sparr), Old High German sparre (German Sparren), Old Norse sparri.]

1 A stout pole or piece of timber, esp. (NAUTICAL) a pole (now of any material) used as a mast, yard, boom, etc. ME.

A rafter or beam in a roof. Now dial. ME.
 A wooden bar for fastening a door etc.; a crossbar or rail

of a gate; a rung. Now Scot. 116.

The main longitudinal beam of an aeroplane wing. M19. COMD.: spar buoy: made of a spar with one end moored so that the other stands up; spar deck the light upper deck of a vessel; spar tree rowsenv a tree or other tall structure to which cables are attached for hauling logs.

spar/spa:/noun2.LME ORIGIN from SPAR verb1.

A thrust, Only in tme.
 A boxing match, sp. a non-aggressive one for practice or exhibition; a sparring movement, £19.
 A cockfight, M19.

4 transf. An argument, a dispute. M19.

- comb.: sparmate US a sparring partner.

SPAT /spa:/ noun³, 116. [ORIGIN Middle Low German, rel. to base of spar-stone, Cf. spat noun³, spath.]

MINERALOGY. 1 Any of various crystalline transparent or

translucent minerals, usu, more or less lustrous and readily cleavable. 116.

Derbyshire spar, feldspar, fluorspar, Iceland spar, pearl spar, tabular spar, etc.

2 A fragment or particle of spar; rare an ornament made of spar. M19.

spar/spar/ noun4. dial. Also spear. M18. [ORIGIN Unknown.]

A pointed and doubled rod for securing thatch.

par/spo:/verb1.Infl.-rr-

ipal / spot/verb'. Infl.-rr-.
longin Old English sperman, spyrran, corresp. to Old Norse sperrask
kitckout, of unknown origin.]

1 verb intrans. Dart, spring; strike or thrust rapidly, on-lme.
2 verb intrans. Of a cock: fight with the feet or spurs. In6.
b verb intrans. Make (a cock) fight in this way, ID7.
3 verb intrans. Hngage in argument, dispute, ID7.
4 verb intrans. Make the movements of boxing without landing heavy blows how in this way as practice or train-

landing heavy blows; box in this way as practice or training, M18

sparring partner (a) a boxer employed to spar with another as training; (b) a person with whom one enjoys arguing.

Par /spa:/verb² trans. orch, Infl. -rr- ME.
[ORIGIN Middle Dutch, Old High German sperren, ult. from Germanic base of span noun¹. Cf. spean verb¹.]

Fasten (a door or gate) with a bar or bolt, ME. Close: fasten: secure, ME-E18.

3 Confine or imprison in a place, ME-LIG.

4 Shut out or in, LME-M16.

par/spa:/verb3 trans. Infl. -rr-, M17.

[Origin from spar noun'.]

1 Provide, make, or close in (a gate, roof, etc.) with a spar or spars, M17.

Naurical Provide or fit (a vessel) with spars, M19. >b Guide

(a vessel) over a shallow bar by using spars. US. M19.

parable / sparab(a)/ noun. E17. [ORIGIN Contr. of spanrow-HILL.]

A small headless wedge-shaped nail, used for the soles and heels of shoes.

sparadrap noun. M16-E18. ORIGIN Old French & mod. French from Italian sparadrappo, of

unknown origin.]

MEDICANE. A piece of linen etc. dipped in, or spread with, an ointment or medicament for use as a bandage or plaster.

sparage noun var. of sperage.

Paragmite / sparagmat/ noun, t19.
[ORIGIN Greek sparagma fragment, piece torn off; see -HE*.]
GOLOGY Any of the feldspathic sandstones, conglomerates, and other fragmental rocks which occur in late Precambrian forms there brian formations in Scandinavia; such rocks collectively.

sparagmos /spaltagmas/ noun, Man.

|ORIGIN Greek = tearing, rending | |The ritual tearing to pieces of a victim, as represented in some Greek tragedies.

Sparagus noun see ASPARAGUS.

Sparaxis /spa'raksis/ noun. E19.
[ORIGIN mod. Latin (see below), from Greek = tearing, laceration.] Any of several ornamental southern African plants con-stituting the genus Sparaxis, of the iris family, which are allied to the genus lxia but have a lacerate spathe.

 Spare /spe:/ noun³. ME.
 [ORIGIN from spare verb, adjective.]
 The fact of leaving unharmed; leniency, mercy. ME-M17. 2 (The exercise of) economy or frugality. arch. LME.

3 ellipt. A reserve sum of money (rare); a spare room; esp. a spare part, a spare tyre, M17.

Which? Poor or tardy supply of spares from the makers.

bit of spare slong (derog.) an unattached woman, esp. one regarded as available for casual sex.

4 In tenpin bowling etc., the knocking down of all the pins with the first two bowls (leaving one 'to spare'); the score for doing this. M19.

Spare /spe:/ noun². Long obsolete exc. Scot. ME. [origin Perh. rel. to Old Norse spjorr rag, tatter, Norwegian spjαr rent, tear.]

A slit or opening in a garment.

Spare/spe:/adjective & adverb.
[oncom Old English spar sparing, frugal = Old High German spar, Old Norse sparr, rel. to sparke verb.]

A adjective. I 1 Characterized by meanness or frugality; (of diet etc.) meagre and plain; scanty; not abundant or plentiful. or. +1b Of a person: not lavish in expenditure or living; frugal; moderate, esp. in eating habits or speech sparing Mid-112. speech; sparing, M16-117.

W. Cowper Patriots . . Enjoy'd—spane feastl—a radish and an eggl Gio. Euro To order the whole establishment on the sparest footing possible.

2 Having little fat; lean, thin. M16. → b Of style: unadorned, restrained, simple. M20.

P. KWAMAGH He was spare of flesh and slight of build.
B. W. Albest His tall, spare figure. b Time A frighteningly spare performance in One Day in the Life of Ivan Denisovich. New Yorker The watercolours themselves... are utterly spare. . sometimes sparse

► II 3 a Not presently in use; reserved for future or emeradditional, extra, LME, >b Of land, etc.: uncultivated; vacant obsolete exc. as in senses 3a, 4. LME.

a R. G. Cumming A horseman. accompanied by an after-rider leading a spare horse, E. Sanon The spare room. ... was frequently inhabited by ... distinguished visitors. DougLAS CLARK Doris will stay. .. The spare bed is made up. b Languine Life Anti-apartheid marchers heading for their meeting place on spare ground.

4 In excess of present requirements; superfluous. M16. 16 spec. Of time: not taken up by one's usual work or duties; free, 116.

J. WAIN There wasn't the spare cash for him to go on being a non-earner. Time With unemployment of over 600,000 there is excessive spare capacity in industry. F. WELDON Irma... asked her to dinner, to sit opposite a spare man. b. D. Loboe I tench lengthish literature... and write novels in my spare time. D. Gen Whenever he had a spare moment he furned to scribble a letter.

PHRASES: **go spare** *colloq*. (a) become infuriated or distraught; (b) not be required or wanted by others.

(b) not be required or wanted by others.

SPECIAL COLLOCATIONS: Spare part (a) a duplicate part to replace a lost or damaged part of a machine (freq. in pl.); (b) collog. (suscero) a visceral organ or other bodily part from a donor, or a prosthetic device, which is to be used to replace a defective organ etc. spare tyre (a) an extra tyre carried in a motor vehicle for emergencies; (b) collog, a roll of fat round the waist.

B adverb. Sparely. Scot. E19.

■ sparely *adverb* in a sparing manner; frugally; simply; sparsely: OE. spareness *noun* M17.

spare /spe:/ verb.
[ORIGIN Old English sparian = Old Frisian sparia, Old Saxon, Old High German sparon (Dutch, German sparen), Old Norse spara, from Germanic.]

► I 1 verb trans. Refrain from killing, injuring or punishing (a person); refrain from destroying or damaging (a thing). OE. *b Forgive or pardon (a sin. etc.). Now rare. LME. c Refrain from ending (a person's life), us,

SHAKES, Lear-Spare my grey beard, you wagtai P.J. M. Correte He and Friday, none but they having been spared when their ship went down. B. W. Alors's Successive owners had spared the ... Victorian fireplace.

2 verb intrans. Exercise or show mercy or leniency. arch. ME.

AV Prov. 6:34 He will not spare in the day of vengeance

3 verb trans. a Allow to be free or exempt from a task etc.; save or relieve from. LME. >b Refrain from denouncing: deal leniently with, M16.

a), C. Powys Johnny was spared the embarrassment of explaining, by the entrance of the Marquis, S. Britowil wanted to be spared from knowing what, my generation is undergoing. R. Gorkow To spare my feelings I was allowed to stip away.

J. Waw Now was my chance to spare him. further anxiety.

A. Dillaro He spares his readers a report of his experience.

B. H. Wilsow The Prime Minister spared no one, ... and reserved his most cutting quips for his most powerful colleagues.

▶ II 4 verb trans. Refrain from using or (now rare) consum-If 4 verb trans. Retrain from using or (now are) consuming, use with moderation or restraint; (now are) forbear to do. Formerly also, save, hoard, oe. *b verb intrans. Refrain from doing something; spec. use or practise economy, be frugal, arch, ME. *c verb trans. In pass.: be left over or unused. Now dial. 116.

SWIFT Resolved to spare my provisions as much as I could R. L. STEVENGO Of my nightmare wanderings. It spare to tell. P.G. Woorbouse Home, James, and don't spare the horses. Proverb Spare the rod and spoil the child.

5 a verb trans. Avoid incurring or be grudging of (expense etc.). ME. >b verb trans. Avoid, shun. Now rare. LME.

a 8. Morroomery No effort was spared in standardising the experimental conditions, M. Forster Λ good party, no expense spared.

6 werb trans. Afford to give or do without; part or dispense with. ME. >b Reserve or retain for a particular use. Now rare. ME. >c Give, grant; supply (a person) with something. u6. >d Save or relieve (a person, a person's feelings, etc.) from something. u7.

D. Cusack Could you spare a moment? I am so sorry to disturb you. G. GRENE They could spare Joseph easily because of his damaged hip. G. Barnscome Where money for necessities was short, little...could be spared for amusement. c). Connab No one spared him a glance. d'A. RADCUFF Spare me the necessity of mentioning those circumstances.

PHRASES; not spare oneself exert one's utmost efforts, spare a person's blushes; see BLUSH noun 2 spare for orth, refrain from doing; be economical (usu, in neg. contexts), to spare left over; free; additional.

spareable adjective (earlier in UNSPAREABLE) 117. sparer noun

spareless /'speiles/adjective, LME.

[ORIGIN from SPARE noun! or verb: see -LESS.] Unlimited, Only in LME.

2 Merciless, arch, L16

Spare rib /spe; 'rib/ noun. L16.
| ORIGIN Prob. from Middle Low German ribbesper, with transposition of the two elems. and assoc. with SPARE adjective.] A cut of meat, esp. pork, consisting of closely trimmed

ribs, Usu, in pl.

spargana noun pl. of sparganum.

Sparganosis /sparga/nousis/ noun. Pl. -noses /- 'nousiz/ L17.
| OniciN Greek sparganosis swathing, used for spargests swelling, distension, from spargan be full to bursting, swell: see -osis. In sense 3 from sparganum.] MEDICINE †1 Distension of the breasts with milk. Only in

†2 Puerperal swelling of the legs. Only in E19.

3 Infection with spargana. E20.

sparganum / spargenem/ noun. Pl. -na /-ne/. E20. [ORIGIN Use as mod. Latin genus name of medieval Latin = swad-dling band from Greek spurgunosis: see sparganosis.] ZOOLOGY & MEDICINE. A migrating plerocercoid larva of tape-worms of the genera Spirometra and Diphyllobothrium, which are parasites of various vertebrates

SDarge/snords/ noun F19.

[ORIGIN From the verb.]

1 The action of sprinkling or splashing; a splash or dash.

S

2 BREWING. A spray of hot water sprinkled over the malt.

COMB.: sparge arm serving a (usu, rotating) sparge pipe used to sprinkle hot water over the malt; sparge pipe a horizontal per-forated pipe used to sprinkle or spray water etc.; esp. one used to flush a urinal.

sparge /spu:dy/ verb trans. Also (earlier) [sparget. LME. [ORIGIN In sense 1 from PARGET, prob. infl. by Old French espargier sprinkle; in senses 2, 3 prob. from Latin spargere sprinkle.]

Plaster; roughcast, LME.

Plaster, roughcast. LME.
Splash or sprinkle (water etc.) about. L16.
Bespatter, besprinkle, L18.

Bespatter, besprinkle (malt) with hot water. E19. b Aerate (a

sparger noun an appliance for sprinkling water etc (esp. in brewing) or for aerating a liquid with air M19.

spargefication / spa:dʒifiˈkeɪʃ(ə)n/ noun, rare, м19. [оным from Latinspargere sprinkle + -1 + - FICATION.] The action of sprinkling something.

sparget verb var. of sparge verb.

spargosis /spa:'gousts/ noun. Now rare, Pl. -goses /-'gaositz/. M19.

[ORIGIN Greek spargosis, var. of spargesis: see sparganosis.] MEDICINE. Swelling or distension, spec. of the breasts (with milk), or of the skin.

cat, or arm, a bed, or her, i sit, i cosy, ir see, b hot, or saw, a run, or put, ur too, or ago, ai my, ao how, or day, ou no, ar hair, io near, or boy, or poor, are tire, and sour

APPENDIX H

APPENDIX NSPAD 6 - MONITORING CABLE DESIGN DIAGRAM

See below extract at http://aquind.co.uk/

Data Cable

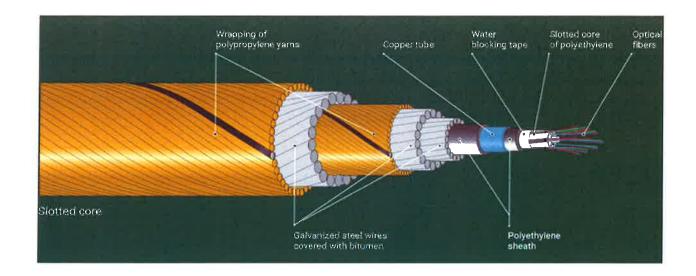
As part of the AQUIND Interconnector project, AQUIND will be deploying fibre optic infrastructure for protection and monitoring purposes. A fibre optic data transmission cable will be installed in a trench alongside and at the same time with each of the two power cable pairs both offshore and onshore. The spare data transmission capacity of such cables may be used to transfer data of third parties, providing further connectivity between France and England.

Demand for data transmission and, therefore, high-bandwidth, fast and reliable data transmission capacity is growing rapidly as services, technology and data uses continue to evolve. Meeting that demand is becoming increasingly important for economies and quality of life.

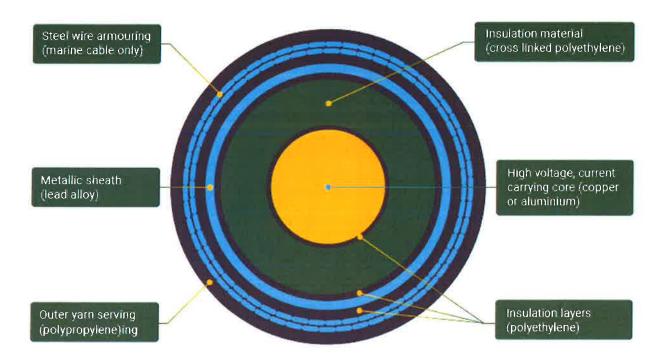
Using the latest subsea and optical technology, AQUIND will deliver high speed connectivity between England and France. Up to 180 "dark" fibres in each of the two data transmission cables may be available for third-party access enabling the high data transfer rates of up to 100 Gbps per fibre pair. The AQUIND fibre optic transmission link offers a shorter route than some of the existing systems, ensuring the low latency time of approximately 2.622 ms. The system will be capable of connecting the French and English shores without the need for amplification by subsea repeaters.

Installation in the same trench as the power cables and alongside them, together with separation of the two cable systems, ensure consistent protection against fishing and anchor damage as well as natural hazards.

Show Less



HVDC Interconnector



Cross-section of a typical XLPE cable