SCHEDULE 9

Deemed Licence under the 2009 Act – Generation Assets (Licence 1 – Phase 1)

PART 4

Conditions

Design parameters

- **1.**—(1) Subject to paragraph (2), each wind turbine generator forming part of the authorised scheme must not—
 - (a) exceed a height of 350 metres when measured from HAT to the tip of the vertical blade;
 - (b) exceed a height of 198.5 metres to the height of the centreline of the generator shaft forming part of the hub when measured from HAT;
 - (c) exceed a rotor diameter of 303 metres;
 - (d) be less than 800 metres from the nearest wind turbine generator in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 800 metres from the nearest wind turbine generator in either direction which is in line with the approximate prevailing wind direction (downwind); or
 - (e) have a draught height which is less than the minimum draught height specified for the relevant wind turbine generator capacity in the table below—

Wind Turbine Generator Capacity	Minimum draught height	
Up to and including 14.6MW	35m from MHWS	
14.7 MW and above	30m from MHWS	

- (2) References to the location of a wind turbine generator in paragraph (1) above are references to the centre point of that turbine.
- **2.**—(1) The dimensions of any offshore service platform forming part of the authorised scheme must not exceed 100 metres in height when measured from HAT, 90 metres in length and 60 metres in width.
 - (2) Each meteorological mast must not exceed a height of 200 metres above HAT.
 - (3) Each meteorological mast must not have more than one supporting foundation.
- 3. The total length of the cables and the area and volume of their cable protection must not exceed the individual distributions set out in Table 2 of the outline scour protection and cable protection plan and must not exceed the following—

Work	Length	Cable protection (m³)	Cable protection (m ²)
Work No. 1(e) and (f) (array)	600 kilometres	198,500 m ³	389,000 m ²

- **4.**—(1) In relation to a wind turbine generator, each foundation using piles must not have—
 - (a) more than four driven piles;
 - (b) in the case of single pile structures, a pile diameter which is more than 15 metres; or

- (c) in the case of two or more pile structures, have a pile diameter which is more than five metres.
- (2) In relation to a wind turbine generator, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 1,963m².
 - **5.**—(1) In relation to a meteorological mast, each foundation using piles must not have—
 - (a) more than four driven piles;
 - (b) in the case of single pile structures, a pile diameter which is more than 10 metres; or
 - (c) in the case of two or more pile structures, have a pile diameter which is more than three metres.
- (2) In relation to a meteorological mast, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 314 m^2 .
 - **6.**—(1) In relation to an offshore service platform, each foundation using piles must not have—
 - (a) more than six driven piles; or
 - (b) a pile diameter which is more than three metres.
- (2) In relation to an offshore service platform, each foundation must not have a seabed footprint area (excluding scour protection) of greater than $7,500 \text{ m}^2$.
- 7.—(1) In relation to any LIDAR measurement buoys, each foundation using piles must not have a pile diameter of greater than 10 metres.
- (2) In relation to any LIDAR measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 78.5 m^2 per buoy and 157 m^2 in total.
- (3) In relation to any wave measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 150m² per buoy and 300 m² in total.

Phasing of the authorised scheme and scenarios

- **8.**—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 2 (generation)—
 - (a) the total electrical export capacity of the authorised scheme must not exceed 1,800MW at the point of connection to the offshore electrical platform(s);
 - (b) the total number of wind turbine generators forming part of the authorised scheme must not exceed 158;
 - (c) the total number of offshore service platforms forming part of the authorised scheme must not exceed one;
 - (d) the total number of meteorological masts forming part of the authorised scheme must not exceed two;
 - (e) the total number of LIDAR measurement buoys forming part of the authorised scheme must not exceed two;
 - (f) the total number of wave measurement buoys forming part of the authorised scheme must not exceed two;
 - (g) the total amount of scour protection for the wind turbine generators, offshore service platform, meteorological masts and measurement buoys forming part of the authorised scheme must not exceed 25,834,269 m³ and 5,166,854 m² and must not exceed the

- distributed quantities of scour protection set out in Table 1 of the outline scour protection and cable protection plan;
- (h) the total amount of inert material of natural origin disposed within the offshore Order limits as part of the authorised scheme must not exceed 37,698,890 m³;
- (i) the total amount of disposal for drill arisings in connection with any foundation drilling must not exceed $399,776 \text{ m}^3$; and
- (j) the total length of cable and the amount of cable protection must not exceed the figures stated in condition 3 of this licence.
- (2) Prior to commencement of the authorised scheme the undertaker must give notice to the MMO detailing:
 - (a) whether the authorised scheme will be
 - (i) commenced under scenario 1 or scenario 2; and
 - (ii) constructed in a single offshore phase under this licence or in two offshore phases under this licence and licence 2 (generation).
- (3) Where the authorised scheme will be constructed in two offshore phases the undertaker must give notice to the MMO detailing
 - (a) prior to the commencement of phase 1, the total number of wind turbine generators offshore service platform, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase; and
 - (b) prior to the commencement of phase 2, the total number of wind turbine generators offshore service platform, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase.

Notifications and inspections

- **9.**—(1) The undertaker must ensure that—
 - (a) a copy of this licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—
 - (i) all agents and contractors notified to the MMO in accordance with condition 17; and
 - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 17; and
 - (b) within 28 days of receipt of a copy of this licence those persons referred to in paragraph (a) above must provide a completed confirmation form to the MMO confirming receipt of this licence.
- (2) Only those persons and vessels notified to the MMO in accordance with condition 17 are permitted to carry out the licensed activities.
 - (3) Copies of this licence must also be available for inspection at the following locations—
 - (a) the undertaker's registered address;
 - (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
 - (c) on board each vessel or at the office of any transport manager with responsibility for vessels from which authorised deposits or removals are to be made.
- (4) The documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.

- (5) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised scheme
- (6) The undertaker must inform the MMO Coastal Office in writing at least five days prior to the commencement of the licensed activities or any part of them, and within five days of completion of the licensed activities.
- (7) The undertaker must inform the Kingfisher Information Service of Seafish by email to kingfisher@seafish.co.uk of details regarding the vessel routes, timings and locations relating to the construction of the authorised scheme or relevant part—
 - (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher Fortnightly Bulletin and offshore hazard awareness data; and
 - (b) as soon as reasonably practicable and no later than 24 hours of completion of construction of all offshore activities;

and confirmation of notification must be provided to the MMO within five days.

- (8) A notice to mariners must be issued at least ten days prior to the commencement of the licensed activities or any part of them advising of the start date of Work No. 1 (wind turbine generators or other offshore construction activities including array cables and fibre optic cables) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UKHO within five days.
- (9) The notices to mariners must be updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction and monitoring programme approved under condition 14(1)(b). Copies of all notices must be provided to the MMO, MCA and UKHO within five days.
- (10) The undertaker must notify the UK Hydrographic Office both of the commencement (ten days prior), progress and completion of construction (within ten days) of the licensed activities in order that all necessary amendments to nautical charts are made and the undertaker must send a copy of such notifications to the MMO within five days.
- (11) In case of damage to, or destruction or decay of the authorised scheme seaward of MHWS or any part thereof, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House, the Kingfisher Information Service of Seafish, and the UK Hydrographic Office.
- (12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days.

Aids to navigation

- 10.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and to take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.
- (2) The undertaker must during the period from the start of construction of the authorised scheme to completion of decommissioning seaward of MHWS keep Trinity House and the MMO informed of progress of the authorised scheme seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised scheme within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised scheme.
- (3) The undertaker must provide reports to Trinity House on the availability of aids to navigation as set out in the aids to navigation management plan agreed pursuant to condition 14(1)(k) using the reporting system provided by Trinity House.
- (4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning seaward of MHWS notify Trinity House and the MMO of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.
- (5) In the event that the provisions of condition 9(11) and condition 9(12) are invoked, the undertaker must lay down such marker buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

Colouring of structures

- 11.—(1) Except as otherwise required by Trinity House the undertaker must colour all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.
- (2) Subject to sub-paragraph (1) above, unless the MMO otherwise directs, the undertaker must paint the remainder of the structures submarine grey (colour code RAL 7035).

Chemicals, drilling and debris

- 12.—(1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised scheme, including any chemical agents placed within any monopile void, must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002(1) (as amended).
- (2) The undertaker must ensure that any coatings/treatments are suitable for use in the marine environment and are used in accordance with guidelines approved by Health and Safety Executive and the Environment Agency Pollution Prevention Control Guidelines.
- (3) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.
- (4) The undertaker must inform the MMO of the location and quantities of material disposed of each month under this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive. In the event that no activity has taken place during the reporting period the undertaker must provide a null (0) return to the MMO.
- (5) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, and drilling mud is disposed of within disposal site reference HU217 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal of the inert material at this site.
- (6) The undertaker must ensure that any rock material used in the construction of the authorised scheme is from a recognised source, free from contaminants and containing minimal fines.

⁽¹⁾ S.I. 2002/1355.

- (7) In the event that any rock material used in the construction of the authorised scheme is misplaced or lost below MHWS, the undertaker must report the loss to the District Marine Office within 48 hours and if the MMO reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeayour to locate the material and recover it
- (8) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the water through the freeing ports.
- (9) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 14(1)(d)(i).
- (10) All dropped objects must be reported to the MMO using the Dropped Object Procedure Form as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.

Force majeure

- 13.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to make a deposit which is not authorised under this licence whether within or outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit to the MMO.
- (2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

- **14.**—(1) The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO—
 - (a) A design plan at a scale of between 1:25,000 and 1:50,000 including detailed representation on the most suitably scaled admiralty chart, to be agreed in writing with the MMO in consultation with Trinity House and the MCA which shows, in accordance with the Development Principles—
 - (i) the proposed location and choice of foundation of all wind turbine generators, offshore electrical platforms, offshore service platform and meteorological masts;
 - (ii) the height to the tip of the vertical blade of all wind turbine generators;
 - (iii) the height to the centreline of the generator shaft forming part of the hub of all wind turbine generators;
 - (iv) the rotor diameter and spacing of all wind turbine generators;
 - (v) the height of all lattice towers forming part of all meteorological masts;
 - (vi) the height, length and width of all offshore service platform;
 - (vii) the dimensions of all foundations;
 - (viii) the length and arrangement of all cables (including fibre optic cables) comprising Work No. 1(e);
 - (ix) the proposed layout of all wind turbine generators (in accordance with the recommendations for layout contained in MGN543 and its annexes), offshore service

- platform and meteorological masts including any exclusion zones identified under sub-paragraph (1)(h)(iv);
- (x) a plan showing the indicative layout of all wind turbine generators, offshore service platform and meteorological masts including all exclusion zones (insofar as not shown in (ix) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (1)(b)(iv);
- (xi) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (1)(i); and
- (xii) the grid coordinates of the centre point of the proposed location for each wind turbine generator, offshore electrical platform, substation and meteorological mast.

to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 8 above.

- (b) A construction programme and monitoring plan (which accords with the offshore in principle monitoring plan) to include details of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works;
 - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction surveys and monitoring and related reporting in accordance with sub-paragraph (1)(h) and conditions 17, 18, 19 and 20; and
 - (iv) an indicative written construction programme for all wind turbine generators offshore service platform, meteorological masts, measurement buoys and cables (including fibre optic cables) comprised in the works in Part 3 (licensed marine activities) of this Schedule (insofar as not shown in paragraph (ii) above);

with details pursuant to paragraph (iii) above to be submitted to the MMO in accordance with the following—

- (aa) at least four months prior to the first survey, detail of the pre-construction surveys and an outline of all proposed pre-construction monitoring;
- (bb) at least four months prior to construction, detail on construction monitoring; and
- (cc) at least four months prior to commissioning, detail of post-construction (and operational) monitoring;

unless otherwise agreed in writing with the MMO.

- (c) A construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—
 - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works, and having regard to any mitigation scheme pursuant to sub-paragraph (1)(i);
 - (ii) soft start procedures with specified duration periods;
 - (iii) cable (including fibre optic cable) installation;
 - (iv) contractors;
 - (v) vessels, vessels maintenance and vessel transit corridors; and
 - (vi) associated and ancillary works.
- (d) A project environmental management plan (in accordance with the outline project environmental management plan) covering the period of construction and operation to include details of—

- (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents of the authorised scheme in relation to all activities carried out;
- (ii) a chemical risk assessment to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
- (iii) waste management and disposal arrangements;
- (iv) the appointment and responsibilities of a fisheries liaison officer;
- (v) a fisheries liaison and coexistence plan (which accords with the outline fisheries liaison and co-existence plan) to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 9 and to address the interaction of the licensed activities with fishing activities; and
- (vi) procedures to be followed within vessels transit corridors to minimise disturbance to red-throated diver during operation and maintenance activities.
- (e) A scour protection and cable protection plan (in accordance with the outline scour protection and cable protection plan) providing details of the need, type, sources, quantity, distribution and installation methods for scour protection and cable (including fibre optic cable) protection. For the avoidance of doubt "distribution" in this sub–paragraph must include quantities in respect of each structure comprised in the offshore works and intended to be subject to scour protection.
- (f) In the event that piled foundations are proposed to be used, at least six months prior to commencement of licensed activities, a marine mammal mitigation protocol, in accordance with the draft marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals and following current best practice as advised by the relevant statutory nature conservation bodies.
- (g) A cable specification, installation and monitoring plan, to include—
 - (i) technical specification of offshore cables (including fibre optic cables) below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice;
 - (ii) a detailed cable (including fibre optic cables) laying plan for the Order limits, incorporating a burial risk assessment, encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to chart datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or such similar assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; and
 - (iii) proposals for monitoring offshore cables (including fibre optic cables) including cable protection during the operational lifetime of the authorised scheme which includes a risk based approach to the management of unburied or shallow buried cables.
- (h) An archaeological written scheme of investigation in relation to the offshore Order limits seaward of mean high water, which must accord with the outline written scheme of investigation (offshore) and industry good practice, in consultation with the statutory historic body to include—
 - (i) details of responsibilities of the undertaker, archaeological consultant and contractor;
 - (ii) a methodology for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;

- (iii) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within four months of any survey being completed;
- (iv) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;
- (v) monitoring of archaeological exclusion zones during and post construction;
- (vi) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS (Online Access to the Index of archaeological investigations) form with a digital copy of the report within six months of completion of construction of the authorised scheme, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
- (vii) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme; and
- (viii) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order Limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.
- (i) A mitigation scheme for any habitats of principal importance identified by the survey referred to in condition 18(2)(a) and in accordance with the offshore in principle monitoring plan.
- (j) An offshore operations and maintenance plan, in accordance with the outline offshore operations and maintenance plan, to be submitted to the MMO at least four months prior to commencement of operation of the licensed activities and to provide for review and resubmission every three years during the operational phase.
- (k) An aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, to include details of how the undertaker will comply with the provisions of condition 10 for the lifetime of the authorised scheme.
- (1) In relation to ornithological monitoring—
 - (i) a plan setting out the aims, objectives and timing for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) at least four months prior to the first pre-construction survey (as referred to in condition 14(1)(b)(aa)), and
 - (ii) an ornithological monitoring plan setting out the methods for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) in accordance with the details and timescales approved pursuant to the plan referred to in sub-paragraph (i).
- (m) In the event that piled foundations are proposed to be used, at least six months prior to commencement of licensed activities, a site integrity plan which accords with the principles set out in the in principle Norfolk Boreas Southern North Sea Special Area of Conservation Site Integrity Plan, and which the MMO is satisfied would provide such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.
- (2) Pre-commencement surveys and archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a specific written scheme of investigation which is itself in accordance with the details set out in the

outline offshore written scheme of investigation (offshore), and which has been submitted to and approved by the MMO.

- (3) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive the pile foundations must not exceed—
 - (a) 5,000kJ in respect of monopile foundations; and
 - (b) 2,700kJ in respect of pin piles.
- **15.**—(1) Any archaeological reports produced in accordance with condition 14(1)(h)(iii) must be agreed with the MMO in consultation with the statutory historic body.
- (2) The design plan required by condition 14(1)(a) must be prepared by the undertaker and determined by the MMO in accordance with the Development Principles.
- (3) Each programme, statement, plan, protocol or scheme required to be approved under condition 14 must be submitted for approval at least four months prior to the intended commencement of licensed activities, except where otherwise stated or unless otherwise agreed in writing by the MMO.
- (4) No licensed activity may commence until for that licensed activity the MMO has approved in writing any relevant programme, statement, plan, protocol or scheme required to be approved under condition 14.
- (5) Unless otherwise agreed in writing with the undertaker, the MMO must use reasonable endeavours to determine an application for approval made under condition 14 as soon as practicable and in any event, within a period of four months commencing on the date the application is received by the MMO.
- (6) The licensed activities must be carried out in accordance with the plans, protocols, statements, schemes and details approved under condition 14, unless otherwise agreed in writing by the MMO.
- (7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed MCA recommendations as appropriate to the authorised scheme contained within MGN543 "Offshore Renewable Energy Installations (OREIs) Guidance on UK Navigational Practice, Safety and Emergency Response Issues" and its annexes.

Post-construction plans and documents

16. The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out and provide the data and survey report(s) to the MMO, MCA and UKHO.

Reporting of engaged agents, contractors and vessels

- 17.—(1) The undertaker must provide the following information to the MMO—
 - (a) the name and function of any agent or contractor appointed to engage in the licensed activities within seven days of appointment; and
 - (b) each week during the construction of the authorised scheme a completed Hydrographic Note H102 listing the vessels currently and to be used in relation to the licensed activities.
- (2) Any changes to the supplied details must be notified to the MMO in writing prior to the agent, contractor or vessel engaging in the licensed activities.

Pre-construction monitoring and surveys

18.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for written approval by the MMO in consultation

with the relevant statutory bodies of proposed pre-construction surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report; and—

- (a) the survey proposals must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement; and
- (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what post-construction comparison is intended and the justification for this being required.
- (2) The pre-construction surveys referred to in sub-paragraph (1) must, unless otherwise agreed with the MMO, have due regard to, but not be limited to, the need to—
 - (a) undertake appropriate surveys to determine the location and extent of any benthic communities/benthos constituting Annex 1 reef habitats of principal importance in whole or in part inside the area(s) within the Order limits in which it is proposed to carry out construction works;
 - (b) undertake a full sea floor coverage swath-bathymetry survey that meets the requirements of IHO S44ed5 Order 1a, and side scan sonar, of the area(s) within the Order limits in which it is proposed to carry out construction works;
 - (c) undertake any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(1); and
 - (d) undertake or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).
- (3) The undertaker must carry out the surveys agreed under sub-paragraph (1) and provide the baseline report to the MMO in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation bodies.

Construction monitoring

- 19.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation bodies of any proposed monitoring, including methodologies and timings, to be carried out during the construction of the authorised scheme. The survey proposals must specify each survey's objectives. In the event that driven or part-driven pile foundations are proposed, such monitoring must include measurements of noise generated by the installation of the first four piled foundations of each piled foundation type to be installed unless the MMO otherwise agrees in writing.
- (2) The undertaker must carry out the surveys approved under sub-paragraph (1), including any further noise monitoring required in writing by the MMO, and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation bodies.
- (3) The results of the initial noise measurements monitored in accordance with sub-paragraph (1) must be provided to the MMO within six weeks of the installation of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation with the relevant statutory nature conservation body, the assessment shows significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

- (4) Construction monitoring must include traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA and Trinity House.
- (5) In the event that piled foundations are proposed to be used, the details submitted in accordance with the offshore in principle monitoring plan must include proposals for monitoring marine mammals.

Post construction

- **20.**—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with relevant statutory bodies of proposed post-construction surveys, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.
- (2) The post-construction surveys referred to in sub-paragraph (1) must, unless otherwise agreed with the MMO, have due regard to, but not be limited to, the need to—
 - (a) undertake an appropriate survey to determine any change in the location, extent and composition of any benthic habitats of conservation, ecological and/or economic importance constituting Annex 1 reef habitats identified in the pre-construction survey in the parts of the Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
 - (b) undertake, within twelve months of completion of the licensed activities, one full sea floor coverage swath-bathymetry survey that meets the requirements of IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography and such further monitoring or assessment as may be agreed to ensure that cables (including fibre optic cables) have been buried or protected;
 - (c) undertake any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(1);
 - (d) undertake post-construction traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA and Trinity House; and
 - (e) undertake or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).
- (3) The undertaker must carry out the surveys agreed under sub-paragraph (1) and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation bodies.
- (4) Following installation of cables (including fibre optic cables), the cable monitoring plan required under condition 14(1)(g)(iii) must be updated with the results of the post installation surveys. The plan must be implemented during the operational lifetime of the authorised scheme and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

Reporting of impact pile driving

21.—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the UK Marine Noise Registry—

- (a) prior to the commencement of the licenced activities, information on the expected location, start and end dates of impact pile driving to satisfy the Marine Noise Registry's Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry's Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry's Close Out requirements.
- (2) The undertaker must notify the MMO of the successful submission of Forward Look or Close Out data pursuant to paragraph (1) above within 7 days of the submission.
 - (3) For the purpose of this condition—
 - "Marine Noise Registry" means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas; and
 - "Forward Look" and "Close Out" requirements are as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) or any updated information document.

Reporting of scour and cable protection

- **22.**—(1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection and scour protection used for the authorised scheme.
 - (2) The report must include the following information—
 - (a) location of the cable protection and scour protection;
 - (b) volume of cable protection and scour protection; and
 - (c) any other information relating to the cable protection as agreed between the MMO and the undertaker.

Completion of construction

- 23.—(1) The undertaker must submit a close out report to the MMO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—
 - (a) the final number of installed turbine generators;
 - (b) the installed wind turbine generator parameters relevant for ornithological collision risk modelling.
- (2) Following completion of construction, no further construction activities can be undertaken under this licence.