



Chapter 5

Scoping and Consultation

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March 2018

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5 SCOPING AND CONSULTATION

5.1 Introduction

1. This chapter of the EIA Report summarises the formal scoping exercise undertaken by NnGOWL. Specifically, this chapter presents the following:
 - Background to the scoping process;
 - The scoping process (including scoping consultation, the Scoping Opinion and matters scoped in / out of the EIA);
 - Embedded mitigation measures;
 - Consent condition commitments; and
 - Other consultation and stakeholder engagement.

5.2 Background to the Scoping Process

5.2.1 The Original Application

2. NnGOWL submitted an application for consent under Section 36 of the Electricity Act 1989 and for associated Marine Licences under the Marine (Scotland) Act 2010 in July 2012 (hereafter referred to as the 'Original Application'). The Original Application was supported by an Environmental Statement (ES) (hereafter referred to as the 'Original ES') reporting the findings of an EIA (hereafter referred to as the 'Original EIA') and subsequently, in June 2013, by an Addendum of Supplementary Environmental Information (hereinafter referred to as the 'Addendum').
3. The Addendum submitted in June 2013 reassessed the effects on some (but not all) receptors based on a reduced Project design envelope comprising of up to 90 turbines (compared to 125 in the Original ES) and also included an additional 3rd year of bird survey data, plus other design refinements including a commitment to higher rotors (which has been increased further with this new application).
4. The Section 36 Consent and the Marine Licences were awarded by the Scottish Ministers in October 2014, following over five years of project development, including environmental surveys, engineering design studies and wide-ranging stakeholder engagement. The development as consented in October 2014 is hereafter referred to as 'the Originally Consented Project'.
5. In 2015, NnGOWL applied for a Section 36 Consent Variation, seeking to vary the Section 36 Consent in order to modify a number of parameters relating to the wind turbines. Specifically, the variation was sought to allow:
 - An increase in the maximum rated wind turbine capacity from 6 megawatts (MW) to 7 MW (the maximum generating capacity of 450 MW remained the same);
 - A change in maximum wind turbine hub heights, from 107.5 metres (m) to 115 m above Lowest Astronomical Tide (LAT); and
 - A change in maximum turbine platform height from 18 m to 21 m above LAT.
6. The Section 36 Consent Variation was awarded by the Scottish Ministers in March 2016. This varied Section 36 Consent and the Marine Licences granted in October 2014 are collectively referred to as 'the Consents' hereafter.
7. The decision by the Scottish Ministers to consent the Originally Consented Project (and three other offshore wind farms in the Forth and Tay region) in 2014 was challenged by the Royal Society for the Protection of Birds (RSPB) by way of Judicial Review (JR) in January 2015. The Outer House of the

Scottish Court of Session ruled in favour of the RSPB in July 2016. The JR decision was appealed by the Scottish Ministers and developers, including NnGOWL, at the Inner House of the Scottish Court of Session. The outcome of that appeal was announced on 16 May 2017 whereby the original JR judgement was overturned. An application by the RSPB to the Scottish Court of Session seeking leave to appeal to the Supreme Court was refused on 19 July 2017. On 15 August 2017, the RSPB made an application directly to the Supreme Court for permission to appeal and this was refused on 6 November 2017.

8. NnGOWL has decided to submit a new consent application for the Project (hereafter referred to as 'the Application'), supported by the findings of this EIA Report. If consented, the Application will enable NnGOWL to take advantage of new developments in offshore wind technology, allowing for example, the same maximum generation capacity as previous designs but using fewer turbines. This will lead to a reduction in the potential environmental impacts (when compared to the Original Application and the Originally Consented Project).
9. Notwithstanding the new application, the Original Consents remain extant and NnGOWL reserves the ability to implement the Original Consents, for example in the event that determination of this application is unduly delayed.
10. It is NnGOWL's intention to construct either the Originally Consented Project (as amended by the Section 36 Consent Variation) or the Project as described in the Application, but not both.
11. The Project now proposed by NnGOWL is broadly analogous in terms of location and most aspects of its design to the Originally Consented Project. The principle differences between the design envelope of the Originally Consented Project and this Application are summarised in Table 5. 1.

Table 5. 1: Summary of changes between the design envelopes for the Consents and the Project Application

Parameter	Design envelope for the Originally Consented Project (as amended)	Design envelope for Application
Maximum number of wind turbines	75	54
Maximum rotor tip height (above LAT)	197 m	208 m
Maximum hub height (LAT)	115 m	126 m
Maximum rotor diameter	126 - 152 m	167 m
Minimum spacing between turbines	450 m	800 m
Minimum air gap clearance to blade tip (above LAT)	30.5 m	35 m
Maximum number of piles per foundation (turbines)	4	6
Number of piles per foundation (Offshore Substation Platforms (OSP))	8	8
Foundation options	Gravity Base Structures Jackets	Jackets
Inter-array cables	Up to 6 turbines per collector circuit Up to 15 circuits 75 - 120 km cable length	Up to 10 turbines per collector circuit Up to 14 circuits Up to 140 km cable length
Minimum height to bottom of OSP topside (above LAT)	21 m	18 m
Maximum Offshore Export Cable length (per cable)	33 km	43 km

5.3 The Scoping Process

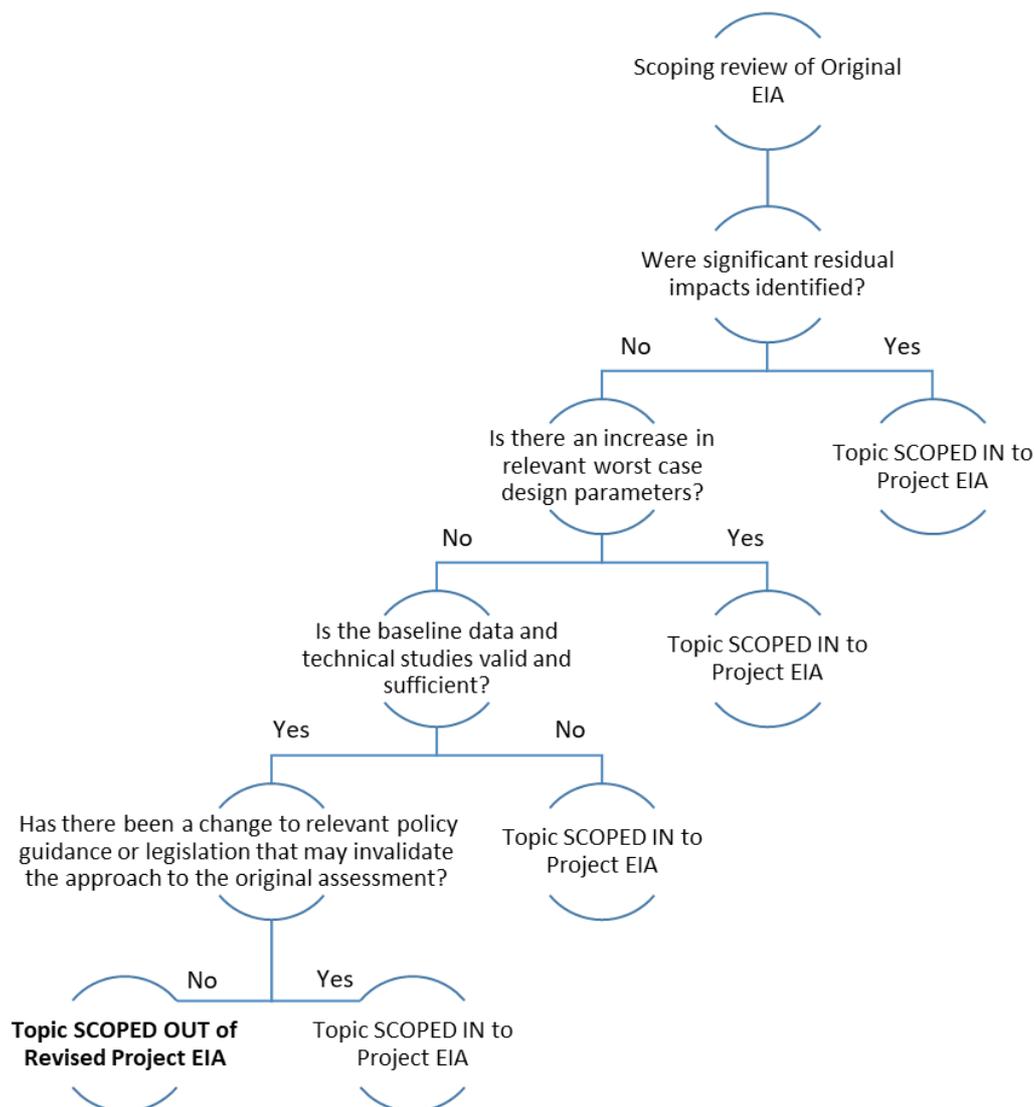
5.3.1 Introduction

12. Scoping of an EIA is a voluntary process under the EIA Regulations. A proponent of a project can request a Scoping Opinion from Scottish Ministers as to the proposed content of the EIA Report in order to identify those potentially significant environmental effects that should be considered for further assessment.
13. A Scoping Report was submitted to MS-LOT on 15 May 2017, supporting a request for a formal Scoping Opinion from Scottish Ministers. The Scoping Report (NnGOWL, 2017) which accompanied the request for a scoping opinion is available online via the Scottish Government Marine Licensing website (<http://www.gov.scot/Topics/marine/Licensing/marine/scoping/NnGRev2017>).
14. The Scottish Ministers initiated a 28-day consultation process on the Scoping Report, which commenced on 29 May 2017. The Scoping Opinion (Scottish Ministers, 2017) was issued on 8 September 2017 and is also available to download from the same website (<http://www.gov.scot/Resource/0052/00524490.pdf>). Further detail on the Scoping Opinion and the scope of this EIA Report is set out under Section 5.3.4 below.

5.3.2 The Approach to Scoping

15. Whilst the Project is broadly analogous in terms of location and most aspects of its design to the Originally Consented Project, it should be noted that the Original EIA was conducted for a design comprising of up to 125 wind turbines (and associated foundations etc.) with the Addendum considering 90 turbines and the Consents allowing for 75 turbines. This compares with a substantial reduction to 54 turbines (maximum) being considered for this Application.
16. In the Original EIA, the potential effects of the Originally Consented Project on the environment were thoroughly assessed, and the outcomes of that assessment were considered by the Scottish Ministers in their determination of the Original Application. The Original ES also presents a large body of existing data and knowledge regarding the environmental characteristics of the Project location, acquired through site specific surveys, technical studies and data gathering to inform the Original EIA. Therefore, the approach to the Scoping Report was to apply the findings of the Original EIA as a basis for the scoping of the likely significant effects that could arise from the Project.
17. The Scoping Report therefore drew on the Original EIA in order to:
 - Characterise the baseline environment to inform the Scoping Report, where data was sufficient and it was appropriate to do so;
 - Scope out impacts where there was clear justification for doing so; and
 - Where impacts were scoped in, use the available data to inform the baseline conditions where appropriate in carrying out the Project EIA.
18. The approach to scoping, summarised in Figure 5.1, reviewed the assessments presented in the Original Application and scoped receptors and impacts out of the Project EIA based on the following principles:
 - No significant impacts were identified in the Original ES;
 - The design envelope parameters have been reduced or remain the same as those considered in the Original EIA;
 - The baseline data and technical studies used to inform the Original EIA remain valid and sufficient to characterise the current baseline conditions within and adjacent to the Development Area; and
 - There has been no change to the policy guidance or legislation that would invalidate the approach applied within the Original EIA.

Figure 5.1: Scoping of the Project EIA based on the Original EIA.



19. The approach to scoping was intended to focus the Project EIA on the potential impacts that were most likely to give rise to significant effects (or where significant uncertainty existed in relation to the validity of the previous assessments) and thereby avoid revisiting assessments where the conclusions reached previously in the Original ES and Addendum demonstrate that significant effects would not be likely to occur.
20. The Scoping Report set out, for each of the topic chapters, a series of questions for Scottish Ministers asking them to confirm their views on the conclusions of the Scoping Report and, where relevant, the detailed requirements for considering the topic in the EIA Report (questions relating to, for example, data, methodology, cumulative impact scope etc.).
21. Further detail on the approach to the scoping process is set out in the Scoping Report.
22. In concluding as to whether a particular impact or receptor should be scoped in to the EIA Report, the commitment to embedded mitigation was considered. More detail on embedded mitigation relevant to this EIA Report and the Application is set out under Section 5.4.

5.3.3 Consultation on the Scope of the Project EIA

23. The Scottish Ministers consulted with a range of stakeholders on the scope of the Project EIA, as listed in Table 5.2. The purpose of the consultation was to obtain advice and guidance from each consultee or advisor as to which potential effects should be scoped in or out of the Project EIA and to inform the Scoping Opinion.

Table 5.2: List of stakeholders consulted by the Scottish Ministers during the scoping consultation

Angus Council (AC)	Arbroath Sailing and Boating Club
Bond Offshore Helicopters	Bristow Helicopters
British Telecom (Radio Network Protection Team) (BT)	Civil Aviation Authority
Chamber of Shipping (CoS)	CHC Helicopters
Crown Estate Scotland	Defence Infrastructure Organisation (DIO)
Dundee City Council (DCC)	East Lothian Council (ELC)
Esk District Salmon Fishery Board (Esk DSFB)	Fife Council (FC)
Fife Fish Producers Organisation	Firth of Forth Lobster Hatchery
Fisheries Management Scotland	Fife Fishermen’s Association (FFA)
Fishermen’s Mutual Association (Pittenweem) Limited (FMA)	Forth District Salmon Fishery Board (Forth DSFB)
Forth Ports	Health and Safety Executive
Historic Environment Scotland (HES)	Inch Cape Offshore Limited
Marine Safety Forum	Marine Scotland Compliance – Anstruther
Marine Scotland Compliance – Eyemouth	Marine Scotland Compliance – Aberdeen
Maritime and Coastguard Agency (MCA)	Marine Scotland Science (MSS)
National Air Traffic Services (NATS)	National Trust for Scotland
North Sea Regional Advisory Council	North East Regional Inshore Fishery Group
Planning Aid Scotland	Northern Lighthouse Board (NLB)
Royal Society for the Protection of Birds (RSPB)	Royal Yachting Association (Scotland) (RYAS)
Scottish Borders Council (SBC)	River Tweed Commission (RTC)
Scottish Enterprise	Scottish Canoe Association (SCA)
Scottish Federation of Sea Anglers	Scottish Environment LINK
Scottish Fisherman’s Organisation	Scottish Fishermen’s Federation (SFF)
Scottish Natural Heritage (SNH)	Scottish Government Planning
Scottish Surfing Federation	Scottish Seabird Centre
Seagreen Wind Energy Limited	Scottish Wildlife Trust
Surfers Against Sewage	Scottish Environment Protection Agency (SEPA)
The 10 Metre and Under Association	Tay District Salmon Fishery Board
Transport Scotland (TS)	Torness Power Station
Transport Scotland (Ports and Harbours) (TS(P&H))	Whale and Dolphin Conservation (WDC)

24. From the list above, a total of 20 responses were received. The consultee responses received were used to inform the Scoping Opinion advice (all responses are reproduced in full in the Scoping Opinion).
25. In addition, to support the scoping process, a number of meetings were organised by MS-LOT in order to facilitate structured discussion between the Scottish Ministers, NnGOWL and stakeholders. The meetings were intended to allow for early engagement between stakeholders and NnGOWL. The meetings were topic related and covered marine mammals, fish, shellfish and benthic ecology, commercial fisheries and ornithology. Table 5.3 sets out the dates and stakeholders who participated

in the face-to-face scoping meetings. Details of the items discussed and how they have been incorporated into this EIA Report are detailed within the relevant technical chapters.

Table 5.3: Details of the Scoping stakeholder consultation meetings

Date	Discipline	Attendees
13 June 2017	Marine Mammals	MSS, SNH
13 June 2017	Ornithology	MSS, SNH, RSPB
13 June 2017	Fish and Shellfish	MSS, SNH
27 June 2017	Commercial Fisheries	SFF

26. In addition, a further meeting between MS-LOT, MSS, SNH and RSPB was held to further discuss the ornithology receptors, including common approaches to cumulative impact assessment, collision risk modelling, and displacement assessment and non-breeding season effects, for all three Forth and Tay projects. A further teleconference meeting was held between MS-LOT, MSS, SNH and WDC to allow further discussions on marine mammals.
27. The aim of these meetings was to provide clarity and answer any questions the stakeholders had with regard to the Scoping Report. This was intended to allow an opportunity to discuss issues in detail in advance of stakeholders completing their scoping responses. The meetings took the form of an overview from NnGOWL and then a discussion on specific issues of concern. The meetings informed the responses to the Scoping Opinion made by the relevant stakeholders.

5.3.4 The Scoping Opinion

28. The Scottish Ministers, having consulted on the Scoping Report and having considered the responses received from consultees, issued their Scoping Opinion (Scottish Ministers, 2017) on 8 September 2017. The Scoping Opinion confirmed that the Scottish Ministers were satisfied that the topics identified in the Scoping Report encompass those matters identified in Schedule 4 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 and Schedule 3 of the Marine Works (Environmental Impact Assessment) Regulations 2007, as required by the transitional arrangements of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and the Marine Works (Environmental Impact Assessment) Regulations 2017 (for more information on the 2017 Regulations and the transitional arrangements see Chapter 6: EIA Methodology).
29. Following the consultation with the statutory consultees and other environmental stakeholders, the Scottish Ministers, where they had confidence that the Original EIA could be relied upon to inform a conclusion of no significant environmental effects in relation to the Project, were also content to conclude that certain topics could be scoped out of the Project EIA. The Scottish Ministers provided a response to each of the questions set out in the Scoping Report as part of their Scoping Opinion.
30. Full details of the scoping requirements set out by the Scottish Ministers, along with the responses from stakeholders, are included in the Scoping Opinion.
31. The scope of the Project EIA based on the Scoping Opinion (Scottish Ministers, 2017) is presented in Table 5.4.

Table 5.4 – Summary of impacts scoped into and out of the Project EIA (based on Scottish Ministers, 2017)

Topic	Scoped in (and scoping advice)	Scoped out (and scoping advice)
Geology and Water Quality	East Lothian Council (ELC) raised a concern with regard to a proposed Local Geodiversity Site at Thorntonloch Coast (see Table 5.5 below); the Scoping Opinion required that, if this site is designated, the EIA Report will need to consider whether there is potential for any impact on the site – see Table 5.5 below.	All other potential impacts on geology and water quality.
Physical Processes	None	All potential impacts on physical processes.
Air Quality	None	All potential impacts on air quality.
Ornithology	<p>Assessment of potential impacts on key seabird species including SPAs / pSPA as listed in and in line with the recommendations of Section 8.6 of the Scoping Opinion.</p> <p>Collision and displacement effects for specifically named species as listed in and in line with the recommendations of Sections 8.7 and 8.8 of the Scoping Opinion.</p> <p>Apportioning effects in line with the recommendations of Section 8.9 of the Scoping Opinion.</p> <p>Population Viability Analysis (PVA) in line with the recommendations of Section 8.10 of the Scoping Opinion.</p> <p>Assessment of cumulative impacts in line with the recommendations of Section 8.11 of the Scoping Opinion.</p>	Need for additional site survey data (unless submission of Application is delayed in which case advice may change, NnGOWL must seek advice again if the Application is not submitted within 12 months of the date of issue of the Scoping Opinion).
Marine Mammals	<p>Assessment of noise impacts on Bottlenose Dolphin, Harbour Seal, Grey Seal, Harbour Porpoise, Minke Whale and White Beaked Dolphin.</p> <p>Use of management unit populations and additional recommended literature to assess distribution and impacts on Bottlenose Dolphin, Harbour Seal, Grey Seal, Harbour Porpoise, Minke Whale and White Beaked Dolphin.</p> <p>Underwater noise effects on specifically named species.</p> <p>Species specific impact assessments, including CIA, as recommended.</p> <p>Population level effects on specifically named species.</p>	<p>All other impacts on marine mammals.</p> <p>Need for additional baseline data.</p>

Topic	Scoped in (and scoping advice)	Scoped out (and scoping advice)
	Assessment of cumulative impacts in relation to the projects listed in Section 8.12 of the Scoping Opinion.	
Benthic Ecology	None	All potential impacts on benthic ecology.
Fish and Shellfish Ecology	Clarity on the effects of suspended sediment on scallop populations and catching grounds. Potential impact of particle motion effects. Review of cumulative impact assessment with justification if no updated needed.	All other potential impacts on fish and shellfish ecology. Effects on diadromous fish (pending confirmation that no significant effects would occur using updated literature provided by marine Scotland science).
Commercial Fisheries	All potential impacts on commercial fisheries. Assessment of cumulative impacts in relation to the projects listed in Section 8.15 of the Scoping Opinion.	None
Shipping and Navigation	Updating shipping baseline data with marine traffic survey data. Discuss and agree specific requirements for an updated Navigational Risk Assessment (NRA) with the Maritime Coastguard Agency (MCA) (Subsequently agreed updated NRA not required). Assessment of cumulative impacts in relation to the projects listed in Section 8.16 of the Scoping Opinion.	Shipping and navigation receptors not considered to be significantly affected by the Project.
Military, Civil Aviation and Telecommunications	Impacts of increased turbine blade tip height on defence radar and other radar systems. Consultation with Ministry of Defence's (MOD) Defence Infrastructure Organisation (DIO) regarding embedded mitigation for effects on military and aviation receptors as listed in Section 8.17 of the Scoping Opinion. Assessment of cumulative impacts in relation to the projects listed in Section 8.17 of the Scoping Opinion.	Impacts on all other radar and telecommunications.
Maritime Archaeology and Cultural Heritage	Visual impacts on cultural heritage setting based on the increase in turbine size. Assessment of cumulative impacts where they apply to visual impacts on cultural heritage setting based on the increase in turbine size.	All other potential impacts on maritime archaeology and cultural heritage.
Seascape, Landscape and Visual Impact	All seascape, landscape and visual impacts, including lighting. Assessment of cumulative impacts in relation to the projects listed in Section 8.19 of the Scoping Opinion.	None
Other Marine Users	None	All potential impacts on other marine users.

Topic	Scoped in (and scoping advice)	Scoped out (and scoping advice)
		The Scoping Report did not consider the impacts on other marine users from Airborne Noise. NnGOWL commissioned two noise assessments to determine the likelihood of impacts resulting from construction related airborne noise on other marine or coastal users. These assessments are presented in Appendix 5.1 and Appendix 5.2. The findings of these reports confirm that impacts on coastal receptors are unlikely from construction activity and as such no further assessment is presented within this EIA Report.
Socioeconomics	Potential socioeconomic impacts (GVA and employment).	Potential impacts on tourism.

32. The Scoping Opinion raised a number of other points for consideration in the Project EIA that were not dealt with in the Scoping Report, resulting from input to the scoping consultation from stakeholders. These are summarised in Table 5.5 below along with an indication of how these have been dealt with in preparing the application.

Table 5.5: Other issues raised in the Scoping Opinion (based on Scottish Ministers, 2017)

Stakeholder	Topic Area	Specific Request	Scottish Ministers Response	How Addressed?
ELC	Geodiversity interest	ELC have raised a concern with regard to a proposed Local Geodiversity Site at Thorntonloch Coast.	If this site is designated, the EIA Report will need to consider whether there is potential for any impact on the site.	<p>The proposed Local Geodiversity Site (site ELC 26 in the East Lothian Geodiversity Audit – Whitbread et al, 2015) lies to the south-eastern end of the beach and shows good examples of natural arches and rocky shore platform.</p> <p>ELC26 lies to the south-east of the landfall location which will be situated on the northern half of the beach (so that there will be no spatial overlap with the proposed Local Geodiversity Site).</p> <p>NnGOWL have written to ELC identifying this spatial separation and providing an assessment for the potential for indirect effects on ELC26.</p> <p>Given that the site is not yet designated, it is not considered further in this EIA Report.</p>

Stakeholder	Topic Area	Specific Request	Scottish Ministers Response	How Addressed?
<p>Transport Scotland</p> <p>Scottish Borders Council</p>	<p>Access, traffic and transport</p>	<p>Requirement for an ‘Access, Traffic and Transport’ chapter in the EIA Report - consistent with the approach adopted in the Original ES but updated as required.</p> <p>Transport Scotland note that they sent a response on 21 September 2015 and given the conclusions of this response note that there are unlikely to be significant traffic impacts or associated issues on the Trunk Road Network.</p>	<p>The Scottish Ministers advise NnGOWL to consider the response from Transport Scotland and provide updated information on ‘Access, Traffic and Transport’ in the EIA Report.</p>	<p>NnGOWL note that in fact the Original ES did not consider traffic and transport (that is onshore transport associated with the offshore construction) – not least because no port had been selected – which remains the case for the current application. However, the Consents included the following condition (condition 22) requiring a Traffic and Transportation Plan for approval:: The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must, at all times, be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval by the Scottish Ministers).</p> <p>Reason: To maintain the free flow and safety of the Trunk Road network.</p> <p>NnGOWL would anticipate s similar condition in the Section 36 consent for the Project which would ensure that traffic and transport issues are addressed once the final port(s) are selected</p> <p>Note that matters relating to traffic, transport and access relating to the onshore works were assessed in the ES accompanying the town and country planning application for the onshore works and that any traffic relating to development in the intertidal area is separately the subject of a Traffic Management Plan under condition 6 of the onshore planning permission.</p>
<p>ELC</p>	<p>Onshore works – inclusion in the EIA</p>	<p>ELC state their view that both onshore and offshore works are an integral part of the Project. ELC are of the view that the EIA Report would require to consider</p>	<p>NnGOWL should consider the detailed comments provided by ELC and take these into account when</p>	<p>See Chapter 6: EIA Methodology - Inter-related Assessment</p>

Stakeholder	Topic Area	Specific Request	Scottish Ministers Response	How Addressed?
		the impacts of the offshore works together with the impacts of the onshore works as consented and in respect of an up to date baseline.	preparing the EIA Report.	

5.3.5 Scoping Gap Analysis

33. The Scoping Opinion included a template for a gap analysis, which is to be used to record the environmental concerns identified during the scoping process and is to be completed and used to inform the preparation of the EIA Report and submitted as part of the Application.

5.3.6 Post-scoping

- 34. Following receipt of the Scoping Opinion, NnGOWL have continued to engage with key stakeholders in developing the approach to the assessments and discussing the issues arising. A summary of these further consultations is set out in Section 5.6.3.
- 35. Following the Scoping Opinion, there have been a number of further amendments to the Project design, these are detailed in Table 5.6 below.

Table 5.6: Project changes that have occurred post-scoping

Parameter	Value at Scoping	Value for Application
Number of turbines	56	54
Seabed occupied by jacket (jackets, legs and scour protections) ¹	225m ²	300m ² per leg for four leg jacket; 108 m ² per 6 leg jacket
Foundation installation method ¹	3% driven only; 7% of piles will be drilled only; 90% drill-drive-drill	0-10% driven only; 90-100% drill-drive-drill Drill only may be used at a small number of locations
Maximum rotor tip height (m)	230	208
Rotor Diameter (m)	180	167
Length x width of OSP Topside (m)	30 x 30	40 x 40
Total weight of topside (tonnes)	Up to 2500	Up to 3500

5.4 Embedded Mitigation

- 36. The Scoping Report, and the resulting Scoping Opinion, were based on an assessment of the potential significant effects that might arise from the Project taking into account embedded mitigation as identified for each of the topics considered.
- 37. Embedded mitigation is the term applied to mitigation measures that are effectively ‘built in’ to the Project i.e. they are assumed to be in place as up-front commitments rather than mitigation proposed in response to the EIA process and being necessary to specifically mitigate a significant effect.

¹ Following submission of the Scoping Report a number of Project parameters have been refined upwards. These project parameters still fall within the worst case design scenario assessed in the Original Application and therefore does not compromise the scoping process as detailed within Section 5.3.

38. The Scoping Opinion therefore relies on these embedded mitigation measures being in place (and ultimately secured in some form in the consents granted), in addition to any additional mitigation identified through the detailed EIA process.
39. For those topics scoped into the Project EIA (in whole or in part) (as identified in Table 5.4) the relevant embedded mitigation measures are listed in each respective chapter of this EIA Report (together with any additional mitigation that may be required).
40. For those topics wholly scoped out of the EIA Report, embedded mitigation measures must, where appropriate, be retained in considering and determining the Application.
41. The embedded mitigation is derived from the following:
- Mitigation and management measures that formed ‘embedded mitigation’ applied during the Original EIA; and
 - Additional mitigation and management measures identified as a result of the Original EIA.
42. For each of the topics set out in the Scoping Report, the question was asked as to whether the embedded mitigation provides a suitable means for managing and mitigating the potential significant effects of the Project and whether the receptors should be scoped out of the Project EIA. Table 5.7 summarises the embedded mitigation for those topics wholly scoped out of the EIA process as detailed in the Scoping Report.
43. For each of the topics listed in Table 5.7, Marine Scotland has confirmed that they are content that the embedded mitigation is sufficient to manage or mitigate the potential significant effects and can be used as a basis for scoping out.

Table 5.7: Summary of embedded mitigation measure commitments for topics scoped out of the Project EIA

Topic	Embedded mitigation measures
Geology and Water Quality	<ul style="list-style-type: none"> ▪ Construction contractors will be required to produce Site Environmental Management Plans (SEMP) and Pollution Control and Spillage Response Plans prior to construction works. These plans will reduce the probability of accidental spillage and formalise a contingency plan in the event that one does occur.
Physical Processes	<ul style="list-style-type: none"> ▪ A nearshore survey will be completed to inform the design of the intertidal and nearshore cable laying, and thus minimise impacts; ▪ A variety of techniques may be employed to reduce or eliminate scour. The following measures will be considered: rock armouring, mattresses, and frond mats; and ▪ Cables will be suitably buried or will be protected by other means when burial is not practicable.
Air Quality	<ul style="list-style-type: none"> ▪ As all atmospheric emissions associated with the development are from vessel emissions, total emissions will be reduced by taking total vessel emissions / fuel use into account when designing the final installation, operation and maintenance, and decommissioning strategies to minimise as far as practicable the number of vessel movements and installation time required; and ▪ Additionally, all vessels employed during the Project development will comply with the Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008 and where practicable, contracts with the vessels will include a requirement for energy management, to minimise energy usage.

Topic	Embedded mitigation measures
<p>Benthic Ecology</p>	<ul style="list-style-type: none"> ▪ Cable burial to an appropriate trenching depth to limit the rise in sediment temperature and prevent macrozoobenthic fauna from direct harm as well as limit physical changes that may impair the ecological functioning of benthic communities and to increase the distance between benthic species and electro-magnetic field (EMF) associated with subsea cabling; ▪ Conduct a pre-construction cable route survey to identify any sensitive seabed habitats. Should such habitats be recorded, the Offshore Export Cable Corridor will be micro-sited, in consultation with Scottish Natural Heritage (SNH) and other stakeholders via submission, for approval, to MS-LOT of a Cable Plan (CaP) (see section 5.5); and ▪ Although no significant impact arising from the installation of the cables is predicted, it is considered good practice to minimise the extent of any unnecessary habitat disturbance. On this basis, material displaced as a result of cable burial activities should, where techniques allow, be back-filled in order to promote recovery.
<p>Maritime Archaeology and Cultural Heritage (excluding settings analysis)</p>	<ul style="list-style-type: none"> ▪ Direct physical impact on all sites of cultural heritage interest identified will be avoided where possible through micro-siting of both turbines and installation equipment (e.g. jack-ups); ▪ Where cultural heritage assets may potentially be subject to direct or indirect impacts, Archaeological exclusion zones (AEZ) will be implemented to prevent potential impacts from anchoring or installation of jack-up vessels; ▪ Exclusion zones of at least 100 m will be established around sites identified as being of high vulnerability, while an exclusion zone of a minimum 50 m will be established around those of medium vulnerability. In addition to the construction phase it is also anticipated that the implementation of AEZs will ensure cultural heritage assets are protected from potential impacts during the operation and decommissioning phases; ▪ Absolute exclusion zones of at least 300 m around all protected wrecks within the Development Area; ▪ Should further survey or investigation confirm the nature and characteristics of an identified asset then an AEZ can be maintained or removed as appropriate and in consultation and agreement with Historic Scotland (now Historic Environment Scotland (HES)); ▪ The implementation and monitoring of the AEZs will be maintained through the Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD) highlighted below; ▪ In order to mitigate the risk of damage to any previously unrecorded archaeological remains a WSI and PAD will be prepared to mitigate construction impacts in the event of any unexpected archaeological discoveries during construction. This protocol will also include appropriate archaeological briefings for all personnel involved in the construction, operation and decommissioning activities associated with the proposed development. The PAD will be in place for the life of the proposed development and will be updated when required should details within the document change, for example contact details for key stakeholders; and ▪ Should it not be possible to avoid sites of cultural heritage interest, a full programme of archaeological investigation, which may include diver survey or Remotely Operated Vehicle (ROV) investigation, will be undertaken to identify the nature and extent of these sites. Subject to these investigations, an appropriate mitigation strategy will be agreed with HES.

Topic	Embedded mitigation measures
Other Marine Users	<ul style="list-style-type: none"> ▪ Marking of the proposed Project on Admiralty charts to aid navigation; ▪ Appropriate information circulation such as use of Notice to Mariners (NtM), Navigation Broadcasts and other appropriate media; ▪ Appropriate marking and lighting of structures associated with the Offshore Wind Farm in accordance with international guidance; ▪ Adequate turbine air draught: the lowest point of the rotor sweep will exceed the 22 m above MHWS as recommended by the MCA; ▪ Cables to be appropriately protected and post installation surveys may be undertaken to indicate status of cable burial to allow fishing practices and anchoring to recommence; ▪ The Project will be compliant with the MCA's Marine Guidance Note 71; ▪ Emergency Response and Cooperation Plans will be developed as per MCA recommendations; ▪ Best practice measures may be implemented, which include development of a Marine Control Centre, routine subsea surveys to monitor cable burial status, and use of construction safety zones; ▪ A UXO risk assessment will be carried out prior to construction; and ▪ Full seabed magnetometer scan, or other industry accepted method of UXO identification, may be undertaken prior to construction.

5.5 Consent Condition Commitments

44. The Consents included a number of conditions and requirements relating to the mitigation or management of the Project (many of which incorporate the requirements set out as embedded mitigation).
45. NnGOWL recognises that the Scottish Ministers, in granting consents for the Project, are likely to require similar conditions and requirements (where they are considered to remain relevant) – and indeed may wish to prescribe additional conditions. However, NnGOWL would expect that, broadly, the main requirements encapsulated by the conditions set out in the Consents, where relevant and necessary to the Project, will remain a requirement in some form.
46. For example, NnGOWL would envisage a condition requiring the Project to be constructed and operated in accordance with this EIA Report, and the requirement for some or all of the following plans to be submitted for approval by the Scottish Ministers prior to the commencement of construction - each of which act to limit the final design of the Project to that detailed within the design envelope in this EIA Report:
- Construction Programme (CoP) to confirm the timing and programming of construction;
 - Design Specification and Layout Plan (DSLPL) detailing the final specification and layout of the Offshore Wind Farm and OfTW;
 - Construction Method Statement (CMS) to confirm the installation methods and management of construction taking into account any required mitigation measures;
 - Piling Strategy (PS) setting out the key pile parameters, installation method and mitigation to be applied during construction;
 - Cable Plan (CaP) setting out the installation methods taking into consideration all environmental and navigational issues; and
 - Operation and Maintenance Programme (OMP) setting out the requirements and programme of ongoing operation and maintenance activities.
47. In addition, a variety of other conditions were attached to the Consents which acted to mitigate or control particular aspects of the Originally Consented Project. NnGOWL would expect similar conditions to be required where they remain relevant to the Application. Reference to anticipated consent condition commitments are referenced within specific topic chapters where they are relevant to the management and mitigation of environmental risk for specific receptor groups.

5.6 Other Consultation and Stakeholder Engagement

5.6.1 Legislative Requirements for Pre-Application Consultation

48. There are no statutory requirements for consultation during the pre-application stage for Section 36 consent applications made under the Electricity Act 1989.
49. Draft guidance on applications for consents for marine renewables projects in Scotland (Marine Scotland, 2012) notes that although not required under the Section 36 Consent process, MS-LOT will require applicants to have undertaken pre-application consultation with stakeholders, consultees and the public in accordance with good practice.
50. For applications for Marine Licences under the Marine (Scotland) Act 2010, the Marine Licensing (Pre-application Consultation (PAC)) (Scotland) Regulations 2013 set out specific requirements for pre-application consultation (Marine Scotland, 2013). The purpose of these requirements is to allow local communities, environmental groups and other interested parties to comment upon proposed marine developments at an early stage, before an application is submitted to Marine Scotland (for relevant applications in the Scottish Inshore Region, from MHWS to 12 nautical miles).
51. The PAC requirements consist of at least one public event (local to the location of the project) and notification, at least 12 weeks prior to the submission of the application, of the intention to submit a marine licence application to a number of prescribed statutory consultees (The Commissioners of Northern Lighthouses, The Maritime and Coastguard Agency, The Scottish Environment Protection Agency, Scottish Natural Heritage, and any delegate for the relevant marine region or regions where these have been established). Notification to submit an application for a Marine Licence was given to statutory consultees on the 3 August 2017. In addition, and no less than 6 weeks in advance of the public pre-application consultation event, a notice must be published in a local newspaper giving details of the Project and the timing and location of the public event and the date by which comments are to be provided.
52. Section 24(1) of the Marine (Scotland) Act 2010 requires that a PAC report be prepared and submitted with the Marine Licence application.

5.6.2 Project Pre-Application Consultation

53. NnGOWL has undertaken pre-application consultation in compliance with the specific requirements set out under the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013.
54. The details of the consultation and the outcomes of the consultation are presented separately in the PAC Report, which accompanies the Application (Facilitating Change, 2017) and conforms to the prescribed requirements set out in the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013. It summarises the results of a number of public events at the following locations:
 - 25 September 2017 – North Berwick;
 - 26 September 2017 – Dunbar;
 - 27 September 2017 – Carnoustie;
 - 28 September 2017 – Crail; and
 - 4 October 2017 – St Andrews.
55. The PAC Report also includes a summary of any responses received in response to the public notices placed in local newspapers.

5.6.3 Other Stakeholder Engagement

56. NnGOWL undertook extensive consultation on the Originally Consented Project and Section 36 Variation with a range of statutory and non-statutory stakeholders and the general public. In doing so,

NnGOWL has well developed stakeholder relationships and a good understanding of the interests and issues associated with the Project.

57. For the current application, NnGOWL has continued that engagement, principally through the scoping and pre-application consultation processes outlined above, in developing the Application for the Project. Further meetings, following on from the scoping process, have been held with a number of key stakeholders including:
- Community Councils;
 - Members of Parliament, Members of the Scottish Parliament and Local Councillors;
 - MCA (shipping and navigation);
 - Local planning authorities (SLVIA, cultural heritage and geology);
 - Commercial fisheries stakeholders;
 - Marine Scotland Science (benthic ecology, ornithology, marine mammals, fish and shellfish ecology);
 - SNH (SLVIA, ornithology and marine mammals); and
 - RSPB (ornithology).
58. Further detail on these consultations are provided in the respective topic chapters.
59. NnGOWL will continue to engage through the post-application process and in seeking determination of the Application.

5.7 References

- Marine Scotland (2013) *Guidance on Marine Licensable Activities Subject To Pre-Application Consultation*. Available from <http://www.gov.scot/Resource/0043/00439649.pdf>
- Marine Scotland (2012) *Marine Scotland Licensing and Consents Manual, covering Marine Renewables and Offshore Wind Energy Development*. Date: October 2012. Available from <http://www.gov.scot/Resource/0040/00405806.pdf>
- Facilitating Change (2017) *Neart na Gaoithe Offshore Wind Farm Pre-Application Consultation Report*. UK02-0504-0744-MRP-PAC_REPORT-RPT-A1
- NnGOWL (2017) *Neart na Gaoithe Offshore Wind Farm Scoping Report*. Dated May 2017. Report ref: UK02-0504-0673-MRP-NNG SCOPING REPORT 2017-RPT-A1. Available from <http://www.gov.scot/Topics/marine/Licensing/marine/scoping/NnGRev2017/NnG-ScopingReport-May2017>
- NnGOWL (2013) *Neart na Gaoithe Offshore Wind Farm Addendum of Supplementary Environmental Information*. Dated June 2013. Available from http://marine.gov.scot/datafiles/lot/nng/Addendum_of_supplementary_Environmental_Information/
- NnGOWL (2012) *Neart na Gaoithe Offshore Wind Farm Offshore Environmental Statement*. Available from <http://marine.gov.scot/datafiles/lot/nng/Application/>
- Scottish Ministers (2017) *Scoping Opinion for the Proposed Section 36 Consent and Associated Marine Licence Application for the Revised Neart Na Gaoithe Cape Offshore Wind Farm and Revised Neart Na Gaoithe Offshore Transmission Works*. Dated September 2017. Available from <http://www.gov.scot/Topics/marine/Licensing/marine/scoping/NnGRev2017/SO-092017>
- Whitbread, K, Ellen, R, Callaghan, E, Gordon, JE and Arkley, S (2015). *East Lothian Geodiversity Audit*. British Geological Survey Open Report, OR/14/063. 192pp.