Appendix 6.3: Enhancement, Mitigation and Monitoring Commitments

Array EIA Report

2024

Revision	Comments	Author	Checker	Approver
FINAL	Final	RPS	RPS	RPS

Approval for Issue		
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TABLES

1. INTRODUCTION

1. This chapter of the Array Environmental Impact Assessment (EIA) Report presents a summary of the designed in measures, mitigation and monitoring commitments detailed for the Ossian Array (hereafter referred to as “the Array”). For each commitment, the means of implementation is also specified.

2. The summaries presented below are taken from the related topic chapters:

- volume 2, chapter 7: Physical Processes;
- volume 2, chapter 8: Benthic Subtidal Ecology;
- volume 2, chapter 9: Fish and Shellfish Ecology;
- volume 2, chapter 10: Marine Mammals;
- volume 2, chapter 11: Offshore Ornithology;
- volume 2, chapter 12: Commercial Fisheries;
- volume 2, chapter 13: Shipping and Navigation;
- volume 2, chapter 14: Aviation, Military and Communications;
- volume 2, chapter 15: Infrastructure and Other Users;
- volume 2, chapter 16: Major Accidents and Disasters;
- volume 2, chapter 17: Climatic Effects;
- volume 2, chapter 18: Socio-Economics;
- volume 2, chapter 19; Marine Archaeology; and
- volume 2, chapter 20: Inter-Related Effects.

2. SUMMARY OF DESIGNED IN MEASURES, MITIGATION AND MONITORING

2.1. PHYSICAL PROCESSES

Table 2.1: Volume 2, Chapter 7: Physical Processes Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C1	Spacing between wind turbines within the Array will be sufficiently distant (at least 1,000 m).	There is the potential for changes to the wave, wind and hydrodynamic regime due to the presence of the Array, should the wind turbines be situated closely together. The design adopted will ensure a sufficient spacing of at least 1,000 m between wind turbines, as discussed in volume 1, chapter 3. Thus, any wake effects, or changes to the wind and wave field or hydrodynamics will be minimised.	Secured in the Section 36 Consent and/or Marine Licence.
C2	Undertake detailed wake loss modelling.	Undertaken to inform layout design by minimising wake loss across the Array.	As part of detailed design of the Array, the Applicant will undertake detailed wake loss modelling to inform the development of the final layout, taking into account the final turbine design.
C3	Development of, and adherence to a Cable Burial Risk Assessment (CBRA).	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of the Array, to minimise the risk of interaction with other sea users or cable exposure.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a Cable Plan (CaP) and associated CBRA, which will be submitted post-consent.
C4	Use of minimum burial depths (0.4 m) or cable protection around the Array and interconnector cables.	There is the potential for disturbance of seabed sediments to occur due to interactions between metocean regime (wave, sand and currents) and subsea cables. This can result in increased suspended sediments and affect the sediment transport regime. Therefore, the use of minimum burial depths and cable protection around inter-array and interconnector cables will be employed to ensure cables remain adequately protected for the duration of the operational phase of the project, as described in detail in volume 1, chapter 3.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a CaP and associated CBRA, which will be submitted post-consent.
C5	Development of, and adherence to, an Operation and Maintenance Programme (OMP)	The OMP will detail a programme of routine inspections, including of static inter-array and interconnector cables to confirm target burial depth is maintained. There is a potential for disturbance of seabed sediments to occur if the target burial depth is not maintained.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a OMP which will be submitted to Marine Directorate – Licencing and Operations Team (MD-LOT) for approval.
C6	Development of, and adherence to a Scour Protection Management Plan (SPMP).	There is the potential for scouring of seabed sediments to occur due to interactions between metocean regime (wave, sand and currents) and wind turbine anchors or Offshore Substation Platform (OSP) foundations or other seabed structures. This scouring can develop into depressions around the structure, therefore the use of scour protection around offshore structures and foundations will be employed, where required, as described in detail in volume 1, chapter 3.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a SPMP which will be submitted to MD-LOT for approval.
Secondary Mitigation			
N/A	None.	No physical processes mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
M1	No physical processes monitoring is proposed to test the predictions made within the assessment of likely significant effects or Cumulative Effects Assessment (CEA) on physical processes as no likely significant effects were predicted during the construction and decommissioning phases. During the operation and maintenance phase, monitoring will be undertaken for engineering and asset security purposes.	This monitoring during the operation and maintenance phase will identify if the seabed morphology has changed and/or cables become exposed.	Detailed monitoring commitments will be agreed with MD-LOT post-consent, as required, and included in the OMP secured in the Section 36 Consent and/or Marine Licence and submitted to MD-LOT for approval.

2.2. BENTHIC SUBTIDAL ECOLOGY

Table 2.2: Volume 2, Chapter 8: Benthic Subtidal Ecology Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C7	Development of, and adherence to an Environmental Management Plan (EMP).	To ensure adequate environmental controls are in place across the project to manage and mitigate any potential risk to the environment. Measures will cover all aspects of environmental management including environmental awareness training, auditing, environmental reporting and waste management. It is anticipated that the Marine Pollution Contingency Plan (MPCP) and Invasive Non-Native Species Management Plan (INNSMP) will be appendices to the overarching EMP.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C8	Development of, and adherence to a MPCP.	Measures will be adopted to ensure that the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out by International Convention for the Prevention of Pollution from Ships (MARPOL).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C6	Development of, and adherence to an SPMP.	To set out the approach to scour protection installation and monitoring to ensure asset integrity is not compromised whilst reducing scour requirements as far as practicable during the project lifecycle.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for an SPMP which will be submitted for MD-LOT for approval.
C9	Development of, and adherence to an INNSMP.	To reduce the risk of introduction and spread of Invasive and Non-Native Species (INNS) during all phase of the Array as far as reasonably possible.	Secured in the Marine Licence via the requirement for an INNSMP to be submitted to MD-LOT for approval.
C3	Development of, and adherence to a CBRA.	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of the Array, to minimise the risk of interaction with other sea users or cable exposure.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a CaP and associated CBRA, which will be submitted post-consent.
C10	Development of, and adherence to a Decommissioning Programme (DP^2).	The aim of this plan is to adhere to the existing United Kingdom (UK) and international legislation and guidance (at the time of writing) during the decommissioning phase. This will reduce the amount of long-term disturbance to the environment as far as reasonably practicable.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DP^2. It is expected the DP^2 will be submitted to be submitted to MD-LOT for approval.
Secondary Mitigation			
N/A	None.	No benthic subtidal ecology mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) are not significant in EIA terms.	N/A
Monitoring			
M2	Engage and contribute to regional and strategic monitoring giving due consideration to the Scottish Marine Energy Research ScotMER programme, or any successor programme formed to facilitate these research interests, or any developer lead regional groups.	No project specific monitoring measures are proposed given that no significant impacts were predicted from the Array alone or cumulatively with other plans and projects. The Applicant will engage with MD-LOT, NatureScot, and other relevant key stakeholders to identify and contribute to targeted and proportionate regional or strategic monitoring to better understand the environmental effects of offshore wind taking account of known evidence gaps taking account of Evidence Maps published through the ScotMER forum (Scottish Government, 2024).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a Project Environmental Monitoring Plan (PEMP).

2.3. FISH AND SHELLFISH ECOLOGY

Table 2.3: Volume 2, Chapter 9: Fish and Shellfish Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C11	The development of, and adherence to a Piling Strategy (PS) (or equivalent) which will set out the following measures: Implementation of initiation stage and soft start during piling. This will involve the use of a low hammer energy with a low number of strikes used initially, followed by lower hammer energies at a higher strike rate at the beginning of the piling sequence before energy input is 'ramped up' (increased) over time to required higher levels.	These measures will reduce the likelihood of injury from elevated underwater noise to marine life in the immediate vicinity of piling operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PS which will be submitted to MD-LOT for approval. The PS (or equivalent) will be submitted post-consent in collaboration with stakeholders, including but not limited to, MD-LOT and NatureScot, following collation of additional data and final design parameters (e.g. piling locations, hammer energies). Noise modelling will be reviewed with the additional information and inform the final PS, which will be submitted to MD-LOT, following consultation with stakeholders.
C12	Undertake Unexploded Ordnance (UXO) clearance using low order disposal techniques where technically feasible.	Low order techniques will be adopted wherever practicable (e.g. deflagration and clearance shots) as mitigation to reduce noise levels and thereby injury and disturbance to sound-sensitive receptors during UXO clearance. There is a small risk that low order disposal could unintentionally result in a high order detonation and therefore this scenario has also been considered in the assessment of likely significant effects.	UXO clearance will be subject to a separate Marine Licence application and European Protected Species (EPS) Licence as appropriate. Mitigation, including implementation of low order disposal, will be secured through the relevant Marine Licence and EPS licence.
C13	Implementation of soft start measures for UXO clearance using a sequence of small explosive charges detonated over set time intervals.	These measures will reduce the likelihood of injury from elevated underwater noise to fish and shellfish receptors in the immediate vicinity of piling/UXO clearance operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur. This is in line with the most up to date guidance for piling/UXO clearance operations (Joint Nature Conservation Committee (JNCC), 2010a; JNCC, 2010b) and, in most cases, compliance with this guidance reduce the likelihood of injury to fish and shellfish receptors to negligible levels.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including, implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.
C7	Development of, and adherence to an EMP.	To ensure adequate environmental controls are in place across the project to manage and mitigate any potential risk to the environment. Measures will cover all aspects of environmental management including environmental awareness training, auditing, environmental reporting and waste management. It is anticipated that the MPCP and INNSMP will be appendices to the overarching EMP.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C8	Development of, and adherence to a MPCP.	To reduce the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out by MARPOL.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an outline EMP, including an outline MPCP to be submitted to MD-LOT for approval.
C14	Development of, and adherence to an INNSMP.	To reduce the risk of introduction and spread of INNS during all phase of the Array as far as reasonably possible.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an INNSMP to be submitted to MD-LOT for approval.
C3	Development of, and adherence to a CBRA.	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of the Array, to minimise the risk of interaction with other sea users or cable exposure.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a CaP and associated CBRA, which will be submitted post-consent.
C10	Development of, and adherence to a DP[2].	The aim of this plan is to adhere to the existing UK and international legislation and guidance (at the time of writing) during the decommissioning phase. This will reduce the amount of long term disturbance to the environment as far as reasonably practicable. While this measure has been committed to as part of the Array, the MDS for the decommissioning phase has been considered in each of the assessments of effects presented in section 9.11 of volume 2, chapter 9.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DP[2]. It is expected the DP[2] will be submitted to be submitted to MD-LOT for approval.
Secondary Mitigation			
N/A	None.	No fish and shellfish ecology mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A

Reference	Commitment	Justification	Means of Implementation
Monitoring			
M2	Engage and contribute to regional and strategic monitoring giving due consideration to the Scottish Marine Energy Research ScotMER programme, or any successor programme formed to facilitate these research interests, or any developer lead regional groups.	No project specific monitoring measures are proposed given that no significant impacts were predicted from the Array alone or cumulatively with other plans and projects. The Applicant will engage with MD-LOT, NatureScot, and other relevant key stakeholders to identify and contribute to targeted and proportionate regional or strategic monitoring to better understand the environmental effects of offshore wind taking account of known evidence gaps taking account of Evidence Maps published through the ScotMER forum (Scottish Government, 2024).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PEMP.

2.4. MARINE MAMMALS

Table 2.4: Volume 2, Chapter 10: Marine Mammals Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C7	Development of, and adherence to an EMP.	To ensure adequate environmental controls are in place across the project to manage and mitigate any potential risk to the environment. Measures will cover all aspects of environmental management including environmental awareness training, auditing, environmental reporting and waste management. It is anticipated that the MPCP and INNSMP will be appendices to the overarching EMP.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C8	Development of, and adherence to a MPCP.	To reduce the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out by MARPOL.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an outline EMP, including an outline MPCP to be submitted to MD-LOT for approval.
C15	Development of, and adherence to, a Navigational Safety and Vessel Management Plan (NSVMP).	The NSVMP will include measures to reduce disturbance to marine mammal receptors from transiting vessels, requiring them to: • not deliberately approach marine mammals as a minimum; and • avoid abrupt changes in course or speed should marine mammals approach the vessel to bow-ride. The NSVMP will be implemented as far as practicable and where it does not compromise the safety of vessels.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an NSVMP which will be submitted to MD-LOT for approval.
C11	The development of, and adherence to a PS (or equivalent) which will set out the following measures: Implementation of initiation stage and soft start during piling. This will involve the use of a low hammer energy with a low number of strikes used initially, followed by lower hammer energies at a higher strike rate at the beginning of the piling sequence before energy input is 'ramped up' (increased) over time to required higher levels.	These measures will reduce the likelihood of injury from elevated underwater noise to marine life in the immediate vicinity of piling operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur. These measures will reduce the likelihood of injury from elevated underwater noise to marine mammals in the immediate vicinity of piling operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur. This is in line with the most up to date guidance for piling/UXO clearance operations (JNCC, 2010a; JNCC, 2010b) and, in most cases, compliance with this guidance reduce the likelihood of injury to marine mammal receptors to negligible levels.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PS and associated Marine Mammal Mitigation Plan (MMMP) which will be submitted to MD-LOT for approval. The PS (or equivalent) will be submitted post-consent in collaboration with stakeholders, including but not limited to, MD-LOT, MD-SEDD, and NatureScot, following collation of additional data and final design parameters (e.g. piling locations, hammer energies). Noise modelling will be reviewed with the additional information and inform the final PS, which will be submitted to MD-LOT, following consultation with stakeholders.
C12	UXO clearance using low order disposal techniques where technically feasible.	Low order techniques will be adopted wherever practicable (e.g. deflagration and clearance shots) as mitigation to reduce noise levels and thereby injury and disturbance to sound-sensitive receptors during UXO clearance. There is a small risk that low order disposal could unintentionally arise in a high order detonation and therefore this scenario has also been considered in the assessment of likely significant effects.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including, implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.
C13	Implementation of soft start measures for UXO clearance using a sequence of small explosive charges detonated over set time intervals.	These measures will reduce the likelihood of injury from elevated underwater noise to marine mammals in the immediate vicinity of piling/UXO clearance operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur. This is in line with the most up to date guidance for piling/UXO clearance operations (JNCC, 2010a; JNCC, 2010b) and, in most cases, compliance with this guidance reduce the likelihood of injury to marine mammal receptors to negligible levels.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including, implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.

Reference	Commitment	Justification	Means of Implementation
C16	The development of, and adherence to an MMMP.	The MMMP will: • mitigate for the risk of permanent auditory injury to marine mammals within a pre-defined 'mitigation zone' for each activity. The mitigation zone is determined considering the largest injury zone across all species for each relevant activity; • reduce the potential injury to marine mammals and other marine megafauna (e.g. basking shark and sea turtles) as far as practicable; and detail the visual and acoustic monitoring required (as a minimum) over the defined mitigation zones so that animals are clear before the activity commences. Additional measures to deter animals from injury risk zones may be applied in some instances (e.g. Acoustic Deterrent Devices (ADDs) or soft start charges). An outline MMMP has been developed on the basis of the most recent published statutory guidance (JNCC, 2010a, JNCC, 2010c, JNCC, 2017).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PS and associated MMMP which will be submitted to MD-LOT for approval post-consent.
C17	Routine inspections of the inter-array cables and mooring lines.	Mooring lines and dynamic inter-array cables in the water column will undergo regular inspections during the operation and maintenance phase with inspection frequency more frequent initially for the first two years and then decreasing to an annual schedule. The removal of marine debris from mooring lines and inter-array cables will be undertaken as necessary following monitoring and further relevant action taken if required, based on findings from the inspections. The removal of debris from mooring lines and cables further reduces the likelihood of secondary entanglement.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a OMP which will be submitted to MD-LOT for approval post-consent.
C10	Development of, and adherence to a DP[2].	The aim of this plan is to adhere to the existing UK and international legislation and guidance (at the time of writing) during the decommissioning phase. This will reduce the amount of long term disturbance to the environment as far as reasonably practicable.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DP[2]. It is expected the DP[2] will be submitted to be submitted to MD-LOT for approval.
Secondary Mitigation			
C58	Implementation of soft start charges and ADD deployment (duration to be determined post-consent).	To reduce the potential for injury and disturbance from underwater noise generated during UXO clearance.	Consideration of secondary measures post-consent.
Monitoring			
M3	Effects on marine mammals due to entanglement associated with the Array.	Mooring lines and dynamic inter-array cables will undergo regular inspections during the operation and maintenance phase. The inspection frequency for mooring lines and dynamic inter-array cables is anticipated to be more frequent initially (e.g. years 1 and 2), and likely to decline in frequency after this, following a risk based approach. Any inspected or detected debris on the floating lines and cables will be recovered based on a risk assessment which considers impact on environment including risk to marine mammals, risk to asset integrity, and health & safety. In addition, the Applicant will consider new technologies for monitoring of mooring lines/snagged gear and will agree approach to monitoring of mooring lines and associated removal of gear with NatureScot and MD-LOT prior to the operation and maintenance phase.	Monitoring commitments will be submitted post-consent and included in the EMP.
M2	Engage and contribute to regional and strategic monitoring giving due consideration to the Scottish Marine Energy Research ScotMER programme, or any successor programme formed to facilitate these research interests, or any developer lead regional groups.	The Applicant will engage with MD-LOT, NatureScot, and other relevant key stakeholders to identify and contribute to targeted and proportionate regional or strategic monitoring to better understand the environmental effects of offshore wind taking account of known evidence gaps taking account of Evidence Maps published through the ScotMER forum (Scottish Government, 2024).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PEMP.

2.5. OFFSHORE ORNITHOLOGY

Table 2.5: Volume 2, Chapter 11: Offshore Ornithology Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C18	Minimum blade tip clearance height of 36 m above Lowest Astronomical Tide (LAT).	As most seabirds tend to fly low, increased blade tip clearance leads to a reduction in collision mortality.	Implemented at design stage. Secured in the Section 36 Consent and/or Marine Licence via a consent condition.
C7	Development of, and adherence to an EMP.	To reduce the risk of accidental release of contaminants from vessels as far as reasonably practicable, thus providing protection for marine life across all phases of the Array. Measures will be adopted to ensure that the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out MARPOL.	Secured in the Marine Licence via the requirement for an EMP (including a MPCP) to be submitted to MD-LOT for approval.
C8	Development of, and adherence to a MPCP.	To reduce the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out by MARPOL.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an outline EMP, including an outline MPCP to be submitted to MD-LOT for approval.
C12	UXO clearance using low order disposal techniques where technically feasible.	Low order techniques will be adopted wherever practicable (e.g. deflagration and clearance shots) as mitigation to reduce noise levels and thereby injury and disturbance to sound-sensitive receptors during UXO clearance. There is a small risk that low order disposal could unintentionally arise in a high order detonation and therefore this scenario has also been considered in the assessment of likely significant effects.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including, implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.
C13	Implementation of soft start measures for UXO clearance using a sequence of small explosive charges detonated over set time intervals.	These measures will reduce the likelihood of injury from elevated underwater noise to marine mammals in the immediate vicinity of piling/UXO clearance operations as far as practicable, allowing individuals to move away from the area before sound levels reach a level at which injury may occur. This is in line with the most up to date guidance for piling/UXO clearance operations (JNCC, 2010a; JNCC, 2010b) and, in most cases, compliance with this guidance reduce the likelihood of injury to marine mammal receptors to negligible levels.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including, implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.
C15	Development of, and adherence to a NSVMP.	The NSVMP will include measures to reduce disturbance to marine mammal receptors from transiting vessels, requiring them to: • not deliberately approach marine mammals as a minimum; and • avoid abrupt changes in course or speed should marine mammals approach the vessel to bow-ride. The NSVMP will be implemented as far as practicable and where it does not compromise the safety of vessels.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an NSVMP which will be submitted to MD-LOT for approval.
C17	Routine inspections of the inter-array cables and mooring lines	Mooring lines and dynamic inter-array cables in the water column will undergo regular inspections during the operation and maintenance phase with inspection frequency more frequent initially for the first two years and then decreasing to an annual schedule. The removal of marine debris from mooring lines and inter-array cables will be undertaken as necessary following monitoring and further relevant action taken if required, based on findings from the inspections. The removal of debris from mooring lines and cables further reduces the likelihood of secondary entanglement.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an OMP.
Secondary Mitigation			
N/A	None.	No offshore ornithology mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
M2	Engage and contribute to regional and strategic monitoring giving due consideration to the Scottish Marine Energy Research ScotMER programme, or any successor programme formed to facilitate these research interests, or any developer lead regional groups.	The Applicant will engage with MD-LOT, NatureScot, and other relevant key stakeholders to identify and contribute to targeted and proportionate regional or strategic monitoring to better understand the environmental effects of offshore wind taking account of known evidence gaps taking account of Evidence Maps published through the ScotMER forum (Scottish Government, 2024).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a PEMP.

2.6. COMMERCIAL FISHERIES

Table 2.6: Volume 2, Chapter 12: Commercial Fisheries Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C19	Fisheries liaison.	Appointment of a Fisheries Liaison Officer (FLO) and use of Offshore FLOs (OFLO) as required to enable ongoing liaison with fishing fleets to be maintained. Adherence to appropriate guidance with regards to fisheries liaison and mitigation procedures in the event of interactions between the proposed development and fishing activities, (i.e. Fisheries Liaison with Offshore Wind and Wet Renewables Group (FLOWW) guidance).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for appointment of a FLO.
C20	Promulgation of information through timely and efficient posting of Notice to Mariners (NtM), Kingfisher Bulletins and navigational warnings, as appropriate. Information will include but not be limited to vessel routes, timings and locations, safety zones and advisory safe passing distances as required.	Maximises awareness of the Array allowing vessels to passage plan in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information and will be set out within the NSVMP.
C3	Development of, and adherence to a CBRA.	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of the Array, to minimise the risk of interaction with other sea users or cable exposure. The location of the areas of cable protection (if cable protection is required) will be communicated to the fishing industry.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a CaP and associated CBRA which will be submitted post-consent to MD-LOT.
C21	Apply for and implement safety zones during major construction and operation and maintenance activities.	Application for safety zones up to 500 m around structures where vessels are undertaking construction work during construction and periods of major operation and maintenance and 50 m around partially completed or completed but not yet fully commissioned surface piercing structures during construction. Advisory temporary safe passing distances to be promulgated to mariners, including fishers, around installation/maintenance vessels actively engaged in works.	Safety zones applications will be made to MD-LOT in accordance with Section 95 of the Energy Act 2004 supported by justification as to why a safety zone is required. Advisory safe passing distances to be promulgated through appropriate channels, including through an established Marine Coordinator and in accordance with measures set out in the NSVMP which will likely be required under a condition of the Section 36 Consent and/or Marine Licence post-consent.
C7	Development of, and adherence to an EMP.	To reduce the risk of accidental release of contaminants from vessels as far as reasonably practicable, thus providing protection for marine life across all phases of the Array. This will include mitigation/monitoring measures and commitments made within the Array EIA Report to reduce the impacts on fish species, including but not limited to chemical usage, INNS, pollution prevention and waste management.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C22	Development of, and adherence to, an OMP.	This will include a schedule of operation and maintenance activities and a procedure for setting out the refined parameters of any cable repair activities.	Secured in the Section 36 Consent and Marine Licence via the requirement for an OMP which will be submitted to MD-LOT for approval.
C23	Development of, and adherence to, a Fisheries Management and Mitigation Strategy (FMMS).	The FMMS will set out the means of ongoing fisheries liaison through the lifetime of the Array and detail any mitigation measures of relevance to commercial fisheries to be put in place. This will set out commitments to environmental monitoring in the pre, during and post-construction phases. A procedure for claims due to loss of, or damage to fishing gear, will be included in the FMMS.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an FMMS which will be submitted to MD-LOT for approval.
C24	Member of and engagement in a Regional Commercial Fisheries Working Group.	Provides a forum for information sharing and discussion of key issues with commercial fisheries stakeholders and other developers in the region.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an FMMS which will be submitted to MD-LOT for approval.

Reference	Commitment	Justification	Means of Implementation
C15	Development of, and adherence to a NSVMP.	The NSVMP will confirm the types and numbers of vessels that will be engaged in activities associated with the Array, and consider vessel coordination including indicative transit route planning (Marine Coordination). All contractors undertaking works to be contractually obliged to ensure compliance with standard offshore policies, including those that prohibit the discarding of objects or materials overboard and that require the rapid recovery of accidentally dropped objects where feasible. Development and issue of a Code of Conduct to all project vessel operators to advise on how to avoid impacts on marine megafauna and interference with fishing activities. Compliance of all project vessels with maritime regulations as adopted by the relevant flag state including the COLREGs (International Maritime Organization (IMO), 1974a) and the International Convention for the Safety of Life at Sea (SOLAS) (IMO, 1974b).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an NSVMP which will be submitted to MD-LOT for approval.
C25	Development of, and adherence to a Lighting and Marking Plan (LMP).	The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting. Navigational aids and marine charting so that other marine users are made aware of the location of the Array. Consideration of UK Marine Guidance Note (MGN) 654 with respect to wind turbine design and construction, so that recognised safe standards are met with regards to navigational safety and emergency response (search and rescue, salvage and towing, counter pollution). Adherence with the provisions of the COLREGs for all contracted vessels, including the display of appropriate lights and shapes such as when vessels are restricted in their ability to manoeuvre.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for LMP which will be submitted to MD-LOT for approval post-consent.
C10	Development of, and adherence to a DP[2].	The aim of this plan is to adhere to the existing UK and international legislation and guidance (at the time of writing) during the decommissioning phase. This will reduce the amount of long term disturbance to the environment as far as reasonably practicable.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DP[2]. It is expected the DP[2] will be submitted to be submitted to MD-LOT for approval.
C26	Appropriate marking of structures on UK Hydrographic Office (UKHO) Admiralty Charts and other electronic charts as appropriate	Ensure the appropriate marking of structures on UKHO Admiralty Charts to maximise the awareness of the Array allowing vessels to plan their passage in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement to provide information to the UKHO.
Secondary Mitigation			
N/A	None.	No commercial fisheries mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
M4	Commitment to monitoring of existing data sources, including landing statistics, Vessel Monitoring System (VMS) and Automatic Identification System (AIS) for commercial fishing vessels.	Monitoring will facilitate an understanding of any changes in fishing activities in the commercial fisheries local and regional study areas across a period covering pre-construction, during-construction and during operation to determine potential fishing activity in the vicinity of the Array and facilitate coexistence as far as practicable.	Detailed monitoring commitments will be proposed post consent and included in the FMMS which will likely be a requirement of the S36 Consent and/or Marine Licence conditions.

2.7. SHIPPING AND NAVIGATION

Table 2.7: Volume 2, Chapter 13: Shipping and Navigation Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C21	Apply for and implement safety zones during major construction and operation and maintenance activities.	Application for safety zones up to 500 m around structures where vessels are undertaking construction work during construction and periods of major operation and maintenance and 50 m around partially completed or completed but not yet fully commissioned surface piercing structures during construction. Advisory temporary safe passing distances to be promulgated to mariners, including fishermen, around installation/maintenance vessels actively engaged in works.	Safety zones applications will be made to MD-LOT in accordance with Section 95 of the Energy Act 2004 supported by justification as to why a safety zone is required. Advisory safe passing distances to be promulgated through appropriate channels, including through an established Marine Coordinator and in accordance with measures set out in the NSVMP which will likely be required under a condition of the Section 36 Consent and/or Marine Licence post-consent.
C27	Deployment of a buoyed construction area in agreement with the Northern Lighthouse Board (NLB).	Protects third-party vessels from project vessels involved in construction activities which may be RAM, and partially completed structures.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a NSVMP and LMP, which will be submitted to MD-LOT for approval.
C3	Completion of, and adherence to a CBRA.	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of the Array, to minimise the risk of interaction with other sea users or cable exposure.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a CaP and associated CBRA, which will be submitted post-consent.
C28	Compliance with MGN 654 and its annexes (in particular Search and Rescue (SAR) annex 5 and completion of a SAR checklist) where applicable.	Ensures the final Array layout is suitable for SAR operations and that reductions in underkeel clearance are acceptable.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a Development Specification and Layout Plan (DSLP) which will be submitted to MD-LOT for approval.
C29	Use of guard vessel(s) as required by risk assessment.	Maximises awareness of temporary hazards, and ensures vessel presence where necessary to alert passing mariners to a hazard.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a NSVMP which will be submitted to MD-LOT for approval.
C30	Development of, and adherence to, a DSLP to confirm the final layout and design in consultation with the Maritime and Coastguard Agency (MCA) and NLB.	Ensures the final Array layout is suitable for both surface and air based (for SAR purposes) navigation and is compliant with MGN 654. Will also confirm adherence to key project design conditions including ensuring a safe underkeel clearance is maintained around mooring line arrangements.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DSLP which will be submitted to MD-LOT for approval in consultation with the MCA and NLB.
C25	Development of, and adherence to an LMP.	The LMP will confirm compliance with legal requirements including IALA G1162 (IALA, 2021), with regards to shipping, navigation and aviation marking and lighting to increases awareness of the Array in both day and night conditions for vessel and aviation operators including in restricted visibility and assists with SAR operations. Consideration of UK MGN 654 with respect to wind turbine design and construction, so that recognised safe standards are met with regards to navigational safety and emergency response (search and rescue, salvage and towing, counter pollution).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for LMP which will be submitted to MD-LOT for approval.
C26	Appropriate marking of structures on UKHO Admiralty Charts and other electronic charts as appropriate.	Ensure the appropriate marking of structures on UKHO Admiralty Charts to maximise the awareness of the Array allowing vessels to plan their passage in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement to provide information to the UKHO.
C18	Minimum blade tip clearance height of 36 m above LAT.	This minimises the risk of blade allision particularly for sailing vessels with a mast and surpasses the requirements set by the Royal Yachting Association (RYA) policy (RYA, 2019) and MGN 654 (MCA, 2021).	Specific details of the design of the Array are expected to be conditioned in the Section 36 Consent and/or Marine Licence.

Reference	Commitment	Justification	Means of Implementation
C15	Development of, and adherence to an NSVMP.	The NSVMP will confirm the types and numbers of vessels that will be engaged in activities associated with the Array and consider vessel coordination including indicative transit route planning (Marine Coordination). All contractors undertaking works to be contractually obliged to ensure compliance with standard offshore policies, including those that prohibit the discarding of objects or materials overboard and that require the rapid recovery of accidentally dropped objects where feasible. Development and issue of a Code of Conduct to all project vessel operators to advise on how to avoid impacts on marine megafauna and interference with fishing activities. Compliance of all project vessels with maritime regulations as adopted by the relevant flag state including the COLREGs IMO, 1974a) and the SOLAS (IMO, 1974b). Promulgation of information for vessel routes, timings and locations, safety zones and advisory safe passing distances as required via Kingfisher Bulletins. Compliance with the Regulatory Expectations on Moorings for Floating Wind and Marine Devices (Health and Safety and Environment (HSE) and MCA, 2017), in particular independent third party verification and monitoring/tracking.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an NSVMP which will be submitted to MD-LOT for approval.
C31	Development and implementation of an Emergency Response Co-operation Plan (ERCoP).	In line with MGN 654 (MCA, 2021) Annex 5 SAR requirements	Requirement to produce the ERCoP will be secured in the Section 36 Consent and/or Marine Licence. The plan will be prepared in consultation with the MCA and will be submitted for to MD-LOT approval.
C20	Promulgation of information through timely and efficient posting of NtM, Kingfisher Bulletins and navigational warnings, as appropriate. Information will include but not be limited to vessel routes, timings and locations, safety zones and advisory safe passing distances as required.	Maximises awareness of the Array allowing vessels to passage plan in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information and will be set out within the NSVMP.
C32	Establishment of a Marine Coordinator and communication procedures to manage project vessel movements.	Ensure project vessels are suitably managed to minimise the likelihood of involvement in incidents and ensure the safe operation during all phases of project development. Increases the ability to assist in the event of a third-party incident.	Set out an agreed within the NSVMP as required within the Section 36 Consent and/or Marine Licence.
C33	Compliance with the Regulatory Expectations on Moorings for Floating Wind and Marine Devices (HSE and MCA, 2017).	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Required under MGN 654.
C34	Ossian Array infrastructure will be subject to third party verification where applicable.	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Anticipated to be a requirement of the Section 36 Consent and/or Marine Licence
C8	Production and implementation of a MPCP.	To reduce the potential for release of pollutants from construction, operation and maintenance and decommissioning plant is reduced so far as reasonably practicable. These will likely include designated areas for refuelling where spillages can be easily contained, storage of chemicals in secure designated areas in line with appropriate regulations and guidelines, double skinning of pipes containing hazardous substances, and storage of these substances in impenetrable bunds. All vessels associated with the Array will be required to comply with the standards set out by MARPOL. Measures will be in place to reduce the risk that accidental pollution poses to personnel, third party vessels and the environment.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an outline EMP, including an outline MPCP to be submitted to MD-LOT for approval.
C35	Installation of remote discrete condition monitoring equipment	Installation of appropriate system, such as sensors, cameras, dataloggers, etc. to ensure the safe and efficient operation of the Array infrastructure.	Implemented as part of standard operating procedures and confirmed within the project OMP required by condition of the in the Section 36 Consent and/or Marine Licence.
C59	Construction Method Statement (CMS)	The CMS will confirm certain construction activities and how these will be managed. This will include plans on wet storage within the Array.	Requirement to produce the CMS will be secured in the Section 36 Consent and/or Marine Licence. The plan will be prepared in consultation with the MCA and NLB and will be submitted for to MD-LOT approval.
Secondary Mitigation			
N/A	None.	No shipping and navigation mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
N/A	None.	N/A	N/A

2.8. AVIATION, MILITARY AND COMMUNICATIONS

Table 2.8: Volume 2, Chapter 14: Aviation, Military and Communications Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C30	Development of, and adherence to, a DSLP to confirm the final layout and design in consultation with the MCA and NLB.	The Applicant will consider MGN 654 (MCA, 2021), in addition to Civil Aviation Publication (CAP) 393 (CAA, 2016b, as amended 2022), and CAP 764 (CAA, 2016a) where applicable. The Applicant has committed to a layout that will be compliant with MGN 654 which will incorporate at least one line of orientation.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for DSLP which will be submitted to MD-LOT for approval consultation with the MCA, Ministry of Defence (MOD), Civil Aviation Authority (CAA) and NLB.
C25	Development of, and adherence to, a LMP.	The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting. Array aviation lighting will conform to the following: • Red medium intensity aviation warning lights (of variable brightness between a maximum of 2,000 candela (cd)) to a minimum of 10% of the maximum which would be 200 cd) will be located on either side of the nacelle of significant peripheral wind turbines. These lights will flash simultaneously with a Morse W flash pattern and will also include an infra-red (IR) component. • All aviation warning lights will flash synchronously throughout the Array and be able to be switched on and off by means of twilight switches (which activate when ambient light falls below a pre-set level). • Aviation warning lights will allow for reduction in lighting intensity at and below the horizon when visibility from every wind turbine is more than 5 km (to a minimum of 10% of the maximum (i.e. 200 cd)). • SAR lighting of each of the non-periphery wind turbines will be combi IR/200 cd steady red aviation hazard lights, individually switchable from the control centre at the request of the MCA (i.e. when conducting SAR operations in or around the Array). • All wind turbines will be fitted with a low intensity light for the purpose of helicopter winching (green hoist lamp). All wind turbines will also be fitted with suitable illumination (minimum one 5 cd light) for identification signs.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for LMP which will be submitted to MD-LOT for approval in consultation with the CAA and the MCA.
C36	Notification to the Defence Geographic Centre (DGC) and NATS.	Information regarding construction will be passed to the DGC (at dvof@mod.gov.uk) at least 10 weeks in advance of the obstacle type(s) erection detailing position, height (tip of arc) and type of aviation lighting. Once reported, all will be included in the DVOF database and all that meet aviation chart inclusion criteria will be published for broader awareness. Appropriate information about the site construction and any associated lighting (where applicable), for example the height and temporary location of construction cranes, should be provided to the NATS Aeronautical Information Service (AIS) (for promulgation in applicable aviation publications including the UK Integrated Aeronautical Information Package (IAIP)) (CAA, 2023a).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information.
C31	Development and implementation of an ERCoP.	In line with MGN 654 (MCA, 2021) Annex 5 SAR requirements.	Requirement to produce the ERCoP will be secured in the Section 36 Consent and/or Marine Licence. The plan will be prepared in consultation with the MCA and will be submitted for to MD-LOT approval.
Secondary Mitigation			
C37	Radar blanking via commercial agreement between the Applicant and NATS, creation of a Transponder Mandatory Zones (TMZ) via application to the CAA by the Applicant, and industry led strategic solutions (Programme B).	In the airspace in which the Array is located, operational acceptance of the effect created is unlikely to be acceptable to all Air Traffic Control (ATC) providers without technical Primary Surveillance Radar (PSR) mitigation, as portions of airspace may be more important to some ATC establishments than others, due to the role and responsibility of ATC provision allocated to them. In the case of the NATS PSR system impacted (Perwinnes), previous acceptable mitigation of wind turbine impact to this system has been achieved through agreement by NATS of radar blanking and infill. NATS will be required to 'blank' the area of the array to ensure primary radar contacts from the operational wind turbines are not displayed to the air traffic controller. This blanking will require technical manipulation of the radar system by NATS engineers. Blanking will create a 'black hole' on the radar display where no radar contacts will be provided. To ensure safety is maintained an application to the CAA for an airspace change for the implementation of a TMZ in the area of radar blanking will be required. Further details can be found in volume 2, chapter 14.	The process is defined with Civil Aviation Publication CAP 1616H Appendix B (CAA, 2023b).

Reference	Commitment	Justification	Means of Implementation
C38	Use of a Non-Auto Initiation Zones (NAIZ) via commercial agreement between the Applicant and the MOD, or employment of mitigations provided via the MOD Programme NJORD, and industry led strategic solutions.	In the case of MOD Air Defence Radar (ADR) systems impacted (Remote Radar Head (RRH) Buchan and to a degree, in the south of the region, RRH Brizlee Wood) secondary mitigation will be agreed with relevant impacted aviation stakeholders (reducing the magnitude of the impact), and it is expected that similar measures would be agreed in regard to other project/plans in Table 14.12 (volume 2, chapter 14) adversely affecting MOD ADR assets, along with modified procedures in the provision of the Air Traffic Service (ATS) in the region. Further details can be found in volume 2, chapter 14.	The use of a NAIZ will require agreement from the MOD that it will provide the required mitigation for ADR. The MOD will require to be engaged if they agree a NAIZ will provide mitigation and the process for implementation can be provide by the MOD at that time. Programme NJORD forms part of the JTF programme for the future mitigation of ADR, a process which is still ongoing. Specific details of mitigation solutions are not yet available.
Monitoring			
N/A	No aviation monitoring to test the predictions made within the assessment of likely significant effects on aviation is considered necessary. No monitoring as a result of the CEA is proposed as mitigation will have been required for those receptors which are affected by operational and planned projects, a much-reduced obstacle and radar (if any in some areas of the region) cumulative effect will be apparent and therefore with mitigation in place the residual effect will be minor which is not significant in EIA terms for all scenarios. No monitoring is therefore considered necessary.	N/A	N/A

2.9. INFRASTRUCTURE AND OTHER USERS

Table 2.9: Volume 2, Chapter 15: Infrastructure and Other Users Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C20	Promulgation of information through timely and efficient posting of NtM, Kingfisher Bulletins and navigational warnings, as appropriate. Information will include but not be limited to vessel routes, timings and locations, safety zones and advisory safe passing distances as required.	Maximises awareness of the Array allowing vessels to passage plan in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information and will be set out within the NSVMP.
C21	Apply for and implement safety zones during major construction and operation and maintenance activities.	Application for safety zones up to 500 m around structures where vessels are undertaking construction work during construction and periods of major operation and maintenance and 50 m around partially completed or completed but not yet fully commissioned surface piercing structures during construction. Advisory temporary safe passing distances to be promulgated to mariners, including fishermen, around installation/maintenance vessels actively engaged in works.	Safety zones applications will be made to MD-LOT in accordance with Section 95 of the Energy Act 2004 supported by justification as to why a safety zone is required. Advisory safe passing distances to be promulgated through appropriate channels, including through an established Marine Coordinator and in accordance with measures set out in the NSVMP which will likely be required under a condition of the Section 36 Consent and/or Marine Licence post-consent.
C36	Engagement with oil and gas operators.	The Applicant will seek to engage early with oil and gas operators and, where possible and appropriate to do so, coordinate activities to facilitate coexistence.	Through the Applicants commitment to discuss and coordinate activities across projects.
Secondary Mitigation			
N/A	None.	No infrastructure and other users mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
N/A	No infrastructure and other users monitoring to test the predictions made within the assessment of likely significant effects on infrastructure and other users is considered necessary.	N/A	N/A

2.10. MAJOR ACCIDENTS AND DISASTERS

Table 2.10: Volume 2, Chapter 16: Major Accidents and Disasters Designed in Measures, Mitigation and Monitoring Commitments

Reference	Relevant Chapter(s)	Commitment	Justification	Means of Implementation
Designed in Measures				
C7	Volume 2, chapter 12	Development of, and adherence to an EMP.	To ensure adequate environmental controls are in place across the project to manage and mitigate any potential risk to the environment. Measures will cover all aspects of environmental management including environmental awareness training, auditing, environmental reporting and waste management. It is anticipated that the MPCP and INNSMP will be appendices to the overarching EMP.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an EMP to be submitted to MD-LOT for approval.
C19	Volume 2, chapter 12	Fisheries liaison.	Appointment of a FLO and use of Offshore FLOs as required to enable ongoing liaison with fishing fleets to be maintained. Adherence to appropriate guidance with regards to fisheries liaison and mitigation procedures in the event of interactions between the proposed development and fishing activities, (i.e. FLOWW guidance). An appropriate fisheries liaison strategy will be implemented to reduce the risk of any major accidents or disasters resulting from fisheries interactions.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for appointment of a FLO.
C3	Volume 2, chapter 12, 13 and 17	Completion of, and adherence to a CBRA.	The CBRA will consider relevant activities in the vicinity of inter-array and interconnector cables and confirm appropriate means of protection taking account of the final inter-array and interconnector cable. The CBRA will identify the appropriate target burial depth to ensure the cable remain buried, or appropriately protected, where target burial depths cannot be achieved, for the duration of Ossian, to minimise the risk of interaction with other sea users or cable exposure.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a CaP and associated CBRA, which will be submitted post-consent.
C21	Volume 2, chapter 12, 13 and 15	Apply for and implement safety zones during major construction and operation and maintenance activities.	Application for safety zones up to 500 m around structures where vessels are undertaking construction work during construction and periods of major operation and maintenance and 50 m around partially completed or completed but not yet fully commissioned surface piercing structures during construction. Advisory temporary safe passing distances to be promulgated to mariners, including fishers, around installation/maintenance vessels actively engaged in works.	Safety zones applications will be made to MD-LOT in accordance with Section 95 of the Energy Act 2004 supported by justification as to why a safety zone is required. Advisory safe passing distances to be promulgated through appropriate channels, including through an established Marine Coordinator and in accordance with measures set out in the NSVMP which will likely be required under a condition of the Section 36 Consent and/or Marine Licence post-consent.
C39	Volume 2, chapter 12 and 13	The development of, and adherence to, a CaP confirming final cable arrangements are in accordance with this EIA.	Preparation and implementation of a CaP including a refined cable route and layout, final cable laying approach and confirmation of target burial depths with reference to a CBRA. The CaP will confirm adherence to relevant good practice and health and safety requirements to ensure safe and efficient operations during cable installation. Appropriate cable burial depths will ensure cables are adequately protected and do not pose a risk to other sea users.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a CaP which will be submitted to MD-LOT for approval.
C5	Volume 2, chapter 12, 13 and 17	Development of, and adherence to, an OMP.	Preparation and implementation of a robust OMP to maintain the integrity of Ossian infrastructure and ensure safe and efficient operations.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a CaP OMP which will be submitted to MD-LOT for approval.
C26	Volume 2, chapter 12 and 13	Appropriate marking of structures on UKHO Admiralty Charts and other electronic charts as appropriate.	Ensure the appropriate marking of structures on UKHO Admiralty Charts to maximise the awareness of the Array allowing vessels to plan their passage in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement to provide information to the UKHO.
C23	Volume 2, chapter 12	Development of, and adherence to, a FMMS.	The FMMS will set out the means of ongoing fisheries liaison through construction and operation and maintenance phases of the Array and detail any mitigation measures of relevance to commercial fisheries to be put in place. The FMMS will ensure safe coexistence as far as practicable and where safe to do so and reduce any risk of interaction with fish vessels and gear.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an FMMS which will be submitted to MD-LOT for approval.

Reference	Relevant Chapter(s)	Commitment	Justification	Means of Implementation
C15	Volume 2, chapter 12 and 13	Development of, and adherence to an NSVMP.	The NSVMP will confirm the types and numbers of vessels that will be engaged in activities associated with the Array, and consider vessel coordination including indicative transit route planning (Marine Coordination). All contractors undertaking works to be contractually obliged to ensure compliance with standard offshore policies, including those that prohibit the discarding of objects or materials overboard and that require the rapid recovery of accidentally dropped objects where feasible. Development and issue of a Code of Conduct to all project vessel operators to advise on how to avoid impacts on marine megafauna and interference with fishing activities. Compliance of all project vessels with maritime regulations as adopted by the relevant flag state including the COLREGs (IMO, 1974a) and SOLAS (IMO, 1974b).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for an NSVMP which will be submitted to MD-LOT for approval.
C25	Volume 2, chapter 12, 13 and 14	Development of, and adherence to a LMP.	The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting. Navigational aids and marine charting so that other marine users are made aware of the location of the Array. Consideration of UK MGN 654 with respect to wind turbine design and construction, so that recognised safe standards are met with regards to navigational safety and emergency response (search and rescue, salvage and towing, counter pollution). Adherence with the provisions of the COLREGs for all contracted vessels, including the display of appropriate lights and shapes such as when vessels are restricted in their ability to manoeuvre.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for LMP which will be submitted to MD-LOT for approval.
C35	Volume 2, chapter 12	Installation of remote discrete condition monitoring equipment.	Installation of appropriate system, such as sensors, cameras, dataloggers, etc. to ensure the safe and efficient operation of the Array infrastructure.	Implemented as part of standard operating procedures and confirmed within the project OMP required by condition of the in the Section 36 Consent and/or Marine Licence.
C40	Volume 2, chapter 12	Completion of post-installation hydrographic surveys of the Array and periodic hydrographic surveys in accordance with the IHO Order 1a survey standard as per the MGN 654 requirements.	Minimises the risks of underwater allision with cable protection, anchor or fishing gear interaction with subsea cables and interference with magnetic position fixing equipment. Damage, destruction or decay of cables notified to the MCA, NLB, Kingfisher and UKHO no later than 24 hours after discovered.	Anticipated to be a requirement of the Section 36 Consent and/or Marine Licence.
C28	Volume 2, chapter 12	Compliance with MGN 654 and its annexes (in particular SAR annex 5 and completion of a SAR checklist) where applicable.	Ensures the final Array layout is suitable for SAR operations and that reductions in underkeel clearance are acceptable.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DSLP which will be submitted to MD-LOT for approval.
C6	Volume 2, chapter 12	The development of, and adherence to, a SPMP.	There is the potential for scouring of seabed sediments to occur due to interactions between metocean regime (wave, sand and currents) and foundations or other seabed structures. This scouring can develop into depressions around the structure that if left unmanaged could comprise the integrity of structures. Therefore the use of scour protection around offshore structures and foundations will be employed, where required, to mitigate the risk of any accidents or disasters resulting from scour.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a SPMP which will be submitted to MD-LOT for approval.
C29	Volume 2, chapter 13	Use of guard vessel(s) as required by risk assessment.	Maximises awareness of temporary hazards, and ensures vessel presence where necessary to alert passing mariners to a hazard.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a NSVMP which will be submitted to MD-LOT for approval.
C30	Volume 2, chapter 13, 14 and 17	Development of, and adherence to, a DSLP to confirm the final layout and design in consultation with the MCA and NLB.	Ensures the final Array layout is suitable for both surface and air based (for SAR purposes) navigation and is compliant with MGN 654. Will also confirm adherence to key project design conditions including ensuring a safe underkeel clearance is maintained around mooring line arrangements.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a DSLP which will be submitted to MD-LOT for approval in consultation with the MCA and NLB.
C32	Volume 2, chapter 13	Establishment of a Marine Coordinator and communication procedures to manage project vessel movements.	Ensure project vessels are suitably managed to minimise the likelihood of involvement in incidents and ensure the safe operation during all phases of project development. Increases the ability to assist in the event of a third-party incident.	Set out an agreed within the NSVMP as required within the Section 36 Consent and/or Marine Licence.
C18	Volume 2, chapter 13	Minimum blade tip clearance height of 36 m above LAT.	This minimises the risk of blade allision particularly for sailing vessels with a mast and surpasses the requirements set by the RYA policy (RYA, 2019) and MGN 654 (MCA, 2021).	Specific details of the design of the Array is expected to be conditioned in the Section 36 consent and/or marine licence.

Reference	Relevant Chapter(s)	Commitment	Justification	Means of Implementation
C20	Volume 2, chapter 12 to 15	Promulgation of information through timely and efficient posting of NtM, Kingfisher Bulletins and navigational warnings, as appropriate. Information will include but not be limited to vessel routes, timings and locations, safety zones and advisory safe passing distances as required.	Maximises awareness of the Array allowing vessels to passage plan in advance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information and will be set out within the NSVMP.
C33	Volume 2, chapter 13 and 17	Compliance with the Regulatory Expectations on Moorings for Floating Wind and Marine Devices (HSE and MCA, 2017).	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Required under MGN 654.
C34	Volume 2, chapter 13 and 17	Array infrastructure will be subject to third party verification where applicable.	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Anticipated to be a requirement of the S36 Consent and Marine Licence.
C36	Volume 2, chapter 14	Notification to the DGC and NATS.	Information regarding construction will be passed to the DGC (at dvof@mod.gov.uk) at least 10 weeks in advance of the obstacle type(s) erection detailing position, height (tip of arc) and type of aviation lighting. Once reported, all will be included in the Digital Vertical Obstruction File (DVOF) database and all that meet aviation chart inclusion criteria will be published for broader awareness. Appropriate information about the site construction and any associated lighting (where applicable), for example the height and temporary location of construction cranes, should be provided to NATS AIS (for promulgation in applicable aviation publications including the UK IAIP) (CAA, 2023a).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for notifications and promulgation of information.
C31	Volume 2, chapter 13 and 14	Development and implementation of an ERCoP.	In line with MGN 654 (MCA, 2021) Annex 5 SAR requirements	Requirement to produce the ERCoP will be secured in the Section 36 Consent and/or Marine Licence. The plan will be prepared in consultation with the MCA and will be submitted for to MD-LOT approval.
C36	Volume 2, chapter 15	Engagement with oil and gas operators.	The Applicant will seek to engage early with oil and gas operators and, where possible and appropriate to do so, coordinate activities to facilitate coexistence.	Through the Applicants commitment to discuss and coordination of activities across projects.
C41	Volume 2, chapter 17	Safety provisions within the wind turbine generator to include automatic shutdowns/lockdowns with to ensure turbines do not exceed maximum operational rotational speeds.	Enable the Array to be resilient to future climate change, in particular from the risk of overheating from temperature changes and increased frequency and intensity of extreme weather.	A required function to be designed and implemented by the turbine manufacturer.
C42	Volume 2, chapter 17	The OSP electrical plant will be located within an internal structure. Appropriate cooling plant will be designed to account for a range of temperature conditions.	Ensure appropriate, robust design and enable the OSP to be resilient to the known environmental conditions and potential future changes.	A required function to be designed and implemented by the substation manufacturer.
C43	Volume 2, chapter 17	Application of anti-corrosion protective coatings, accounting for sea level rise.	Enable the Array to be resilient to future climate change, in particular from the risk of increased sea temperatures, ocean acidification and sea level rise.	Will be a requirement of design and implemented by the relevant suppliers/manufacturers for all project components.
C44	Volume 2, chapter 17	Completion of a UXO Risk Assessment and clearance to be undertaken in advance of construction activities.	All UXO detonation will be subject to a risk assessment completed in accordance with relevant guidance including PUB C754 Assessment and management of UXO risk in the marine environment (Construction Industry Research and Information Association (CIRIA), 2015). The project is committed to using low order detonation techniques as far as technically feasible to reduce the risk to the environment and of any accidents relating to clearance activities.	UXO clearance will be subject to a separate Marine Licence application and EPS Licence as appropriate. Mitigation, including implementation of low order disposal will be secured through the relevant Marine Licence and EPS licence.
Secondary Mitigation				
N/A	N/A	None.	No major accidents and disasters mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring				
N/A	N/A	None.	No major accidents and disasters monitoring to test the predictions made within the assessment of likely significant effects on and from climate change is considered necessary. No monitoring as a result of the CEA is proposed.	N/A

2.11. CLIMATIC EFFECTS

Table 2.11: Volume 2, Chapter 17: Climatic Effects Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C41	Safety provisions within the wind turbine generator to include automatic shutdowns/lockdowns with to ensure turbines do not exceed maximum operational rotational speeds.	Enable the Array to be resilient to future climate change, in particular from the risk of overheating from temperature changes and increased frequency and intensity of extreme weather.	A required function to be designed and implemented by the turbine manufacturer.
C42	The OSP electrical plant will be located within an internal structure. Appropriate cooling plant will be designed to account for a range of temperature conditions.	Ensure appropriate, robust design and enable the OSPs to be resilient to the known environmental conditions and potential future changes.	A required function to be designed and implemented by the substation manufacturer.
C43	Application of anti-corrosion protective coatings, accounting for sea level rise.	Enable the Array to be resilient to future climate change, in particular from the risk of increased sea temperatures, ocean acidification and sea level rise.	Will be a requirement of design and implemented by the relevant suppliers / manufacturers for all project components.
C5	Development of, and adherence to, an OMP.	The OMP will detail a programme of routine inspections, of all project infrastructure to ensure safe and efficient operations.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a OMP which will be submitted to MD-LOT for approval.
C33	Compliance with the Regulatory Expectations on Moorings for Floating Wind and Marine Devices (HSE and MCA, 2017).	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Required under MGN 654.
C34	Array infrastructure will be subject to third party verification where applicable.	Ensure that the final design is appropriately designed, constructed to an appropriate standard and structural integrity maintained during the operation and maintenance phase of the project.	Anticipated to be a requirement of the S36 Consent and Marine Licence.
C6	Development of, and adherence to an SPMP.	There is the potential for scouring of seabed sediments to occur due to interactions between metocean regime (wave, sand and currents) and wind turbine anchors or OSP foundations or other seabed structures. This scouring can develop into depressions around the structure, therefore the use of scour protection around offshore structures and foundations will be employed, where required, as described in detail in volume 1, chapter 3.	Secured in the Section 36 Consent and/or Marine Licence, via the requirement for a SPMP which will be submitted to MD-LOT for approval.
Secondary Mitigation			
C44	Compliance with corporate carbon emission reduction policies.	To reduce carbon emissions, and provide low carbon energy generation to reduce the impacts of climate change.	Implementation of a number of corporate plans and measures including the following: • Net Zero Transition Action Plan (NZTAP): sets short-, medium- and long-term targets to achieve net zero by 2035 across its operations and by 2050 across its supply chain. • Carbon Management in Project Design: align with the principles of the PAS 2080 – Carbon Management in Infrastructure and Built Environment – standard. Sustainable Procurement: consideration of sustainability and carbon reduction principles within the wider supplier and contractor procurement process. • Technology Innovation: consideration of technological solutions to develop low carbon solutions for the offshore floating wind sector at all stages of development from construction and operation and maintenance to decommissioning.
Monitoring			
N/A	No climatic effects monitoring to test the predictions made within the assessment of likely significant effects on and from climate change is considered necessary. No monitoring as a result of the CEA is proposed.	N/A	N/A

2.12. SOCIO-ECONOMICS

Table 2.12: Volume 2, Chapter 18: Socio-Economics Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C45	Establishment of an online portal where potential suppliers can register interest, boosting the supply chain (implemented).	Measures to increase the capacity of the Scottish supply chain will support more companies to secure wind contracts and increase economic impact.	Implementation of a Supply Chain Development Strategy (SCDS).
C46	Signed memorandum of understanding with Scottish suppliers.	Engagement with Scottish and UK suppliers of offshore wind services will ensure that the appropriate capacity is in place.	Implementation of a SCDS.
C47	Engaging with international companies to invest in Scottish manufacturing capacity.	Higher manufacturing potential in Scotland will result in higher Scottish content and more economic activity.	Implementation of a SCDS.
C48	Establishing a £30 million Supply Chain Fund, which will enable local companies to invest in new facilities and equipment, and have confidence to invest.	Increased capacity will enable Scottish firms to secure more contracts and increase the Scottish economic impact.	Implementation of a SCDS.
C49	Establish a £3 million Education, Research and Community Benefit Fund, which will promote offshore wind careers for young people, develop an apprenticeship programme and benefit local communities.	Will increase the capacity of the Scottish workforce, increasing the potential Scottish economic impact.	Implementation of a SCDS.
Secondary Mitigation			
N/A	None.	No offshore socio-economics mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
M5	Monitor expenditure throughout the supply chain.	To evaluate its impacts and determine whether the commitments outlined in the SCDS are being met. This will also help identify necessary actions to ensure the maximization of spending commitments as per the SCDS.	Secured through the terms in the Option Agreement for Lease with Crown Estate Scotland (CES[1]).

2.13. MARINE ARCHAEOLOGY

Table 2.13: Volume 2, Chapter 19: Marine Archaeology Designed in Measures, Mitigation and Monitoring Commitments

Reference	Commitment	Justification	Means of Implementation
Designed in Measures			
C50	The identification and implementation of AEZs around anomalies identified as having high and medium archaeological potential. Further details of AEZs are provided in the Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD) (volume 3 appendix 19.2).	To reduce the potential for direct impacts on sites of identified archaeological significance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval post-consent.
C51	The identification and implementation of TAEZs based on all available information including the stated positional accuracy, the recorded size of the target and the potential archaeological significance around those records for wrecks and obstructions outside of the survey data coverage but within the Array site boundary. Further details of which are provided in the WSI and PAD (volume 3 appendix 19.2).	To reduce the potential for impacts on sites of archaeological importance.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
C52	Archaeologists engaged by the Applicant to be consulted in the preparation of any pre-construction Remotely Operated Vehicle (ROV) surveys and, if appropriate, in monitoring/checking of data. Further details of which are provided in the WSI and PAD (volume 3 appendix 19.2).	To identify any sites of archaeological importance that may require further investigation, avoidance or engagement with Historic Environment Scotland (HES).	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.

Reference	Commitment	Justification	Means of Implementation
C53	Archaeological input into specifications for, and archaeological analysis of, any further site investigation. Further details of which are provided in the WSI and PAD (volume 3 appendix 19.2).	To identify any sites of archaeological importance that may require further investigation, avoidance or engagement with HES. To preserve by record on sediments of geoarchaeological/palaeoenvironmental importance and enhance knowledge of the offshore marine archaeological resource.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
C54	Mitigation of unavoidable direct impacts on known sites of archaeological significance through options which include i) preservation by record; ii) stabilisation; iii) detailed analysis and safeguarding of otherwise comparable sites elsewhere. Further details are provided in the WSI and PAD (volume 3 appendix 19.2).	To mitigate the effects of disturbance/destruction of irreplaceable archaeological remains.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
C55	Operational awareness of the location of those archaeological anomalies identified as having a low potential. Reporting through the protocol (PAD) will be undertaken should material of potential archaeological interest be encountered. Further details of which are provided in the WSI and PAD (volume 3 appendix 19.2).	To identify any sites of archaeological importance that may require further investigation, avoidance or engagement with HES.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
C56	Archaeologists to be consulted in the preparation of pre-construction clearance operations and, if appropriate, to carry out archaeological monitoring of such work. Further details of which are provided in the WSI and PAD (volume 3 appendix 19.2).	To record archaeological remains that may be affected by pre-construction clearance operations.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
C57	Commitment to preparation and implementation of an Offshore WSI and PAD prior to any post-consent works within the Array.	To set out and agree the mitigation measures required to minimise any potential effects on known and undocumented archaeological assets within the Array.	Secured in the Section 36 Consent and/or Marine Licence via the requirement for a WSI and PAD which will be submitted to MD-LOT for approval.
Secondary Mitigation			
N/A	None.	No marine archaeology mitigation is considered necessary because the likely significant effect in the absence of further mitigation (beyond the designed in measures outlined) is not significant in EIA terms.	N/A
Monitoring			
M6	Commitment to the ongoing monitoring of known archaeological receptors through the archaeological assessment of relevant spatial survey data (acquired by the Applicant for any purpose) where appropriate. This monitoring will include the appropriateness of, and adjustments that need to be made to, AEZs through the lifetime of the Array.	To monitor any direct or indirect damage to marine archaeology receptors.	Changes to marine archaeology receptors during the lifetime of offshore wind projects are not well known. Industry guidance (Wessex Archaeology, 2007a) suggests that monitoring methods, set out in the WSI, may include periodic reporting on adherence to exclusion zones and the results of watching briefs. Periodic reporting will provide a potential beneficial effect through regional mapping of accessible data and provision of publicly accessible data post-consent (described but currently not quantifiable).

2.14. INTER-RELATED EFFECTS

3. There are no enhancement, mitigation and monitoring commitments related to volume 2, chapter 20.

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