Annex R Dogger Bank C: Marine Mammal Compliance Report (Offshore Substation Platform

Project Title:	Dogger Bank C
Date:	23/01/2026

Dogger Bank C

Offshore Substation Platform

Marine Mammal Mitigation Compliance Report

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Executive Summary

The installation of the pin-pile foundations for the Offshore Substation Platform (OSP) for Dogger Bank C (DBC), the third phase of Dogger Bank Wind Farm, took place between 11th and 12th of May 2025. The vessel that installed the foundations was the *SSCV Sleipnir.*

A Marine Mammal Mitigation Protocol (MMMP) was implemented during the installation of the foundations with the aim of mitigating any impacts of underwater noise on marine mammals. A Marine Mammal Mitigation Team (MMMT) consisting of five Marine Mammal Observers (MMObs), Passive Acoustic Monitoring Operators (PAM-Ops) and Acoustic Deterrent Device Operators (ADD-Ops) covering all roles were deployed on the installation vessel to implement the mitigation.

The mitigation, as per the MMMP, consists of visual and acoustic (during the hours of darkness and poor visibility) monitoring, deployment of an Acoustic Deterrent Device (ADD), a soft-start (low-energy blows and ramp-up (gradual increase in hammer energy)), before piling at full hammer energy commenced.

There were no visual sightings and no acoustic detection of marine mammals during the piling operations.

There were two soft-starts and during the second soft-start two incidences of non-compliance were recorded with the MMMP, whereby the strike rates were above the limits of the MMMP.

There were five mitigation actions during piling operations; one was the implementation of the Piling Mitigation Procedure (PMP) from step 1 after a break of > 2hrs and on 4 occasions 5-6 low energy blows were carried out at maximum of 350 kJ before continuing with operational piling due to breaks of > 10 minutes and < 2hrs.

It is considered that the mitigation implemented was sufficient to mitigate for permanent auditory damage to marine mammals.

The DBC OSP piling campaign was completed successfully with mitigation measures effectively implemented.

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Abbreviations

ADD	Acoustic Deterrent Device
ADD-Op	Acoustic Deterrent Device Operator
DBC	Dogger Bank C
DBWF	Dogger Bank Wind Farm
dML	deemed Marine Licence
EPS	European Protected Species
HF	High Frequency
HLV	Heavy Lift Vessel
JNCC	Joint Nature Conservation Committee
kJ	Kilojoule
LF	Low Frequency
MA	Monitoring Area
MMO	Marine Management Organisation
MMObs	Marine Mammal Observer
MMMP	Marine Mammal Mitigation Protocol
MMMT	Marine Mammal Mitigation Team
MPA	Marine Protected Area
NC	Non-Compliance
NI	National Instruments
OSP	Offshore Substation Platform
PAM-Op	Passive Acoustic Monitor Operator
PMP	Piling Mitigation Protocol
PSR	Piling Summary Report
PTS	Permanent Threshold Shift
SAC	Special Area of Conservation
SSCV	Semi-Submersible Crane Vessel
VPAM	Vertical Passive Acoustic Monitoring

Key terms

Acoustic Deterrent Device Operator (ADD-Op)	A trained member of the team who operates the Acoustic Deterrent Device (ADD).
Low-energy blows	The first part of the soft-start procedure which comprises 10 minutes of hammer blows at energies of up to a maximum of 350 kJ
Monitoring Area (MA)	The area around each pile location to be monitored in the pre-piling watch, and where possible during any breaks in piling or soft-start by either Marine Mammal Observers (MMObs) or Passive Acoustic Monitoring Operator (PAM-Op). This area is 600 m from the pile location in all directions.
Marine Mammal Mitigation Team (MMMT)	The team undertaking the marine mammal mitigations, including MMObs, PAM-Op, and ADD-Op.
Marine Mammal Observer (MMObs)	Trained members of the team who will observe the MA
Operational piling	The period of piling following the completion of the pre-piling watch, ADD activation and the soft-start, where piling is undertaken as required to install the pile. During the operational piling time, the hammer energies must remain within consented limits of 3,000 kJ for pin-piles.
VPAM	Vertical Passive Acoustic Monitoring: acoustic monitoring of the MA.
PAM-Op	A trained member of the team who will use the PAM station to undertake acoustic monitoring of the MA.
PMP	The Piling Mitigation Procedures (PMP) are the flowcharts that set out the required mitigation. These can be found in the MMMP
Pre-piling watch	The period prior to piling commencing during which observations are undertaken visually by the MMObs or acoustically by the PAM-Op of the MA to determine if marine mammals are present in the MA.
Ramp-up	Ramp-up forms part of the soft-start procedure and follows on from the slow-start, starting with low-energy blows and gradually increasing in hammer energy. Hammer energies must not exceed 850 kJ in the first 5-minutes of ramp-up and must not exceed 1,500 kJ in the second 5-minutes of ramp-up.
Slow start	The first part of the soft-start procedure and comprises of 10-minutes where hammer energies must not exceed 350 kJ within this period.
Soft-start	The procedure used to commence piling at a lower hammer energy. The soft-start procedure consists of three stages; a slow start of low-energy blows for 10 minutes (SS1), followed by two ramp-up phases of 5 minutes each (SS2 and SS3) and lasts for a minimum of 20 minutes.

1 Introduction

1.1 Dogger Bank Offshore Wind Farm

The Dogger Bank Offshore Development Zone, located in the North Sea between 125 and 290 km off the east coast of Yorkshire, extends over approximately 8,660 km² and water depths range from 18 m to 63 m (See Figure 1). Dogger Bank C (DBC) is the third phase of the Dogger Bank Wind Farm (DBWF) and is being developed as a Joint Venture between SSE, Equinor and Vårgrønn. DBC will comprise 87 WTGs which will be installed on monopile substructures and will be linked to an Offshore Substation Platform (OSP) via subsea inter-array cables. The OSP, which will house both the offshore converter station and the offshore substation, will convert the power from High Voltage Alternating Current (HVAC) to High Voltage Direct Current (HVDC). This will then be exported via an offshore export cable (approximately 260 km long) from the wind farm site to the landfall north of Marske-by-the-Sea. From the landfall, power will be exported via an HVDC electrical cable (approximately 7 km long) to a new onshore converter station at Lackenby. From the onshore converter station, the power will be carried via an HVAC cable (approximately 2 km long) to the existing National Grid Lackenby substation. DBC will have an installed generation capacity of 1.2 GW and has a development area of around 311 km² and is 233 km at its closest point to land. Connection will be at the existing Lackenby Substation at Teesside.

DBC is approximately 24 km north-east of the Southern North Sea Special Area of Conservation (SAC) summer area; This SAC is part of the European Natura 2000 network and is designated to protect Harbour Porpoise (JNCC, 2022). The area is also significant for common minke whales and white-beaked dolphins, providing them with a habitat that supports their survival and reproduction (JNCC, 2002). The SAC's designation and management aim to protect biological communities within the shallow UK waters of the Dogger Bank (MMO, 2022).

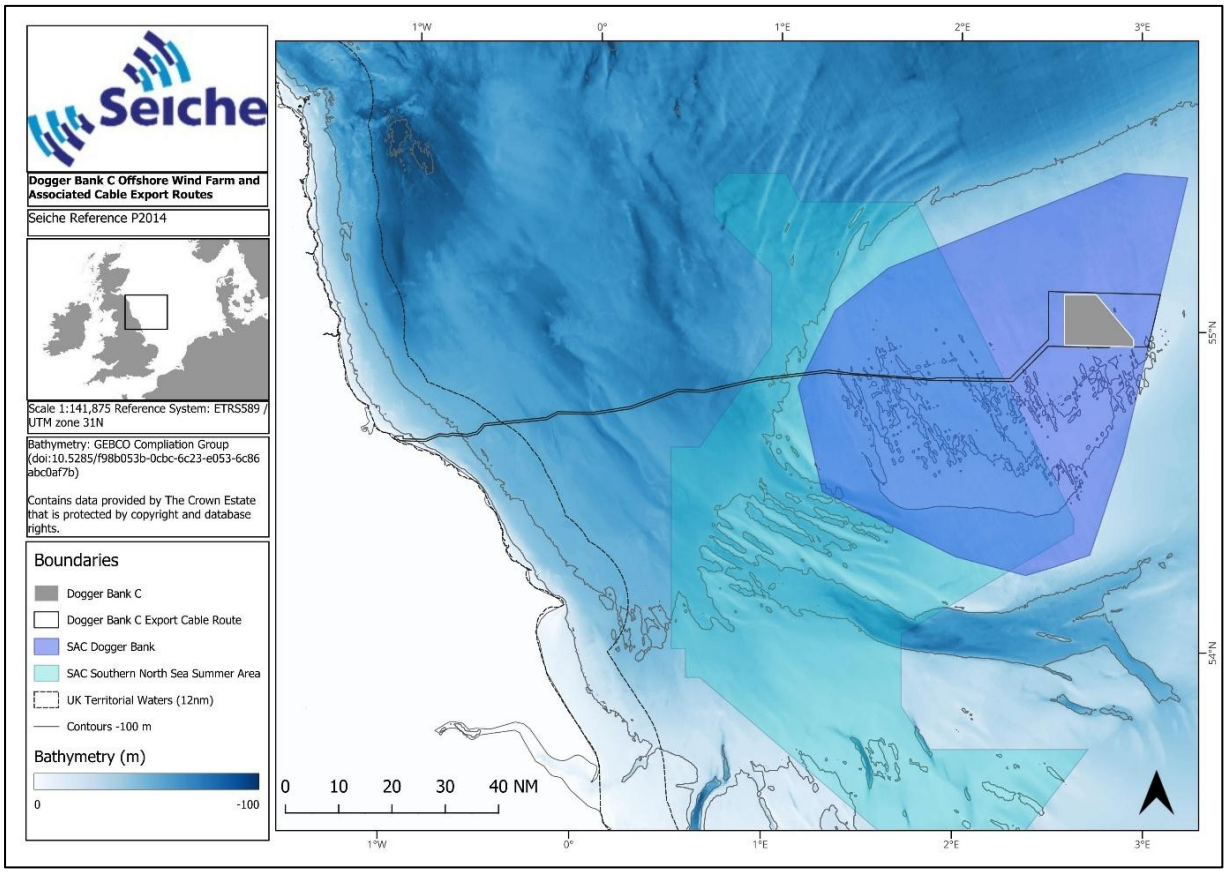

Figure 1 Dogger Bank C offshore wind farm site

1.2 Requirement of this report

The purpose of this report is to demonstrate compliance with the Marine Mammal Mitigation Protocol (MMMP) (*LF700013-CST-DOG-PLN-0060*) and fulfil commitments made relating to mitigation compliance reporting; as well as to satisfy Condition 7 of the DBC construction Wildlife Licence (L/2025/00100/1).

This report covers the installation of DBC Offshore Substation Platform (OSP) pin-piles that were installed on 11th-12th May 2025.

The requirement for this report is stipulated in both the MMMP and the DBC Wildlife Licence. Details on both of these requirements are provided in the following sections.

1.2.1 *MMMP*

The OSP phase of work for DBC include the installation of pin-piles by means of impact piling. This is considered a noisy activity with the potential risk to permanently damage the auditory organs of marine mammals that are present in the North Sea.

To mitigate this risk, the requirement for a MMMP to be produced and agreed with stakeholders and regulators was stipulated in Condition 16(e) of deemed Marine Licence (dML) 1 (Schedule 8 of the DCO). The aim of the MMMP is to reduce the risk of permanent

auditory injury / permanent shift in hearing sensitivity (Permanent Threshold Shift (PTS)) in all marine mammal species in and around DBC, caused by underwater noise. For this reason, the MMMP sets out a number of sequential mitigation measures that were to be adhered to during piling activities, based on the Joint Nature Conservation Committee (JNCC) 2010 'Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise'. The MMMP also sets out how the mitigation carried out will be reported to the regulator, the Marine Management Organisation (MMO), to ensure that the agreed mitigation was adhered to, if it was effective or not, and to detail any incidences of non-compliance (NC) (and how it was ensured these would not occur again).

The installation of the DBC OSP pin piles were conducted under version 2 of the MMMP, which was submitted to the MMO and approved on the 9th December 2024. This superseded the previous submission which was approved by the MMO on the 30th July 2024.

1.2.2 *Wildlife Licence*

In England, marine mammals are afforded protection under 'The Conservation of Habitats and Species Regulations 2017' (as amended) in inshore waters and 'The Conservation of Offshore Marine Habitats and Species Regulations 2017' (as amended) in waters between 12 and 200 nautical miles (NM). Collectively known as the 'Habitats Regulations', these were amended in 2019 by 'The Conservation of Habitats and Species Regulations' (Amendment) (EU Exit) to ensure habitat and species protection and standards derived from EU Law continue to apply after withdrawal from the European Union.

All cetacean species in UK waters are protected as European Protected Species (EPS) (Annex IV) under the Habitats Regulations. These regulations make it an offence to deliberately or recklessly capture, injure or kill, deliberately disturb, or damage or destroy a breeding site or resting place. Harbour porpoise (*Phocoena Phocoena*), bottlenose dolphin (*Tursiops truncatus*), grey seal (*Halichoerus grypus*) and harbour seal (*Phoca vitulina*), are also listed under Annex II, which require the designation of SACs. All cetaceans are also protected by the 'Wildlife and Countryside Act 1981' and 'The Countryside and Rights of Way Act 2000', which protects them from killing or injury and intentional or reckless disturbance.

This means that where activities may cause disturbance or injury to a protected species, a Wildlife Licence is required unless mitigation measures are sufficient to reduce the risk of committing an offence to negligible levels.

For piling at DBC, a Wildlife Licence was required for the disturbance to EPS. Whilst the mitigation measures in the MMMP ensure there was no potential for injury to cetacean species (namely harbour porpoise, bottlenose dolphin, white-beaked dolphin (*Lagenorhynchus albirostris*) and minke whale (*Balaenoptera acutorostrata*)), there remained a potential for disturbance. The Wildlife Licence for DBC (L/2025/00100/1) was issued by the MMO in March 2025.

Condition 7 of the Wildlife Licence states that:

> "*Licence Holder must submit a written report of actions taken under licence no later than one month after the expiry of the Licence, even if no action is taken. The report must include location coordinates of piling, date and time, as well as details of mitigation used. Failure to make reports may result in the licence being revoked and/or the refusal to grant subsequent Licences.*
>
> *This must be submitted via MCMS returns process no later than one month after the expiry of the Licence.*"

The deadline for this condition is "*no later than 1 month after the expiry of the licence*". The expiry for the DBC licence is 31st December 2025 and the deadline for the condition is, therefore, the 31st January 2026.

This report is being provided to the MMO to fulfil commitments made in the MMMP with regards to mitigation compliance reporting, and to satisfy the above-mentioned Wildlife Licence condition for the DBC OSP pin piles installed.

2 Vessel, Date and Location

The SSCV Sleipnir installed the 4 OSP pin-piles. Key details of the installation of the DBC OSP are set out in Table 1 below.

Table 1 DBC OSP Pin-piling vessel details

Date	Start of Piling UTC (hrs:mm)	End of Piling UTC (hrs:mm)	Latitude (dd) WGS84	Longitude (dd) WGS84
11-12th May 2025	03:25	00:09	55.022297	2.710846

3 Mitigation

Mitigation measures for marine mammals are detailed in the MMMP. For this reason, they are not provided again in detail in this document. Rather, this document's main focus is the compliance of the pin-piling activities at DBC with the mitigation in the MMMP.

Table 2 sets out a summary of the key mitigation procedures of the MMMP, for ease of reference.

Table 2 MMMP key mitigation measures

Piling Mitigation Procedures (PMP)	
Monitoring Area (MA)	600 m
Pre-watch monitoring time	33 minutes
ADD Activation period	23 minutes*
Soft-start (three phases)	20 minutes
1) 'slow start' of 10 mins of low energy blows ≤350 kJ at a strike rate of up to 6 blows per min.	
2) 5 mins of ramp-up to 850 kJ at a strike rate of up to 23 blows per min.	
3) 5 mins of ramp-up to 1,500 kJ at a strike rate of 23 blows per min.	
Maximum operational hammer energy	3,000 kJ

* The ADD may be on for an additional 4 minutes to allow for operational contingency, if required and if the MA is not clear of MMs during final 20 mins of ADD activation, extend ADD activation by up to 10 mins.

The implementation of the mitigation measures was undertaken by the MMMT.

3.1 Monitoring and Mitigation Equipment

3.1.1 *Vertical Passive Acoustic Monitoring (VPAM) System Hardware*

The VPAM system is a single hydrophone system that can be deployed over any static vessel or platform. The system comprised of a single channel hydrophone cable (100 m) element and a 10-bar depth sensor, at the end of a 100 m cable, a buffer box (containing power interface and processing unit), a 12 V battery pack and a laptop computer running the industry standard software PAMGuard. A deck cable of 100 m length provides connection between the hydrophone cable and the onboard acquisition unit. The VPAM station was set up on the port side inside of the former ROV office.

The buffer box provides power and connection for the hydrophone cable and transfers the sound signal into high and low frequency ranges through filters to allow for further processing. High Frequency (HF) sound is fed through an internal National Instruments (NI) sampling card that outputs via a USB socket to the laptop running PAMGuard. Low Frequency (LF) sound is output via a Bayonet Neil-Concelman connector and the amplified headphone socket on the front panel of the Buffer Box. Technical specifications for the VPAM system can be found in Table 3.

Table 3 VPAM system technical specifications

Specification	
Length	100 m
Depth Rating	100 m (not connector)
Diameter	12 mm over cable, 32 mm over mouldings, 30 mm over connectors
Weight	17 kg
Connector	Amphenol 4 pin
Hydrophone	Sphere – broadband (20-150 kHz, 3 dB points)
Hydrophone Sensitivity	-166 dB re 1 v/µPa

3.1.2 *VPAM System Software*

The PAM-Op monitored for marine mammals aurally using headphones listening to the lower audible frequencies and visually by observing the processed sound using the PAMGuard software installed on the laptop. HF and LF sound were processed using two individual PAMGuard windows running simultaneously. PAMGuard configuration comprised of a spectrogram displaying up to 24 kHz to monitor tonal sounds, such as delphinid whistles which is also monitored aurally. A click detector displaying pulse signals in the HF bandwidth (20-190 kHz) was also displayed on an amplitude versus time window. Classifiers were applied to the click detector to assist with identification of clicks from different species groups, for example a narrow-band high frequency classifier with a test band of 120-140 kHz was used to identify clicks from harbour porpoise. Additional modules within the configuration included a sound recorder, radar display, clip generator, and map display, with data stored in a (Standard Query Language) SQLite database and binary format for offline processing and reporting.

3.1.3 *VPAM System Deployment*

The VPAM system was deployed from the port side of the heavy lift vessel (HLV) SSCV Sleipnir. The hydrophone cable was deployed to mid-water depth for optimal acoustic monitoring, with the cable marked up with regular distances during mobilisation to enable deployment to the correct depth. A taut weighted rope system was attached to the cable to ensure it remained close to the vessel and not dragged by its currents.

3.1.4 *ADD Operations*

Lofitech Seal Scarer ADDs were used on the project to act as a deterrent for marine mammals from entering the MZ. The ADD was deployed from the port side of the SSCV Sleipnir.

The Lofitech ADD system comprised of a control unit and transducer. The control unit contained a pulse generator and an amplifier to transmit random bursts of audio frequency signals from the transducer, which is converted into intense sound. The ADD transmits sound at 191 dB re 1 µPa @ 1 m at an optimal frequency of between 10 and 20 kHz. Specifications for the ADDs used can be found in Table 4.

Table 4 ADD technical specifications

Specification		
Length of Transducer Cable	100 m	
Diameter	Waterproof self-contained unit. 60 cm x 30 cm x 40 cm	
Weight	12 kg	
Power	Auto Marine 12 V batter (90-120 Ah)	
Power Consumption	Approximately 0.4 A/12 V	
Acoustic Output	**Manufacturer Specifications**	**Field Validation (McGarry et al. 2017, 2020)**
Source Level	191 dB re 1 µPa @ 1 m	204 dB re 1 µPa @ 1 m
Frequency Range	Approximately 10 – 20 kHz	14.6 kHz fundamental, harmonics at 29.2 kHz, 43.6 kHz, and 72.8 kHz
Acoustic Range	300 m radius from source	Displacement >1 km depending on species
Duty Cycle	500 ms pulse with variable inter pulse length	752 ms pulse with variable inter pulse length
Device Testing	-	Suggest testing device using suitable hydrophone and visualisation
Functionality	On/Off switch, no further settings or soft start	

4 Results

4.1 Data used to inform this report

The information presented within this report and used to confirm compliance, has been drawn from:

- Piling summary reports (PSRs)
- JNCC Forms (Appendix D)
- Data compiled by the MMMT

4.2 Mitigation as applied

A comparison of the modelled/predictive piling parameters that were accounted for in the MMMP and the Wildlife Licence, against the actual piling parameters is provided in Table 5 below. This comparison demonstrates that piling parameters were less than anticipated and in accordance with the MMMP (therefore, in accordance with the consented limits).

Details of the mitigation measures undertaken for the OSP instillation, to demonstrate compliance with the MMMP and, therefore, the parameters in the Wildlife Licence are provided in Appendix A (Table 7). Mitigation measures were applied due to a break of 10 min - < 2 hrs and a break of > 2hrs, with the later resulting in a second soft-start. For further details see Section 4.3.

Details of the 2 NCs reported during the OSP operation can be seen in Section 4.3.

A summary of the ADD use, including ADD deployment depth, testing activation and deactivation details is provided in Appendix B.

No marine mammals were observed (visually or acoustically) during the OSP installation.

The OSP piling summary report also contains details of piling operations, and the information in this section was drawn from that report. This report is provided as a separate document, Appendix C.

Furthermore, as per the MMMP and in accordance with the JNCC guidance relating to mitigation, JNCC forms were completed for each piling event, and therefore each mitigation event, which detailed the mitigation conducted as well as any marine mammal sightings. These forms are provided as a separate document, Appendix D.

Table 5 Comparison of parameters accounted for in the MMMP against actuals during pin-pile installation

Parameter	Assumption in MMMP / Wildlife Licence	Actuals	Comparison
No. of piles installed in a 24-hour period	4	4	Same as assumed in the MMMP
Piling duration (incl. soft start and ramp up) per pin pile	6 hours	Maximum piling time of 3 hours 20 minutes for pin-pile A3	50% less than assumed in the MMMP

Maximum soft-start hammer energy	1st Soft Start SS1 350 kJ SS2 850 kJ SS3 1,500 kJ	335 kJ 335 kJ 292 kJ	4% less 61% less 81% less than assumed in the MMMP
	2nd Soft Start SS1 350 kJ SS2 850 kJ SS3 1,500 kJ	346 kJ 678 kJ 853 kJ	1% less 20% less 43% less than assumed in the MMMP
Maximum operational hammer energy	3,000 kJ	1688 kJ	44% less than assumed in the MMMP

4.3 Details of non-compliances and additional mitigation actions

There were two NCs reported during the piling:

- During the 2nd soft-start 31 blows/minute were recorded at 15:07 UTC and 28 blows/minute were recorded at 15:08 UTC. These strike rates were NCs as they exceeded the 23 blows/minute limit defined in the MMMP.

However, overall, during the two soft-starts, the average strike rates remained within the limits that are outlined in the MMMP.

There were five additional mitigation actions undertaken during piling:

- On one occasion there was one break of > 2hrs. The break resulted in the implementation of the PMP from Step 1.
- On 4 occasions there were breaks 10 mins - < 2hrs. The breaks resulted in 5-6 low energy blows being carried out prior to resumption of operational piling.

Details of the additional mitigation actions that occurred during the piling and the actions taken to resolve the issue so that correct procedures can be followed to prevent it from happening again can be seen below in Table 6.

Table 6 Details of additional mitigation actions

Pile	Reason for Mitigation Action	Reason for break in piling	Details of mitigation action(s)
C3	A break of >2 hours	Technical issues with the hammer	During C3 pin-pile operations there was a >2hr break of 7 hours 42 minutes. MMMT continued monitoring (visually and acoustically) and restarted the PMP from Step 1 with the ADD and then soft-start in accordance with the PMP.
C1, A3, A1	Breaks of 10 mins - 2 hours	Moving the hammer to the next pile	For all 4 breaks: Piling was restarted with 5-6 hammer blows at a maximum of 350 kJ before continuing with operational piling.

5 Evaluation of applied mitigation

The mitigation measures implemented for the installation of the OSP pin-piles at DBC were deemed sufficient and effective in minimising the risk of injury to marine mammals in the area. No marine mammals were observed during piling operations.

From an operational perspective, there were no delays due to marine mammals being present in the MA in the period immediately prior to piling. This may suggest that use of the ADD was effective in deterring marine mammals from entering the MA when activated.

Aside from the two instances where operational parameters did not remain within the consented limits defined in the MMMP, piling activities at DBC were undertaken in accordance with the MMMP requirements and the prescribed mitigation measures for the protection of marine mammals.

Key elements that are considered to have contributed to the successful campaign have been identified:

- The lessons learned from the DBA & DBB campaigns contributed to the success of the DBC campaign. These include extensive communications, pre-mobilisation workshops, involvement of MMMT during drafting of the MMMP and a more comprehensive and streamlined MMMP.
- Maintaining excellent communication between the MMMT and installation teams onboard allowed for effective implementation of the MMMP throughout the installation of the pin-piles and allowed the team to efficiently and promptly address any issues that arose.
- Continuous open dialogue between the MMMT, vessel installation crew, Seiche project manager, and DBWF allowed for constant monitoring of the marine mammal mitigation effectiveness and enabled progressive improvements to be made in relation to the overall implementation of the marine mammal mitigation.
- Utilising personnel that were multi-skilled allowed suitable coverage of visual and acoustic monitoring and operation of the ADD, with the installation crew on hand to deploy and activate the second ADD and support ADD and VPAM deployment and recovery where needed.

6 References

JNCC. 2022. Dogger Bank MPA | Advisor to Government on Nature Conservation | JNCC

Marine Management Organisation (MMO). 2022. Decision Document: Dogger Bank SAC, April 2022. Downloaded from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1069134/Dogger_Bank_SAC_Decision_Document.pdf

Appendix A - Details of the mitigation carried out for the DBC OSP pin piles installation

Table 7 Summary of the mitigation conducted for the OSP foundations

Mitigation Summary		
	Date (start - end)	11th – 12th May 2025
	Weather summary	Weather conditions were good with low swells, and a variation between slight and choppy sea state (Beaufort 4)
Monitoring	**Total time visual monitoring**	15 hours 56 minutes
	Total time acoustic monitoring	23 hours 05 minutes
ADD	**Number of ADD activations prior to soft start commencing**	1
	Number of ADD activations due to breaks in piling	1
	Total time ADD was active	49 minutes
1st Soft Start	**low energy blows** **Maximum hammer energy** **Strike rate compliant (6 per minute)**	10 minutes 335 kJ Yes
	low energy blows **Maximum hammer energy** **Strike rate compliant (236 per minute)**	5 minutes 330 kJ Yes
	Ramp-up **Maximum hammer energy** **Strike rate compliant (23 per minute)**	5 minutes 292 kJ Yes
2nd Soft Start	**low energy blows** **Maximum hammer energy** **Strike rate compliant (6 per minute)**	10 minutes 346 kJ Yes
	low energy blows **Maximum hammer energy** **Strike rate compliant (236 per minute)**	5 minutes 678 kJ Yes
	Ramp-up **Maximum hammer energy** **Strike rate compliant (23 per minute)**	5 minutes 853 kJ No*
Breaks in Piling	**Total number of breaks <10 mins during Soft Start**	5
	Total number of breaks >10 mins during Soft Start	0
	Total number of breaks <10 mins during operational piling	43

Mitigation Summary		
	Total number of breaks ≥10 mins and ≤ 2 hours during operational piling	4
	Total number of breaks >2 hours during operational piling	1
	Number of mitigation actions initiated	5*
	Number of incidences of non-compliance	2*
	Maximum operational hammer energy (kJ)	1688
	Duration of piling (hrs:mm)	10 hours 09 minutes

**See section 4.3 for details*

Appendix B – Testing and deployment information of the ADD

ADD deployment depth for first deployment from each vessel was 24 m below the surface of the water and 6.5 m below the deck.

Table 8 Summary of the ADD testing, activation and deactivation (time in UTC)

Date	ADD tested	ADD activated	ADD deactivated
11/05/2025	00:05	03:01	03:24
11/05/2025	12:33	12:19	12:45

Appendix C – OSP PSR Report – See Separate report 'LF700013-CST-DOG-REP-0336'

Appendix D – Marine Mammal Observer logs – see separate document 'P2014_DBC_OSP_MMO PAM Log_2025'. Information to be submitted to JNCC