

MORL/BOWL POST-CONSENT MONITORING DISCUSSIONS

MEETING MINUTES

Meeting	Marine Mammal Monitoring within the Moray Firth	
Date	16 December 2014; 1.00 – 3.00pm	
Location	EDP Renewables, 40 Princes Street	
Attendees	MS-LOT	Roger May (RM)
	MSS	Kate Brookes (KB)
	SNH	Erica Knott (EK), Catriona Gall (CG), Fiona Manson (FM), Caroline Carter (CC) - conference call, Karen Hall (KH) – conference call
	JNCC	Karen Hall (KH2) – conference call, Sonia Mendes (SM) – conference call
	WDC	Sarah Dolman (SD)
	University of Aberdeen	Paul Thompson (PT)
	BOWL	Lis Royle (LR), Liz Reynolds (LR2)
	RPS	Tessa McGarry (TM)
	MORL	Sarah Pirie (SP), Catarina Rei (CR), Holly Best (HB)
Apologies	Jonathan Wilson - BOWL	
Actions	<ol style="list-style-type: none"> 1. SNH to liaise with MSS to discuss how to take monitoring in the east coast forward. 2. HB to circulate minutes and a doodle poll for next meeting (to be as close to February 14th 2015 as possible). 	

1. Introductions

CR outlined the aim of the meeting which was to give an overview of the data collected since issuing the pre-construction Marine Mammal Monitoring Programme (MMMP) for consultation in April 2014 and to discuss the next steps in monitoring.

EK suggested that attendees should be informed about the MSS and SNCB meeting in October where marine mammal monitoring and offshore wind farms were discussed. KB highlighted the following points from this meeting:

- MSS and SNCBs agree that harbour seal and bottlenose dolphins are the key species of concern, with harbour porpoise as a secondary priority.
- MSS and SNCBs identify that there are some aspects of monitoring which will need a strategic approach, where the same marine mammal populations could be impacted by both the Moray Firth and Forth & Tay wind farm developments and possibly by a wider range of development types.

CR confirmed that these points would be discussed later in the meeting.

2. Moray Firth Pre-Construction MMMP

PT highlighted that pre-construction monitoring is part of an evolutionary process. Not much was learned during Round 1 and Round 2 monitoring as the process was poorly planned. The draft MMMP for the Moray Firth (MF) in 2013 recognised that monitoring could be extended to cover the East Coast of Scotland but it would need to be part of a wider strategic monitoring and could not be funded solely by developers. In addition, although presented as monitoring for the MF PT highlighted that this is a scheme for UK monitoring as it aims to study questions that are relevant for the entire offshore industry within UK. At present the funding for the Moray Firth pre-construction MMMP is almost fully secured, however future challenges in securing funding will need to be carefully considered.

PT presented an overview of the preliminary results of the pre-construction MMMP as detailed in the Strategic Regional Pre-Construction Marine Mammal Monitoring Programme Interim Report, November 2014 (circulated to the attendees after the meeting).

3. Other Studies

PT highlighted that one of the comments from the SNCBs on the pre-construction MMMP circulated in April 2014 was that there was a need to link the programme to other studies, including harbour developments.

DECC SEA Project

PT explained that there is a DECC funded project which aims to study the impacts of piling on marine mammals from port construction works (Invergordon, Nigg and potentially Ardersier). The preliminary results have shown that assumptions on the effects of piling on harbour porpoise were conservative, and that less displacement has in fact occurred. The predictions of effects on bottlenose dolphins were based on assumptions using harbour porpoise but bottlenose dolphins are thought to be less sensitive to piling noise. Additional work is currently being undertaken in the North Sea on the study of disturbance effects from piling noise on harbour porpoises (Danish led project).

EK asked when the DECC SEA study would be published. PT hoped this would be in Q2 2015 but noted that it could be later as the communication with the ports had been challenging, particularly with regards to acquiring detailed information on the exact timing of piling.

LR enquired about maximum hammer energy used during piling and PT responded that it was lower than what would be used at a wind farms, however, piling was only 1 km away from a dolphin hotspot, therefore the question of how to relate this to louder noises but further away still remains.

PT added that the results of the DECC SEA project show that impact piling was not the highest noise level recorded, and that the next steps were to separate piling noise from other noise sources. PT stated that there were no statistically different results for piling (versus non-piling), thus indicating a short term response at most. PT said that if there is a behavioural response it will be subtle.

INSITE Project

PT explained that the University of Aberdeen and MSS had submitted a proposal for funding from 'INSITE' (an oil and gas funded programme) to study the effects of removal and installation of man-made structures in the North Sea.

PT stated that for the INSITE project PAMs would be deployed around existing Beatrice oil structures and control areas which would be located within the wind farm sites. PT explained that the role of the current structures on fish was being examined through looking at seabird aggregation / displacement data, which could also be useful for the wind farm sites. EK asked whether the Beatrice platform was being decommissioned. PT replied that it would still be in use for at least the next four years however baseline surveys for decommissioning including benthic, marine mammals and ornithology are currently being undertaken. KB confirmed that the Beatrice demonstrator turbines would also be decommissioned.

East Coast Strategic Marine Mammal Monitoring

KB noted that 13 moorings with C-PODS (for marine mammal monitoring) and hydrophones (to record ambient noise levels for MSFD) have been in use for the last two years. During 2014 five moorings (two at Helmsdale) have been lost, and in 2013 the C-POD batteries did not last as long as expected. KB stated that C-PODS are able to identify whether the marine mammal is a 'seal' or 'dolphin' however they cannot distinguish between different species. For this reason a PhD student is currently developing a whistle classifier to be applied to the data. PT added that this follows on from the work undertaken for the MORL and BOWL EIAs by SMRU.

4. Questions on MORL/BOWL Monitoring Programme

CR confirmed that the programme had been developed to ensure the collection of a long term data series to understand year-to-year variability. SD stated that the programme sounded very impressive and well-coordinated. PT clarified that the pre-construction monitoring programme was being funded by MORL, BOWL, TCE, HIE and MS. CR added that only with collaboration with other organisations could long term data be collected. PT confirmed that this monitoring would also be beneficial to F&T projects.

SD commented that it was very good to see the results of the monitoring being published so quickly, which was particularly important for 'fast-paced' industries such as the renewable energy industry. CR stated that one of the roles of MFRAG, once set up, was to share data. RM added that this was indeed essential and that it would be discussed at a workshop on post-consent monitoring (between MSS and the SNCBs) on 23 January 2015, with the first MFRAG meeting to occur after mid-February. CR acknowledged that this MMMP would need to consider the F&T developments but that it would not be appropriate to discuss those developments at this forum as the F&T developers were not represented at the meeting.

SM asked whether the same amount of effort was being considered for construction monitoring. SM added that the same, if not more, effort would be required for monitoring in the F&T. PT highlighted that careful consideration would be required before asking for more / less monitoring as the question should be what is needed for that area and how it fits in with the MF and east coast. LR stated the focus should be on the MF projects' consent conditions and the key assumptions made in the ES.

PT noted that the consent conditions required greater clarity for developers. EK indicated that the conditions were due to be discussed between MS and SNCBs at the January workshop. CG added that monitoring

questions should be clearly defined through these post-consent discussions taking place between MS, SNCBs and developers. RM stated that there was also a need for contingency should the F&T projects not go ahead. PT stated that scientists and developers need clarity on the extent of monitoring required.

RM highlighted the different roles of MFRAG and SpORRAn and noted that the purpose of monitoring was to verify ES predictions. RM added further that Robin Rigg had not carried out enough appropriate monitoring and that MS-LOT was trying to avoid this here. EK commented that she had not seen the terms of reference for SpORRAn yet. RM noted that SpORRAn would be funded by Marine Scotland, whereas MFRAG would be funded by Developers.

5. Next Steps

PT suggested to broaden out the discussions on marine mammal monitoring as a high-level framework was needed. CR agreed that this was particularly important for bottlenose dolphin and that MSS's role would be to align F&T projects with the framework that was being set in the MF.

RM stated that all bodies except for Developers would be at the January meeting, and a subsequent meeting for Developers would follow. SP stated that participation in "strategic" monitoring is ill-defined in the consent conditions and that definition is needed for costing the discharge of consent conditions. LR added it was also important for de-risking projects as BOWL's FID date was in January 2016. CG commented that SNH had seen the pre-construction monitoring proposal issued in March / April 2014 however there was no information on longer-term monitoring. PT replied that prior to issuing the pre-construction MMMP earlier in the year a document had been issued detailing wider monitoring proposals. PT also highlighted that a draft MMMP which covered pre-during and post construction had been produced in March 2013 (although a formal consultation had not taken place). CR noted that the wider monitoring strategy had also been included as an annex in the pre-construction MMMP issued in April 2014 detailing the rationale for the species proposed. EK suggested that SNH would need to discuss with MSS the scope of the East Coast marine mammal monitoring.

PT noted that he is being asked by MORL and BOWL to develop the construction and post-construction monitoring plans to be included in the wind farm PEMP's and that feedback on the monitoring requirements therefore would need to be delivered very soon. CG stated that feedback could be provided soon if the priority species were agreed upon. PT stated that research and monitoring must be kept separate. CG noted that no discussions had been held with F&T yet. KB suggested an approach for future meetings: to have an initial meeting with the MF and then a second one with both F&T and MF Developers.

Action

- ***SNH are to liaise with MSS to discuss how to take monitoring in the East Coast forward***

6. Concluding Remarks

CR reminded everyone that in January the SNCBs and MSS would be discussing what monitoring would be required (including strategic issues), and that the Developers' main driver to define the monitoring requirements was FID. LR2 stated that there was a need to understand how the SNCBs feedback would affect BOWL's timescales.

EK stated that it was for MS Policy and MS-LOT to coordinate how SpORRAn could be delivered. SP noted the salmon group had been running for 18 months, that it had been working well and that it could be used as an example for the setup of SpORRAn. SP added further that a scenario should not be created where Developers are delayed in progressing with the discharge of consent conditions due to delays in SpORRAn or strategic monitoring requirements. PT highlighted that Developers cannot organise a national strategy.

PT asked whether it was possible to receive feedback on the 2013 draft MMMP. CG replied that the scope of the monitoring would be discussed with MSS but that the SNCBs' main concerns were noise during construction, assessment of population-level consequences and how much post-construction monitoring would be required. PT stated that the scope of the post-construction monitoring would be dependent on the results of the construction monitoring. RM agreed that there would be a focus on understanding what monitoring was needed based on the construction monitoring results. PT added that construction monitoring should also take into account any relevant information that becomes available.

Action

- ***HB to circulate a doodle poll to determine availability***

List of Acronyms

AOB	Any other business
BOWL	Beatrice Offshore Windfarm Limited
CfD	Contract for Difference
DECC	Department for Energy and Climate Change
EIA	Environmental Impact Assessment
ES	Environmental Statement
F&T	Forth and Tay
FID	Final Investment Decision
HIE	Highlands and Islands Enterprise
INSITE	INfluence of man-made Structures In The Environment
JNCC	Joint Nature Conservation Committee
MF	Moray Firth
MFRAG	Moray Firth Regional Advisory Group
MMMP	Marine Mammal Monitoring Programme
MORL	Moray Offshore Renewables Limited
MS	Marine Scotland
MSFD	Marine Strategy Framework Directive
MS-LOT	Marine Scotland Licensing Operations Team
MSS	Marine Scotland Science
NRIP	National Renewables Infrastructure Plan
PAM	Passive Acoustic Monitoring
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SMRU	Sea Mammal Research Unit

SNCB	Statutory Nature Conservation Bodies
SNH	Scottish Natural Heritage
SpORRAn	Scottish Offshore Renewables Research Framework
TCE	The Crown Estate
WDC	Whale and Dolphin Conservation