

## MORAY FIRTH RENEWABLES ADVISORY GROUP (MFRAG) MEETING NOTES

<b>Meeting</b>	MFRAG Marine Mammals Subgroup	
<b>Date</b>	9 February 2021. 13:00 – 16:00	
<b>Location</b>	Teams Call	
<b>Attendees</b>	Marine Scotland Science (MSS)	Jared Wilson (JW) [Chair], Jack Lucas (JL), Ewan Edwards (EE)
	Marine Scotland - Policy	
	Marine Scotland Licensing and Operations Team (MS-LOT)	Gayle Holland (GH)
	NatureScot (NS)	Erica Knott (EK), Caroline Carter (CC)
	University of Aberdeen	Paul Thompson (PT), Isla Graham (IG), Barbara Cheney (BC)
	BOWL	Joseph Deimel (JD), Fiona Wilson (FW)
	Moray East	Ruaridh Danaher (RD), Eliana Araujo (EA)
	Moray West	Catarina Rei (CR), Nuria Abad Oliva (NAO)
<b>Apologies</b>	Sarah Canning (JNCC), Chris Eastham (NatureScot), Sue O'Brien (MSS), Kate Brookes (MSS), Janelle Braithwaite (MS)	
<b>Action Number</b>	<b>Action</b>	<b>Completion Date</b>
1	MSS to provide feedback and comments on Addendum MMMP	
2	NatureScot to confirm acceptance of agreement with the Addendum to the MMMP	
3	MSS to provide written response on Addendum to MMMP	
4	Developers to agree cost sharing to deliver 2022 MMMP work	April 2022
5	PrePARED team to liaise with developers to avoid interactions with major O&M activities	On-going
6	Developers to update MFRAG-MM of any other plans for related research at Moray Firth sites	On-going
7	Developers to set up a doodle poll to identify date for next MFRAG-MM	

### 1. Introductions & Meeting Objectives

Introductions made.

## 2. Review of Actions from Previous Meeting (25 August 2021)

1. All - To consider how fishing data within wind farms could be recorded, MS-LOT to explore availability of existing fisheries data
  - GH has discussed with Bruce Buchanan from MS. Looking to the future, inshore branch is also doing some work on smaller vessels to use tracking system called REM (Remote Electronic monitoring), that could be useful. Looking at some trials – information would be of interest. JD asked how this would this be enforced. GH would provide updated in this group.
2. All - To ensure effective communication between MFRAG and CFWG
  - On-going
3. Developers – To provide survey lookahead for the full year (as available) within quarterly survey updates
  - Next survey lookahead will be submitted to MFRAG next month (March 2022)
4. NatureScot - to share costs for ongoing strategic monitoring with the group
  - On-going. Whilst costs for the next 2 yrs have been incorporated into Moray West led proposals, it is not currently possible to fully cost the anticipated 10 yr strategic monitoring.
5. NatureScot – continue discussions with BEIS/Natural England around integration with monitoring in English waters
  - On-going
6. NatureScot – To consider integration of future Bottlenose Dolphin monitoring and the Standing Scheme.
  - On-going
7. NatureScot – to share CREEM’s strategic monitoring paper when available.
8. EK - To provide a summary note on NatureScot’s advice on marine mammal Strategic Monitoring.
  - Action completed. NatureScot issued a note on 16 September 2021
9. Developers - To review existing cost sharing agreements and consider how cost sharing could be set up for the 2022 Bottlenose Dolphin and Harbour Seal population monitoring costs.
  - To be discussed at this meeting
10. RC - To discuss trawl resistant moorings with Moray East and how these could be used during Moray East’s over-trawl surveys.
  - Ross Culloch (RC) has left MSS. Action on-going
11. GH – To coordinate upload of strategic monitoring priorities note within the RAG page.

12. GH - To draft a letter to BOWL's OFTO reminding them of the responsibilities under their MFRAG condition.

- Action completed.

### **3 Addendum to the Moray Firth MMMP**

At the last MFRAG-MM meeting on 25 August 2021 it was agreed that NatureScot would write a note on what should be included in the revised/updated MMMP. This note was issued to MFRAG-MM members on 16 September 2021.

PT explained that Moray West agreed to lead in the work for their pre-construction and share costs with the Moray East and BOWL.

NatureScot note identified:

1. Key species for population monitoring
  - Bottlenose dolphins
  - Harbour seals
  - Minke whales – for Moray West
2. Harbour porpoises – model specie for behaviour response studied
3. Need to monitor construction noise for monopiles

In response to these needs, the MMMP work package (WP) structure has therefore been changed since 2017 addendum:

- In MMMP produced in 2017, there was 4 work packages:
  - o Harbour seal monitoring
  - o Bottlenose dolphin monitoring
  - o Harbour porpoise monitoring
  - o Noise measurement and modelling
- In the Addendum MMMP, 5 WP have been proposed:
  - o Additional WP3 - focusing on minke whale monitoring
  - o WP 4 - response to construction noise monitoring.

Details of these changes and the rationale behind them were presented in the draft Addendum to the MMMP which was circulated to MFRAG-MM members on 3<sup>rd</sup> Dec 2021. A presentation outlining these changes was made by PT (slides attached).

This was followed by an outline of proposed MMMP fieldwork for 2022. This includes:

- Harbour seal monitoring – series of 10 UAV surveys in May-September period.

- Bottlenose dolphin monitoring – series of 20 Photo-ID surveys, complemented by broad band and CPOD recording in the inner Moray Firth. Further trials of UAV based work are planned for bottlenose dolphins.
- Minke whale monitoring: New broad band noise recordings within MW site between May to September, potentially also over winter between September to May. Method development using archive data is also on-going
- Response to windfarm construction and operation: Deployments of C-POD near and between turbines planned for July-Sept to assess reef effects around constructed windfarm sites (to be integrated with PrePARED prey studies).

EK – highlighted that there were several outstanding comments from NatureScot on the 3/12/21 documents that should be discussed and clarified. These related to

- Minke whale work – PT explained methodologies were being developed with collaborators at SAMS and NOAA,
- Continuation on the south coast work – PT suggested previous approach had demonstrated no large-scale impacts, but other methods would be required to study any finer scale responses.
- UXOs – CR provided an update on UXO. From MFRAG-MM perspective, it would be good to understand how UXO monitoring work could be integrated. Moray West would apply for a Marine License and EPS License but it would be interested to see if this could be incorporated in the wider monitoring programme. CC highlighted that the UXO monitoring work done for Moray East provided a lot of useful data
- PT noted that different kit might be needed to monitor larger UXO detonations, as previous equipment deployed did not have the capabilities to measure the sound resulting from the UXO detonation. Monitoring requirements and potential use of other contractors will need to be explored following scoping of required clearance operations.
- CC noted that we should we make an effort to measure at 750 m from the piling, as per other OWF projects. PT agreed we should include this.
- CR asked about PrePARED integration. All 3 Moray Firth projects committed to support PrePARED with monitoring data, but it is unclear how this links to the consent conditions, and reporting requirements. PrePARED project has its own reporting scales defined in the project itself, and it would be useful to understand how developers integrate reporting required for consent conditions.
- PT explained that PrePARED plans discussed to date are aligned with Addendum MMMP which would fit with the monitoring requirements for all Moray Firth projects.
- JW: MMMP obligations that developers have for reporting would continue. PrePARED is a parallel stream and should not be any conflict across those two processes.
- PrePARED funding does not include funds for any data collection on marine mammals – this would be addressed through the consent monitoring within the MMMP

- RD asked whether any other CPOD deployment are planned within Moray East. PT confirmed that All PAM deployments are included in the Addendum MMMP.

Agreement on MMMP:

EK confirmed agreement on MMMP principles. NatureScot will provide a letter agreeing with the MMMP principles.

JD noted that if there was agreement that BOWL would discharge monitoring requirement by co-funding work in 2022 and then funding a central strategic fund after that.

PT highlighted that it would be useful to separate these decisions; do we agree this is the right programme or work, and separately what is the appropriate mechanism of funding for it. The assumption was that an agreement would be reached at this meeting and minuted. With regards to the funding mechanism for this year, it had previously been agreed that Moray West should lead on this. It remains unclear whether there is a mechanism by which a central funding could be established.

EK agreed with PT. Moray West taking the lead in 2022. EK asked whether Moray West could possibly continue with this process to save issues that could happen in 2023.

JW agreed, and highlighted the lack of a clear process by which a central funding mechanism could be established, as neither NatureScot or MSS could take the lead on this.

CR explained that Moray West is also not able to make long-term commitments to co-ordinate central funding for the 3 Moray Firth developers. CR asked whether this would be for 2 years, covering construction for Moray West and post-construction for Moray East.

PT explained that they were trying to find a way to integrate dolphin work along the East Coast of Scotland. University of St Andrews have a contract with Forth and Tay developers for 2022 and 2023. In 2 years' time, we could therefore plan to develop an integrated programme cover the needs of post-construction and construction monitoring for both Moray Firth and Forth & Tay developers.

CR noted that OceanWinds have been awarded a project in the Moray Firth on ScotWind, which would also benefit from strategic work.

JW asked all members to confirm agreement on the scope and programme described in the Addendum MMMP.

NatureScot confirmed is content with the scope and MMMP discussed at this MFRAG-MM meeting,

NatureScot suggested that the Addendum MMMP could provide greater clarity around the interdependencies of the MMMP and PrePARED work.

CR suggested to add detail on each developers responsibility for the various elements of the MMMP.

GH asked MSS to provide a response to MMMP – JL would provide a response in writing. – Action on MSS to provide comments in response to the Addendum MMMP

JD – in terms of delivery programme – developers to have a discussions between them

CR confirmed the commitment that Moray West would lead on this work on 2022/2023. Developers to discuss after 2023.

NatureScot and MSS action – how this needs to be progressed – decision making process – standard process for different receptions and locations.

<b>Actions</b>	<p><b>NatureScot to confirm acceptance of agreement with the Addendum to the MMMP</b></p> <p><b>MSS (JL) to provide written response on Addendum to MMMP</b></p> <p><b>Developers to agree cost sharing to deliver 2022 MMMP work</b></p> <p>Post meeting notes.</p> <p>NatureScot confirmed broad agreement on MMMP Addendum by email on 15 Feb 2022, subject to audit trail of clarification on key issues. PT circulated final Addendum and track changed copy clarifying NatureScot queries on 19<sup>th</sup> April 2022</p>
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#### **4 Update on strategic work**

##### **4.1 PrePARED Update**

The main aim of the project is to evaluate how the prey respond to offshore wind farms, and how subsequent effects on predator should be incorporated into future EIA.

Funding agreement from CE through OWEC has been signed.

Project aims is to reduce consenting risks, improve cumulative impact assessments, understand potential environmental net gain and improved the evidence base underpinning derogation.

Workstream A – predators and prey relation to OWF in the Forth

Workstream B – predators and prey in relation to OWF in the Moray Firth

Workstream C – relevance application of findings elsewhere in the UK

Workstream D – dissemination for improved impact assessment and OW policy

Moray Firth workstream:

- WP3: changes in fish communities with OWF development
- WP4: improving understanding of marine mammals response to prey and OWF development
- Developer funded marine mammal PAM

**4.2 PrePARED Moray Firth fieldwork 2022**

MSS work:

Capture and tagging of fish around turbines (April, May, June and September)

Maintain an array of acoustic receiver to detect tags (from June to Dec) – 2 years.

How they use the wind farm site and how they would behave.

4 – 5 clusters in the sites to see fine-scale movements.

PAM Moorings – extra sites in Moray East. Done by Moray Firth Marine – in August

Baited remote underwater video deployment – short term deployment – 45 min approx. repeat short deployments in BOWL, ME and MW site. surfaced marked. To be carried out in August

AI underwater video deployments – medium term deployments with different lighting systems. These would be deployed for a few days. To be carried out in August.

Opportunities to integrate other sampling that has a broader strategic benefit to MFRAG and Scotwind:

- ROV 3-D imaging
- Benthic sampling for eDNA

JW mentioned that if Moray Firth developers are approached by projects that might be relevant to PrePARED, it would be good to keep this group updated.

RD noted that it would be worth including consideration of major O&M activities planned for Moray East and BOWL. Exclusion zones might be imposed for some of these major O&M work.

PT asked how long these major works could last; would it be weeks of work?

RD explained that maybe not weeks but it could include jack-up vessel, i.e. gear box repairs.

PT said that shapefiles could be provided, for the developers to identify if there was any locations overlapping with these activities.

GH noted marine licence requirements – equipment deployed for the PrePARED would require additional licences or exemptions, if applicable. Some exemptions could apply.

CR – Moray West will co-ordinate the funding the 2022 data collection that underpins this strategic work (as agreed under Addendum for MMMP)

<b>Actions</b>	<p><b>PrePARED team to liaise with developers to avoid interactions with major O&amp;M activities</b></p> <p><b>Developers to update MFRAG-MM of any other plans for related research at Moray Firth sites</b></p>
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**5 Project and Monitoring Updates**

**5.1 Moray East project update**

RD presented construction update slides. Major points included:

- WTG testing and commissioning on-going
- Snag list and project takeover – still to be completed
- Commercial operational date – 1st April 2022

Activities:

- Transition into O&M phase – establishing Assets Team
- Update required consent documentation - PEMP
- Post-construction monitoring – will be included in the look ahead survey spreadsheet
- Aerial bird surveys (May – July)
- Overtrawl surveys – April 2022

**5.1 Moray West project update**

NA provided a project update

- Section 36 Consent Variation Application - Determination from Scottish Ministers
- Pre-construction site investigations 2022 - Due to commence Q2 2022
- Pre-construction Monitoring Surveys
  - Digital Aerial surveys – to recommence in March 2022
  - GBBG monitoring to commence in March/April 2022
  - Marine mammal monitoring – to recommence in spring 2022
  - Benthic monitoring – assessment of geophysical data on-going
- Drafting Consent Plans:
  - Decommissioning Programme (DP) – submitted to MS-LOT on 26 November 2021
  - Environmental Management Plan (EMP) – submitted to MS-LOT on 9 February 2022

<ul style="list-style-type: none"> <li>○ Project Environmental Monitoring Programme (PEMP) – due to be submitted in February</li> <li>○ Written Scheme of Investigations (WSI/PAD) – due to be submitted in February/early March</li> <li>● Offshore Construction: Commencement of OfTI construction - HDD works – December 2022</li> </ul>
<p><b>5.1 BOWL project update</b></p>
<p>JD provided a project an monitoring update</p> <ul style="list-style-type: none"> <li>● Monitoring – issued the 2021 benthic survey report – issued for comments</li> <li>● 2021 aerial bird survey analysis is underway</li> <li>● GBBG monitoring in combination with other developers</li> <li>● JD provided an update on the puffin monitoring.</li> </ul>
<p><b>6 AOB</b></p>
<p>Barbara – presentation gave a presentation to SAC group – site condition monitoring. Perhaps having a meeting Sept-Oct to invite SAC group.</p> <p>All developers to discuss PrePARED future work within Moray Forth with Sue</p>
<p><b>7 Next meeting and close</b></p>
<p>Developers to set up a doodle poll to identify date for next MFRAG-MM</p>