MINUTES OF MEETING

MeyGen Advisory Group_13
C203 Marine Laboratory, Aberdeen
Wednesday 29th May, 11.00-13.00

Attendees
Ian Davies (ID) MSS Chair
Anna Dunbar (AD) MeyGen
Carol Sparling (CS) representing SMRU
Ross Gardiner (RG) MSS
Ross Culloch (RC) MSS
Emma Lees (EL) MSLOT
Jessica Drew (JD) MSLOT
Chris Eastham (CE) SNH

Phone
Fraser Johnson (FJ) MeyGen
Cara Donovan (CD) MeyGen
Daniel Coles (DC) MeyGen
Benjamin Williamson (BW) University of Aberdeen
Erica Knott (EK) SNH
George Lees (GL) SNH

Apologies
David Taaffe MeyGen
Elain Tait MSPP
Jared Wilson MSS
Kate Brookes MSS
Nicola Bain MSLOT
Roger May MSLOT
Beth Scott University of Aberdeen
Gordon Hastie University of St Andrews

Item	Discussion	Actions
1. Introductions		
2. Objectives for the Meeting	AD: MeyGen objectives: 1. to update the group on plans for Project Stroma; 2. to agree what updates will be required to the PEMP for Stroma; and 3. to close out any outstanding actions from previous AG meeting. JD: MSLOT objective to get better understanding of NERC platform. Unlikely MSLOT will able to specify how PEMP will require updating at meeting as will need time to review, but group to agree process for review of existing document and making updates.	
3. MeyGen Project Update: a) Phase 1A b) Project Stroma	FJ: update provided on MeyGen Phase 1A operation. AD: update provided on plans for Project Stroma. RG: question for MeyGen - are there concerns over loading with move to bigger blades? FJ: operational data from tidal bladed can now be validated from Phase 1A so no concerns over loading. JD: raised concern that recovery and redeployment of AR1500 following upgrade may not be covered in the existing licences. CD: clarified that this is covered in Vessel Management Plan and Operations and Maintenance Plan and is already routinely carried out.	JD to confirm that recovery and redeployment of upgraded AR1500 does not require additional licence.
4. SMRU Update a) PAMS data b) Seal tagging c) NERC Platform	CS: update provided on PAM data analysis. Data have been processed for analysis up to the end of January 2019. These data are currently being analysed with respect to the effect of environmental and physical covariates on porpoise occurrence, as well as the localisation results in relation to the turbine. Data continues to be collected and archived, but no funding for further analysis. Intent is to submit papers for publication in Autumn 2019 in advance of final project report for MMSS project planned for March 2020. ID: is localisation accuracy range as expected? why does localisation accuracy reduce beyond 30m? CS: This is the expected range for good accuracy as a result of the hydrophone array spacing. Will follow up with research team to confirm.	CS to follow up why localisation accuracy drops beyond 30m – CLOSED.

	ID: any concerns with publication timings relating to new MeyGen consents. JD/AD: none for new licences as outputs not required for hub or NERC platform marine licences. *This point was revisited in later discussion on PEMP Revisions. See item 7 below.* DC: MeyGen would like to work collaboratively with SMRU on publication of results. CS: SMRU carrying out initial analysis internally but will include a consultation and review with MeyGen and funders before results are published. EK: Can anything be done expedite publication of results? CS: No dependency on PhD students so no delays expected, but limited opportunities to expedite as resources already fully committed to this analysis and reporting. Obligations are to publish final analysis and interpretation in line with MMSS programme, currently ahead of the MMSS expected timeline for reporting. No obligation to MeyGen Advisory Group.	CS to discuss with MMSS project members any opportunities to report results earlier than planned.
	CS: update provided on seal tagging. Results to be published in line with March 2020 MMSS programme. ID: data points recorded seem low compared to previous deployments. Was there a reason for this? CS: will follow up with colleagues.	CS to follow up why telemetry data was low for 2018 deployment – CLOSED.
	CS: update provided on NERC platform intended for deployment with Project Stroma CS: Question for Advisory Group – NERC platform could potentially be deployed one year in advance of new Stroma turbines. Would it be more beneficial to monitor in new turbine location to get baseline data, or to monitor TTG4, which has other PAM on it? CE: TTG4 would be interesting to compare to existing PAMS. FJ: once TTG4 is upgraded, it will have a new cabling system which is not compatible with the existing PAMS so this data collection will cease at this point. RC: monitoring new locations for baseline data is an attractive option as there aren't many opportunities to deploy monitoring data with no turbines installed. ID: likely to depend on project plan and opportunities for deployment / relocation. CS: need to confirm if there are implications on the design for either option before decision is made.	SMRU / MeyGen to discuss and propose location considering project planning, NERC design and points raised by Advisory Group to date. Proposal to be circulated to Advisory Group for comment.

	CS: NERC platform funding doesn't extend to data analysis so would be helpful if Advisory Group was supportive of new funding applications. ID: relevant Advisory Group members would need to review any new proposals. CS: question for MSLOT – how long does Marine Licence application take? JD: aim to process Marine Licence applications in 14 weeks assuming no issues with application. CS: does the licence have to specify the exact location? JD: Marine Licence can be applied for to cover consented area allowing flexibility for platform to be placed anywhere within that boundary.	
5. UoA Update	BW: update provided on relevant UoA research and pointed to papers from colleagues that may be relevant following SMRU update. ID: are there plans to redeploy FLOWBEC on Project Stroma? AD: currently no plans or funding to redeploy FLOWBEC on Project Stroma BW: UoA and MeyGen keen to continue collaborating. BW is discussing proposals and opportunities with DC. ID: are any monitoring requirements being imposed on MeyGen for Project Stroma? JD: PEMP only relates to monitoring requirements for Phase 1A. No requirements currently imposed on Stroma. PEMP requires updating for Stroma. *Discussion continued – see item 7 below.*	BW to circulate relevant papers to group – CLOSED.
6. Consent Status Update	AD: update provided (discussion in response to earlier questions): 1. Project Stroma consented under first phase of development at MeyGen. 2. New Marine Licence application submitted for subsea hub and expected to be issued imminently (consultation period has closed). 3. New Marine Licence will be required for NERC platform.	SMRU / MeyGen to submit Marine Licence application for NERC platform. *Note potential highlighted after meeting that this could be exempt if classified as Scientific Instrument (and qualifying criteria are met). AD to follow up with MSLOT.*

7. PEMP Revisions	*Discussion continued from item 5* EK: there is uncertainty around the monitoring requirements placed on the MeyGen as the developer. GL: has the monitoring to date addressed the key issues that were required to be addressed in the PEMP? ID: requirement to review the extent to which the objectives of the PEMP have been met to provide input into the new PEMP. When is new PEMP required? JD: new PEMP required in advance of next phase i.e. installation of new turbines and support structures (planned to start Q3 2020). No PEMP required for the subsea hub as this is consented under a separate Marine Licence. ID: Advisory Group would require new PEMP to be written by the end of the year for review in advance of formal submission by MeyGen to MSLOT in Q1 2020. This would allow 3 months for formal approval process, including 28-day consultation period. DC: it will be challenging to assess if the PEMP objectives have been met if publications and final reports from data analysis are not available until March 2020. CS: as discussed above, SMRU plans for reporting are in line with MMSS programme (and are currently expected to be ahead of the requirements of this programme) and there are limited opportunities to improve on these timescales. Will discuss with colleagues. See action above. RC: SMRU also submit quarterly and annual reports with updates on analysis, so although not final, these could be used to review if the PEMP objectives have been (or are expected to be) met. Monthly reports were submitted during the first twelve months of monitoring. *CS noted following meeting that PAM monitoring is only one element of the PEMP so there should not be undue reliance on PAM outcomes to determine of PEMP objectives have been met* EK: have consent conditions actually been met and discharged through Phase 1A? ID: suggest review of consent conditions in advance of review/update of PEMP.	

	Discussion continued and process agreed: 1. MSLOT to lead on review of consent conditions and clarify which have been discharged and which remain. Review could be through stakeholder meeting or by correspondence. 2. Following review of consent conditions, review PEMP to see if objectives (some or all) have been met. Target to have this stage complete and feedback to MeyGen by September. MeyGen to be included in review process. 3. MeyGen to update PEMP as required for Project Stroma and submit to Advisory group for review by end of the year. 4. Following feedback from Advisory Group MeyGen to submit formal PEMP update to MSLOT for approval Q1 2020.	MSLOT to propose process and lead on: 1. Review of consent conditions; and 2. Review of PEMP objectives.
8. Previous Outstanding Actions	Previously outstanding from historic action register: 25. Provide monthly reports for ARL turbine – complete (closed) 28. Consider the monitoring requirements for 1B – superseded (closed) 33. Consider detection function of VEMCO tags with tide speed and animal audibility – decision of MMSS steering group not to pursue (closed) 36. BW @ SAMS – SAMS conducted hydrophone baseline @ MeyGen and would like to repeat post installation to understand if any impact upon Harbour porpoises – MSS to confirm if now closed 37. SMRU requested if angle of turbine blade / orientation and operational data (on/off) can be provided – DC has sent TTG1 data other turbine data to follow (closed) 44. MeyGen to specify proportion of AHH and ARL blade within the screen shot - feedback from Engineers that they cannot specify with confidence (closed) 45. Action Uo PhD students to review environmentally significant periods @ MeyGen site – completed elsewhere (closed)	
9. AOB	Next Advisory Group meeting to depend on review process for consent conditions and PEMP. Expected to reconvene end of September / start of October to discuss feedback on Project Stroma PEMP.	MSLOT to advise if earlier Advisory Group meeting would be beneficial as part of review process.