

MINUTES

Attendees: Ed Rollings (ER) MeyGen Date: 27/01/2015
 Prof. Ian Bryden (IB) Chairman – UHI
 Joao Queiros (JQ) MSLOT
 Nicola Bain (NB) MSLOT
 Finley Bennett (FB) MS Science
 Billy Harris (BH) MSLOT
 Ross Gardiner (RG) MSS
 Chris Eastham (CE) SNH
 Erica Knott (EK) SNH
 Toby Gethin (TG) TCE
 Carol Sparling (CS) SMRU

Chaired by: Prof. Ian Bryden Time: 10:00

Apologies: Kate Brookes (MSS) Location: Conference Call
 Jaren Wilson (MSS)
 Ian Davies (MSS)
 Roger May (MS)
 Ian Walker (MS)
 George Lees (SNH)

SUBJECT: MeyGen Advisory Group (AG) Meeting 4

Agenda

No.	Subject	Time (min)
1	Project Update	10
2	KTP Workplan	30
3	Demonstration Strategy – Carol Sparling	20
4	KTP / Demonstration Strategy interaction	20
5	Environmental Management Plan and other consenting requirements	20
6	AOB	

No.	Subject	Action
1	Project Update	
1.1	ER update on MeyGen Phase 1a since previous meeting (March 2014)	
1.2	Phase 1a funding secured in September 2014. A total of £51.3 million has been secured from syndicate members comprising the UK government, through the Department of Energy and Climate Change ("DECC"), Scottish Enterprise, Highlands and Islands Enterprise ("HIE"), The Crown Estate ("TCE") and Atlantis Resource Ltd.	
1.3	Construction and supply contracts signed with ABB (electrical and civil infrastructure), O'Connor Utilities (Drilling), Fisher Marine Services (offshore installation), JDR (cables), Global Energy (foundation structure), JGC (foundation ballast), Atlantis Resources Ltd. (1 x turbine) & Andritz Hydro Hammerfest (3 x turbines).	
1.4	Programme; onshore works have commenced. Drilling to commence in March 2015 to allow cable installation (longest marine activity) in summer neap windows. Foundations installed following cables. 2 turbines ready to install in March 2016, further 2 in August 2016.	
2	KTP Workplan	
2.1	KTP was applied for following the financing of Phase 1a, and awarded in November 2014. Benjamin will start work on 1 st February 2015. Benjamin Williamson effectively becomes a MeyGen employee and the technical lead for the monitoring programme.	
2.2	Discussion around how the KTP will interact with the AG concluded that regular updates from Benjamin (presentations and papers) will be necessary for the AG to check and evaluate progress.	
2.3	AG meetings to move to quarterly.	
2.4	ACTION – ER to produce organogram for reporting monitoring programme. Linked to how all reporting on consent conditions are conducted and the role of the ECoW and KTP structure with SG Demonstration Project	
2.5	ACTION - ALL to review AG ToR to check they are still fit for purpose as we move into the next stage of monitoring development.	
2.6	Walk through KTP workplan. Noted that the workplan and programme was submitted in August for the KTP application. It requires updating to meet the needs of the monitoring programme (critically, testing in the summer 2015).	
2.7	ACTION – IB to talk to EMEC regarding their monitoring pod and potential linkages with the KTP and Demonstration Strategy.	
2.8	ACTION – TG to contact John Hartley to open dialogue on possible DECC/SEA funding opportunities for a 2nd monitoring platform.	
2.9	ACTION – ER to distribute the revised workplan and programme to the AG (should be complete in 2 weeks)	
3	Demonstration Strategy – Carol Sparling	
3.1	Project has completed Task 1: Platform and sensor review	
3.2	Task 1 identifies a cabled solution with active sonar, passive acoustics and video camera. Working with MeyGen to understand technical issues with power, data and installation and recovery.	
3.3	Working towards a modular design just that systems can be deployed individually or daisy chained together. The approach allows for separation between passive acoustic units to give bearing and range for a sound source (vocalizing cetacean or tagged receptor).	
3.4	Currently continuing system design and bench testing sensors (Q1/Q2 2015)	
3.5	Coordinate field testing with MeyGen monitoring programme (Q2/Q3 2015). It is likely that some field testing will need to be done at other locations, rather than the Inner Sound. Sites with higher densities of target receptors including the possibility of fish farms for salmon.	
3.6	Q3/Q4 analysis of results and reporting. The project is due to finish Q4 2015, but the original plan was to test the system with an operating turbine. Given the current project programmes the earliest would be March 2015 with MeyGen. It is likely that a 2 nd project will carry on the work here into deploying with operating turbines.	
3.7	Discussion regarding how AG interacts with Demonstration Strategy. Concluded that it would be good	

	if the AG could get the DS reporting and outputs. Project level interactions to be continued between MeyGen and SMRU to maximise the value of both projects and limit duplication. There will hopefully not be a situation where there is a need for arbitration between the 2 projects but it would require MSLOT / MSS to seek an appropriate way forward.	
3.8	ACTION - CS to share the Task 1 report and future reports with AG.	
3.9	ACTION - ER to share AG minutes with Demonstration Strategy.	
3.10	ACTION - ER/CS/Benjamin Williamson to develop collaboration between the projects over the next few months.	
4	KTP / Demonstration Strategy interaction	
4.1	Included in agenda item 3	
5	Environmental Management Plan and other consenting requirements	
5.1	MeyGen has agreed with MSLOT a process for discharging the conditions required for construction to commence. Agreed that separate submissions of documents for the HDD marine works and the rest of the construction activities.	
5.2	EMP, Construction Method Statement et al for the HDD marine works are due to be completed this week and submitted next week to MSLOT.	
5.3	MSLOT are currently looking at 10-12 week turn around for consenting documents.	
5.4	Ecological Clerk of Works (ECoW) role needs to be filled and approved by MSLOT. MSLOT are able to provide criteria and CVs from MORL, however the role should be considered against the size of the project and needs to be clear to ensure that reporting does not burden the project and stakeholders.	
	ACTION – ER to discuss EMPs, ECoW with NB and CE	
6	AOB	
6.1	Date of next meeting. Early April. Doodle poll for w/c 30-MAR w/c 06-APR w/c 13-APR	
6.2	ACTION – JQ to set up doodle poll	
6.3	RG – important to keep Salmon high on the monitoring agenda. Previous discussions had included CFD analysis, deployment of dummy fish (Didson camera) with operating turbine and improving the collision models (currently under review with SNH - Bill Band). CS – note that the DS project hopes to ground truth sonar detections at fish farms over the summer.	
6.4	CE – would be good to get an update on other recommendations of the steering report at the next meeting, e.g. pinger tags, stranding scheme (SNH have a tender in for funding which may or may not be applicable) and haul out counts.	
6.5	CS – Understood that Jared Wilson was looking at studentship with tagging seabirds (possibly through MASTS)	
6.6	ACTION – ER to update AG on other monitoring recommendations	

ACTION REGISTER

No.	Action	Responsibility	Complete
1	ACTION – ER to produce organogram for reporting monitoring programme. Linked to how all reporting on consent conditions are conducted and the role of the ECoW and KTP structure with SG Demonstration Project	ER	
2	ACTION - ALL to review AG ToR to check they are still fit for purpose as we move into the next stage of monitoring development.	ALL	
3	ACTION – IB to talk to EMEC regarding their monitoring pod and potential linkages with the KTP and Demonstration Strategy.	IB	
4	ACTION – TG to contact John Hartley to open dialogue on possible DECC/SEA funding opportunities for a 2nd monitoring platform.	TG	Complete
5	ACTION – ER to distribute the revised workplan and programme to the AG (should be complete in 2 weeks)	ER	
6	ACTION - CS to share the Task 1 report and future reports with AG.	CS	
7	ACTION - ER to share AG minutes with Demonstration Strategy.	ER	

8	ACTION - ER/CS/Benjamin Wiliamson to develop collaboration between the projects over the next few months.	ER/CS	
9	ACTION – ER to discuss EMPs, ECoW with NB and CE	ER	
10	ACTION – JQ to set up doodle poll	JQ	Complete
10	ACTION – ER to update AG on other monitoring recommendations	ER	