MINUTES of the BBSRC/EPSRC Synthetic Biology Oversight Group Meeting held on 22 September 2009 at RIBA, London.

Those attending:-

Panel Members

Brian Johnson Chair

John Connolly Department of Health Robert Edwards Durham University

Matthew Harvey Royal Society, attending for James Wilsdon

Pete Ferris EPSRC, attending for Susan Soulsby Jackie Hag PEALS, University of Newcastle

Suzannah Lansdell Sciencewise Patrick Middleton BBSRC

Lesley Paterson Royal Academy of Engineering

Helena Paul Econexus Stuart Wainwright Defra Dawn Woodgate ESRC

Emma Longridge BBSRC, Secretariat Kate Miller EPSRC, observer

Laura Grant Associates (morning only)
Bella Williams Laura Grant Associates (morning only)

Darren Bhattachary BMRB (afternoon only) Andy Hunter BMRB (afternoon only)

Matt Kearnes University of Durham, BMRB (afternoon only)
Phil McNaghten University of Durham, BMRB (afternoon only)

Juliet Pascall BMRB (afternoon only)

Apologies

Jane Calvert University of Edinburgh

Janet Cotter Greenpeace

Ben Davis University of Oxford

Susan Soulsby EPSRC

Emma Southern Biosciences Federation
Judith Petts University of Birmingham

James Wilsdon Royal Society
Phillip Wright Sheffield University

1. Introductions and Background

Brian Johnson welcomed everyone to the meeting and said that he hoped a course of action for beginning the dialogue could be agreed today. He noted apologies for absence including those from a new member of the Group, Janet Cotter from Greenpeace.

Following introductions, Brian Johnson asked the Group how they would like their meetings to be recorded. The Group agreed that they wanted to be as open as possible about the process and that minutes of their meetings should be publically available. Should sensitive information be discussed in the meetings it would be noted at the meeting that this would not be made publically available but they were keen that every effort will be made to minimise this occurrence. It was agreed to proceed with the meeting under the Chatham House Rule.

Patrick Middleton introduced paper OG01 by talking through the history of the project so far. Brian Johnson updated the Group on a meeting that had happened recently between himself, Suzannah Lansdell, Patrick Middleton, Helena Paul and Jackie Haq at which they discussed the process so far. It was noted that several issues had been raised including the need to ensure that the Oversight Group are being kept informed about the process and a concern that the Invitation to Tender could have been advertised more widely. It was also emphasised that there was a hope that everyone would be open and honest during this process. Concern was raised about the flux of Group membership between meetings and how changes in membership impinge on the role of the Group and its ability to make decisions. It was agreed that Group members could nominate an alternative person to attend a meeting in their place but that it was their responsibility to ensure that they are thoroughly briefed. It was also agreed that confirming dates for meetings as far in advance as possible would limit the likelihood of people being unavailable. It was also suggested that it may be useful for members who have missed a meeting to have the option to call Brian Johnson, Patrick Middleton or other research council staff in order to be updated/have an opportunity to input on the process as it progresses.

Brian Johnson invited Suzannah Lansdell to introduce the role of Sciencewise. She spoke about their role as being a supporting one to help ensure that the dialogue runs smoothly according to best practise. Sciencewise will be keen to learn from this dialogue to help inform others undertaking dialogue projects. It was also noted that it may be possible for Sciencewise to help mediate should any serious difficulties arise between the different parties involved in the process.

Brian Johnson invited Laura Grant to introduce herself and Bella Williams as evaluators. Laura Grant said that as evaluators they hoped to provide capacity for reflection in real time on the processes and outcome of the dialogue and on the experiences of everyone involved. She outlined several of the techniques that they are considering using, including carrying out a follow up review after six months. She expressed that she would like the Oversight Group to feel able to come to them as evaluators and let them know their thoughts and experiences. She noted that part of their role will be to look at the working of the Oversight Group, in the context of their Terms of Reference, and so she asked the Group how they would like to hear their feedback. This led to some discussion where the Group expressed a need to have very open channels of communications and a desire to be open and frank with one another. This will include copying the whole group in to emails. It was agreed that Laura Grant Associates would need to find a way to capture everyone's thoughts after a meeting, not just a small number of individuals, perhaps by using a form of some kind. It was also agreed that a standing agenda item will be an evaluation update. Laura Grant asked the Group if they would like them to provide a set of questions to challenge the Group at each meeting about the process and decisions they are making, the Group agreed to this. The Group also confirmed with Laura Grant that she felt that Laura Grant Associates could be completely critical of BMRB and the process of the dialogue, which she said they could.

2. Aim and Objectives

Brian Johnson introduced this paper, commenting that the Aim and Objectives had come about as a result of several meetings involving a large number of people and many iterations of the text. He asked the Group whether they were happy with the aim and objectives and whether they had any questions about them.

The Group generally agreed that the paper details a very commendable set of objectives but that putting them into practise may be more difficult. Discussions

highlighted that there were a number of words and phrases which allowed for some ambiguity and difference of interpretation. The Group accepted that the aim and objectives had needed to be suitably broad to allow the deliverers the opportunity to input into the process themselves. It was agreed that it would now be useful to see the key parts of the dialogue mapped against the objectives so that the Group can see that the objectives are being met and are given to opportunity to modify how they are being interpreted. This will also assist the evaluators in deciding how to measure success against the objectives. Another suggestion was to allow the Group to define what some of the key words mean, for example 'diverse' and 'participants'.

3. Draft Oversight Group Terms of Reference

Brian Johnson introduced the Terms of Reference and asked the Group to comment on and then approve them. There was some discussion of the words 'innovative and imaginative' used in the guiding principles. The Group felt that they would not need to see innovation in the dialogue design if it is there just for the sake of being innovative but that they would like it to also be appropriate. There was some discussion of what the Group defines as 'hard-to-reach'.

The Group also wanted to know how the dialogue would influence the Research Councils. Patrick Middleton and Pete Ferris were able to assure the Group that this would happen by feeding findings into their Bioscience for Society and Societal Issues Panels which themselves feed into BBSRC's Strategy Advisory Board and EPSRC Council respectively. They emphasised the interest and support that the CEOs of BBSRC and EPSRC have shown in the dialogue and that involvement of research council staff and embedding of the dialogue results has been built into the requirement of the process. There followed some discussion about the potential difficulties in ensuring that Government departments are able to respond to the dialogue effectively. It was noted the expertise that Sciencewise can add in this area and that one of the main learnings from the point of view of BIS in recent years has been the importance of engaging and remaining aware of which government departments should be involved in any given dialogue. The importance of remaining aware of and connecting to other activities that are going in this area over the course of the dialogue was emphasised. It was clarified that the role of the Oversight Group is to oversee the dialogue and that it is for the Steering Group to ensure that its results have impact. This highlighted the need for flow of information between the Oversight Group and Steering Group to ensure that capacity for impact is built into the process.

The Group went on to discuss Group membership. They were happy that the Group represented a range of expertise with appropriate links and networks that will be valuable to the Dialogue. These networks will be useful for BMRB to know about as who they talk to about Synthetic Biology will influence many aspects of the process. The Group were keen to see that the dialogue reflects the wide range of different 'flavours' that are covered by Synthetic Biology noting that it will be a challenge to meld them into a coherent narrative and doing this successfully will involve asking the right people.

The Group discussed decision making processes. The Group agreed that they would like to have consensus sign off on materials. They felt that they should be critical friends and advisors to the deliverers to help them decide when there are important choices and options for the dialogue. It was decided that whilst there should be a balanced dialogue between the Oversight Group and BMRB, should any irrevocable differences arise between the Oversight Group and BMRB the final decision will be deferred to the Steering Group.

The question of remuneration was briefly raised. Should anyone feel entitled to additional payment, a case should be made to the secretariat.

The Group would like hard copies of papers to be posted to them in good time ahead of meetings.

Brian Johnson summarised to say that the Terms of Reference will be signed off via email when suitable additions have been made.

The Group then briefly discussed the risks associated with the dialogue. They identified some of the major risks as being:

- The varied definitions of Synthetic Biology and the broad nature of the field.
 Even the community itself cannot agree a definition and this will pose difficulties when discussing it with the public.
- Much of what defines Synthetic Biology is about culture and aspirations.
 Whilst this may make the dialogue unique it also poses difficulties.
- Case studies rather than definitions may be helpful tools. However products of Synthetic Biology are a long way from being available.
- It can be difficult to differentiate in this area between what is really possible, what is plausible and what is totally aspirational and the differences will need to be conveyed carefully.
- The uncertainties of the field will need to be conveyed carefully.

5. The Dialogue Proposal

BMRB presented an overview of their approach and highlighted a number of areas where they would now like to make adjustments to their original tender proposal. These included allowing additional workshop time for participants to consider science more broadly to help them to frame and make sense of Synthetic Biology in a wider context. They would also like to work more closely with the research councils to explore and help them to use the findings of the dialogue. They had also considered how the dialogue will fit into an international arena of discussion around Synthetic Biology. BMRB raised several key areas where they felt they needed input from the Oversight Group.

Discussion began around the scope of the dialogue. BMRB were keen to be explicit about the lessons learnt from experiences of the GM debate, particularly in the stakeholder interviews. By giving participants the opportunity to discuss the use of technology in daily life leading into how they are affected by advances in science it will be easier for them to consider how Synthetic Biology fits into what they think about these wider topic areas. This might involve grouping participants according to characteristics other than socioeconomic groups, for example by whether they buy organic food. The Oversight Group did not want Synthetic Biology framed in terms of GM but saw the value in allowing the public to uncover their own resources to draw on in considering a novel technology.

The Group then discussed payment of experts. BMRB were proposing to pay experts for their involvement and to pay them more than public participants. They felt that this would enable them to recruit experts more easily, particularly when they are recruiting from a small group of individuals. It would also reflect the increased time and effort that experts spend on the process as compared to public participants. The Group had concerns about seeming to value the opinions of experts more highly than those of the publics and noted that many experts may still wish to contribute to the

process without the need for remuneration. This issue was not resolved. (Note from the Secretariat – this issue will be revisited at the next meeting for closure).

The Group discussed how this dialogue is set up in such a way as to allow us to move beyond the findings of the recent RAEng dialogue. The Group heard about the RAEng process which involved two, 3 hour sessions with participants and included scientists at the first meeting. This led to discussion about how to involve experts in the dialogue so that they are part of the process and not just offering a vision or point of view. The Group felt that how the meetings are set up will be hugely important. They would like the public to be able to work things out for themselves rather than be offered opinions to choose from. Experts would also need to be carefully briefed as their input may heavily influence the participants. Participants should therefore be allowed space to consider the issues themselves rather than risk them deferring to the experts, although it was pointed out that we should have some trust that the public are not as fragile and malleable as that. Experts will also need to be given the opportunity to listen to and learn from the discussion. It was suggested that it might be appropriate to allow the public to choose the experts they hear from, or at least choose the subject matter they would like to know more about.

Discussion moved onto how stimulus material would be produced and how the Oversight Group would be involved with this. BMRB highlighted two main types of material to be used. There will be basic facts about how the science is carried out and there will be information about the directions that the science is taking. The latter will draw heavily on the stakeholder interviews that form the first phase of the dialogue. BMRB recognise that it will be hugely important to choose carefully the individuals that they speak to and where they derive information from. They envisage that written stimulus materials will consist of approximately four pages of narratives from the interviews. The Group commented that when they are asked to sign off materials they will want to know how the narratives were selected and the thinking behind the process rather than simply be asked to sign of the text alone. They would also like to input into who the stakeholders are that are interviewed, this was welcomed.

There was also discussion about how policy makers will be involved in the dialogue and how policymakers and participants can be brought together. There will be an event to discuss the findings with policymakers. BMRB will look to embed the dialogue into the research councils' way of working and will look to the Oversight Group to help them involve the appropriate areas of government and industry.

Video ethnography for participants, perhaps between the first and second workshops was suggested.

Brian Johnson introduced a discussion about how the samples of participants will be selected. BMRB would like to look beyond socioeconomic groupings to group people according to their attitudes. Whilst the classic distinctions are still important it should be possible to layer new groups on top to look more closely at peoples influences. There was some discussion about whether or not ethnicity will be an important factor in the dialogue. The Group felt that although tensions between different ethnic groups may mean that separating them out could be helpful, overall ethnicity is unlikely to impact on people opinions about Synthetic Biology. There may be more issues that arise from defining people in this way which mean that it may be best not to divide the participants according to ethnicity. Darren Bhattachary agreed to check the research in this area before making a decision.

The Group asked BMRB how they might look to reach hard-to-reach groups. They answered that they would look to include a broad range of people from society without actively seeking to include particular hard to reach groups. They felt that aiming to reach particular hard-to-reach groups would be a different project entirely.

The Group discussed the timetable of the dialogue. BMRB would like to propose conducting the stakeholder interviews before Christmas and shift all of the workshops to after Christmas. This would avoid splitting workshops over the Christmas break which may impact on the results obtained. It was agreed that it would be better for the process to be carried out properly and delay the workshops phase of the dialogue until after Christmas. The Group could not see any opportunities that would be missed by delaying the workshops and thus results for several months. Both research council strategies will have been completed by then but the results should be being embedded into the workings of the research councils so this should not be a problem. It was estimated that the workshops phase of the project will be completed by mid-March allowing for delivery of a final report in May or June. There was some discussion over whether the time spent on workshops would be long enough to allow the findings to go deeper than the RAEng dialogue had done. It was felt that with approximately 15 hours of contact time this should be possible.

BMRB asked for clarification of how the funders would like to work with the media and offered help and contacts should these be required. Brian Johnson thanked them for this offer of help and it was agreed that the funders will provide a media strategy for the Group and BMRB to be made aware of by the end of October. The Group spoke about needing to take care with the media approach as high profile exposure could colour the participants approach to the project. At the same time, it will be important to have an opportunity to brief particular stakeholders that the dialogue is happening. BMRB would be keen to learn who these people are as potential interviewees.

7. Defining next steps

- ACTION: BMRB, in two weeks BMRB agreed to provide a revised design with clear options for the Oversight Group to choose from and a document mapping processes against the objectives of the dialogue.
- 2. ACTION: Oversight Group, as soon as possible
 The Oversight Group agreed to provide BMRB with suggestions for stakeholders to be interviewed.
- 3. ACTION: Secretariat, as soon as possible
 The Group agreed that they would like to meet again in November, when
 stakeholder interviews are being completed, again in mid-March after
 the workshops and also once between the workshops to provide their
 input during the process.
- 4. ACTION: Research Councils and Sciencewise, by the end of October Devise a media strategy for the Oversight Group to be made aware of.

At this point the meeting broke for tea. BMRB left. The Oversight Group expressed that they had found time alone before BMRB arrived useful and that they would also value a 'wash-up' session after BMRB had left.

Concerns were raised that the proposals from BMRB were not as innovative and imaginative as there was opportunity to be. The Group could see many opportunities for exploring dialogue process and improving the quality of the results obtained, BMRB had suggested some ideas in their tender but these had not been discussed

in the meeting. The Group would like BMRB to focus on generating useful results but would like them to challenge and develop best practise. They would like to give them permission to be innovative. There was also some discussion of how the dialogue can get beyond the generic issues to ones that are specific to Synthetic Biology. However, the Group realised that participants will need to work through the generic issues to allow them to get to the novel ones. There was a suggestion about a mini study to see what the public discover and how they feel about Synthetic Biology when allowed to explore the topic by themselves, through the internet and talking to friends and relatives etc. This raises issues with accessibility of the internet to different people.