



Centre for
Challenge Prizes

Department for Business
Innovation & Skills

The evaluation of public and stakeholder dialogue to inform the development of Longitude Prize 2014

prepared for BIS, NESTA and Sciencewise

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EXECUTIVE SUMMARY

This report provides an account of a small scale evaluation of the public and stakeholder dialogue project around the scoping and framing phase of the Longitude Prize, commissioned by Nesta and BIS with co-funding from Sciencewise¹).

The dialogue was designed and delivered by Ipsos MORI, in close collaboration with Nesta and Sciencewise. The public dialogue events took place between October and November 2013 and consisted of three sets of 11 (32) members of the public who met twice for around three hours each time in Leeds, Cambridge and London in October and November 2013. There was also a three-hour stakeholder dialogue event in London in November 2013.

The total cost of the dialogue project was £157,032 (including evaluation and a web platform), to which Sciencewise contributed £48,825. The aim was to feed into the development of thinking towards the creation of a £10 million prize for Longitude 2014. The project was funded by Nesta and Sciencewise.

The evaluation was carried out during and after the dialogue process, and ran from October 2013 – April 2014. The aims of the evaluation, as set out in the specification, were:

- to provide an independent assessment of the impacts and quality of the dialogue project to demonstrate the extent of the project's success, credibility and effectiveness against its objectives, covering both the outcomes and the dialogue processes (including an assessment of impacts on policy and those involved)
- to contribute to increasing the wider effectiveness and use of public dialogue.

The objectives for the evaluation, and the ways in which the evaluation was expected to meet its aims, were:

- to gather and present objective and robust evidence of the impacts, achievements and activities of the project in order to come to conclusions
- to identify lessons from the project to support capacity building across Government, and the wider development of good practice in public dialogue.

The brief identified that the evaluation would consider Phase 1 of project as a whole, covering all the activities and in accordance with the Sciencewise principles of good practice: Context, Scope, Delivery, Impact and Evaluation. These seek to ensure that: the conditions leading to the dialogue process are conducive to the best outcomes (Context); the range of issues and policy opinions covered in the dialogue reflects the participants' interests (Scope); the dialogue process itself represents best practice in design and execution (Delivery); the outputs of dialogue can deliver the desired outcomes (Impact) and that the process is shown to be robust and contributes to learning (Evaluation). In addition, aspects of governance and costs and benefits of the dialogue were examined.

Evaluation research methods of observation of four of the seven dialogue events, stakeholder conference calls and emails plus questionnaires to all participants, and 25 telephone interviews (with public participants and stakeholder participants, and other stakeholders and the delivery team) were used to gather evidence with which to evaluate the dialogue project.

¹ Sciencewise is the UK's national centre for public dialogue in policy making involving science and technology issues. See www.sciencewise-erc.org.uk

The dialogue objectives were to:

- ensure that the public and stakeholders are engaged in the scope and framing of a new Longitude prize for innovation in science and technology
- ensure that there is a high degree of transparency around the process for developing Longitude challenges
- frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public and stakeholders

There is evidence to support the view that the first and third objectives were met, at least in part, but there was general agreement from those interviewed that though aspects of the process of the public and stakeholder dialogue were transparent, it was not fully clear how the results were used in decision-making processes, alongside the other inputs. There was thus not a full audit trail and understanding of the influences on the way to the decisions, though since the completion of the evaluation, Nesta has published its prize methodology.²

There is a general view that, despite the difficulties, a good set of challenges were identified. Without these inputs, it was thought that the ideas and topics would have been completely internal to Nesta and the Longitude Committee and that the public and stakeholder dialogue events and resulting final dialogue report did help shape the ideas as well as giving an injection of structure into the process. There is evidence that the public and stakeholder dialogues, whatever their limitations, offered insights and evidence and gave Nesta the evidence to convince the Committee to recognise that further work was needed before decisions could be made; and put a structure around the process of developing the challenges, that otherwise might not have been found from elsewhere.

The evaluation brief suggested that the success of the dialogue project could be measured by a range of factors including:

- The use of the results of the dialogue to influence national policy making involving science and technology
- The high quality of the design and delivery of the public dialogue project (good practice, value and effectiveness)
- The greater willingness of the commissioning body to undertake public dialogue in future.

The use of the results of the dialogue to influence national policy making involving science and technology

The results of the dialogue did influence the choice of challenges to some extent, and more significantly influenced the criteria used to select the challenges, and the ways in which the public could be encouraged to engage with the prize. There is some evidence that public and stakeholder dialogue views in the dialogue report did influence the final choice of Longitude challenges by the Longitude Committee in collaboration with the Nesta challenge prize team, and that the criteria and engagement work have influenced the next stages of Nesta work with the BBC. The dialogues also identified challenges that might not interest the public, so taking account of this evidence may have helped avoid a choice of challenges that were unattractive to the public. There is limited evidence of the use of the dialogue results among Longitude Committee members, but the results appear to have impacted on the Nesta challenge prize team and the organisation they worked with to finalise the prize listing. As a result of the dialogue, the issues and challenges set by

² <http://www.nesta.org.uk/publications/longitude-prize-2014-briefing-and-methodology>

Longitude Prize 2014 were not simply those framed by academics or business leaders but were broadly consistent with issues that were of public concern.

Because of BBC embargoes, few people outside the immediate decision makers had access to the dialogue findings until some time after the dialogue events, other than BIS staff and indirectly ministers. A key focus of BIS in the Longitude prize was how the public was being consulted and how their views in developing the Longitude prize were being taken into account. Once the dialogue report was available, BIS staff shared findings with colleagues and ministers and there was interest in them; especially the public lack of interest in particular challenges - and the evidence on the criteria.

Though the final dialogue report was completed in January 2014, because of the BBC embargo, stakeholders were not sent the report until 27th February 2014, four months after the dialogue events. Those stakeholders interviewed for this evaluation appeared not to have read much beyond the executive summary. The public participants had only just received the summary when the research for this evaluation was completed on 16th April 2014 and, among those interviewed, even the summary appeared not to have been read in any detail.

The quality of the design and delivery of the public and stakeholder dialogue project

In relation to the quality of the design and delivery of the public dialogue events, there were criticisms of aspects of the delivery. It was recognised that those involved with delivery coped with a really challenging timetable and difficult demands *'with huge grace'*. Some of those interviewed were critical of the dialogue design. Others felt that the process was good at a high level, but that the issues came at the delivery level, and were due to:

- The incredibly pressured timescales
- A lack of time and experience of commissioning this kind of dialogue leading to some failures of management and oversight, despite considerable support from the Sciencewise DES
- Public stimulus materials, which though mainly liked by the participants and presented well, were seen by stakeholders as weak in terms of the scientific content, due to lack of time and the lack of scientific resources to develop them
- The lack of scientific resources in the dialogues (e.g. scientists present at events) to answer participants' questions
- Some observed weaknesses in the facilitation noted in the stakeholder but not public feedback.

Public participants were largely satisfied with the quality of the public dialogue events though time was limited for extensive dialogue on the challenges. Despite observation of some good dialogue, observers were concerned about weaknesses in design, facilitation and hosting, especially in relation to the stakeholder dialogue. Public participants clearly found the dialogue experience enjoyable and interesting and were positive about being involved in influencing scientific policy. As a general point, the members of the public who participated in the dialogue demonstrated that there was an appetite for engagement with the Longitude prize, and it excited the participants.

The willingness of the commissioning body and participants to undertake public dialogue in future

Although the members of the public involved in the Longitude prize dialogue gave a strong endorsement of the process and said they would like to participate in similar workshops, this was not true for most of the stakeholders. Though feedback questionnaires from public participants and stakeholders were largely positive, the stakeholder dialogue participants and observers interviewed were mainly very critical of the dialogue workshop, both in the lack of clarity about the purpose of the stakeholder dialogue, and strong weaknesses in its facilitation and hosting. As a result, most of those interviewed said they were less likely to agree to take part in a similar event in the future.

Nesta staff interviewed felt that Nesta was neither more or less willing to undertake public dialogue in future, but that the team was a great deal more knowledgeable about the issues and problems that can arise in conducting dialogues. The small number of Longitude Committee members interviewed suggested there had been no changes to their views as a result of this public and stakeholder dialogue - those that went into the dialogue critical of the value of public dialogue found that this dialogue confirmed their viewpoint; those that were supportive of public dialogue had not changed their minds, but were disappointed that the findings from this public dialogue did not greatly inform the decision-making of the Longitude Committee.

Committee members and Nesta staff raised issues about the credibility of the dialogue findings given what they perceived to be the small sample size for the dialogue with insufficient social and geographical diversity, though recruitment had been done using a range of quotas to ensure that research participants were reflective of the wider population. Issues were also raised as to when public dialogue is the most appropriate way of engaging the public rather than using new or existing polling data.

The key lessons that have emerged from the evaluation are:

- Decision makers needed to recognise and accept the value of public dialogue if they are to use the result with confidence. It is not clear that all the Longitude Committee had fully 'bought into' the dialogue work, even at the end of the process
- Greater shared clarity and agreement around dialogue purpose/ objectives was important as well as clarity about why a public dialogue is the right approach to use and that its findings will be seen to have credibility especially with respect to the size and diversity of participation
- The project required sufficient resources to function. In this case progress was affected by the length of time it took to recruit the Longitude prize staff team and that no data base of stakeholders was developed
- It would have aided the Longitude Prize immensely if the public and stakeholder engagement element had been planned in detail early in the process of developing the Prize
- The dialogue contract needed to be appropriate and managed effectively
- Governance and management accountabilities needed to be much clearer
- More time in general was needed to develop the challenges and the criteria, and prepare for the dialogue events:
 - o Funding for the dialogue should have been applied for much earlier and the dialogue delivery agency appointed in May/ June 2013 to meet the initially fixed deadlines
 - o Development of stimulus materials involving expertise required more time and expert inputs than were available
 - o Workshop topic guides would have benefitted from more time for development and additional expert inputs
- Workshops needed to be long enough to cover the content without rushing participants with sufficient time for real reflection and dialogue. In this case, there was an imbalance between the limited time available for the workshops (two three-hour events) and the large number of topics to cover (19 issues). Limited budgets and lack of planning time resulted in this imbalance not being fully addressed.
- Questions were raised by a number of stakeholders about the value of running public dialogues without science specialists present to answer questions
- Informational experts were needed to help in developing both the public and stakeholder materials and in acting as resources in the workshops so that the facilitation/ process and informational/ content roles were kept separate
- Higher quality facilitation and hosting was necessary for making participants feel welcome, involved and respected in the dialogue process

- There needed to be time and opportunity within the dialogue workshops for participants to verify what was reported as having been discussed; stakeholder as well as the public dialogues needed to be transparently and fully recorded and the decision making process fully explained so that the process is clear and transparent
- More time in general was needed for reflection and analysis by the Management Team. After the stakeholder workshop there were only two days to develop the presentation for the Longitude Committee. Time was also very limited for the Committee to hear and discuss the dialogue results: the Committee meeting that was due to make decisions about the prize in November 2013 was set for 1.5 hours including other business, because its members were too busy to allocate further time
- The presence of commissioning body members at the public dialogue events offered a very valuable opportunity for reflection and input and it was a loss to the project that few attended
- Findings of all public and stakeholder dialogues need to be fed back to participants in a timely way
- The evaluation took far more time investment than was covered by the agreed budget.

Lessons from the evaluation in relation to the development of future challenge prizes include that there needed to be:

- A clear rationale for the prize
- A framework for the prize with at least some of the parameters within which to consult being agreed before wider discussions- both in the challenge focus and the design and mechanics of the prize

Conclusions

Overall, the findings from this evaluation suggest that despite weaknesses in the process, the public and stakeholder dialogues were of value to the Longitude Committee and the Nesta team in developing a list of potentially exciting and valuable Longitude prize challenges.

MAIN REPORT

1. INTRODUCTION

This report provides an account of the evaluation of the public and stakeholder dialogue project during scoping and framing phase of the challenge prize development for the Longitude Prize 2014. The project was commissioned by Nesta and BIS with co-funding from Sciencewise³.

This report covers:

- Introduction to the Longitude Prize and the dialogue process
- Evaluation aims and approach
- Evaluation findings
- Learning points for the future arising from the dialogue process
- Conclusions

2. BACKGROUND

2.1 INTRODUCTION TO THE LONGITUDE PRIZE

The Longitude Prize 2014 prize grew out of a letter from Lord Martin Rees, Britain's Astronomer Royal, to The Times in September 2011 entitled '*Isn't it time to lure innovators?*' and signalling the approaching anniversary of the original Longitude prize. In 2012, he approached Nesta suggesting they should work on this, and then in 2013 co-chaired a meeting of 40 scientists and innovators with government ministers at No. 10. It is said that from the start the focus was both about encouraging innovation and gaining public interest in science and technology. The Prime Minister announced the Government's intention to launch a new Longitude Prize at the G8 Innovation Conference in June 2013. The programme was to be run by Nesta's Centre for Challenge Prizes⁴, working with BIS Innovations Policy Team⁵ to award a multi million pound prize focused on solving a key issue of public concern that is tractable to change through innovation, similar to the Longitude Prize of 1714, to resolve some major societal challenges of the day.

For the Nesta Centre for Challenge Prizes, it was an unusual prize as it involved designing a prize without the resources for the prize in place. Whilst the Longitude prize was recognised as a really important piece of work for the Centre and Nesta, the Director of Nesta's Centre for Challenge Prizes was inevitably focused on raising sponsorship monies for the prize, as well as also being responsible at the same time for other prizes. Other staff resources were very limited. The Longitude Prize Research Assistant was appointed in early

³ Sciencewise is funded by the Department for Business, Innovation and Skills (BIS). Sciencewise aims to improve policy making involving science and technology across Government by increasing the effectiveness with which public dialogue is used. Sciencewise provides co-funding to Government departments and agencies to develop and commission public dialogue activities. See www.sciencewise-erc.org.uk

⁴ Nesta, now an independent charity, aims to help people and organisations bring innovative ideas to life by providing investments and grants and mobilising research, networks and skills, working in partnership with others.

⁵ The Department for Business, Innovation & Skills (BIS) is the department for economic growth, and the home of the Government Office for Science, the Sigma/Delta scan, and Foresight. Through BIS, the government invests in research, development and innovation in science, technology and engineering.

August 2013 working for 3 days a week, and the Executive Assistant working for the Longitude Prize came in late October 2013, after the public dialogues had started.

Lord Rees was instrumental in pulling together the members of the Longitude Committee in July 2013, and Nesta reported that the prize framing stage would run until October 2013; stage 2, the debate, would run from October to May 2014; with Stage 3, the vote, in June 2014. Stage 4 would be the launch of the competition in the summer of 2014- see figure 1 below. In practice, because of the length of time to complete stage 1, stage 2 started in May 2014, with stages 3 and 4 taking place over the summer 2014.

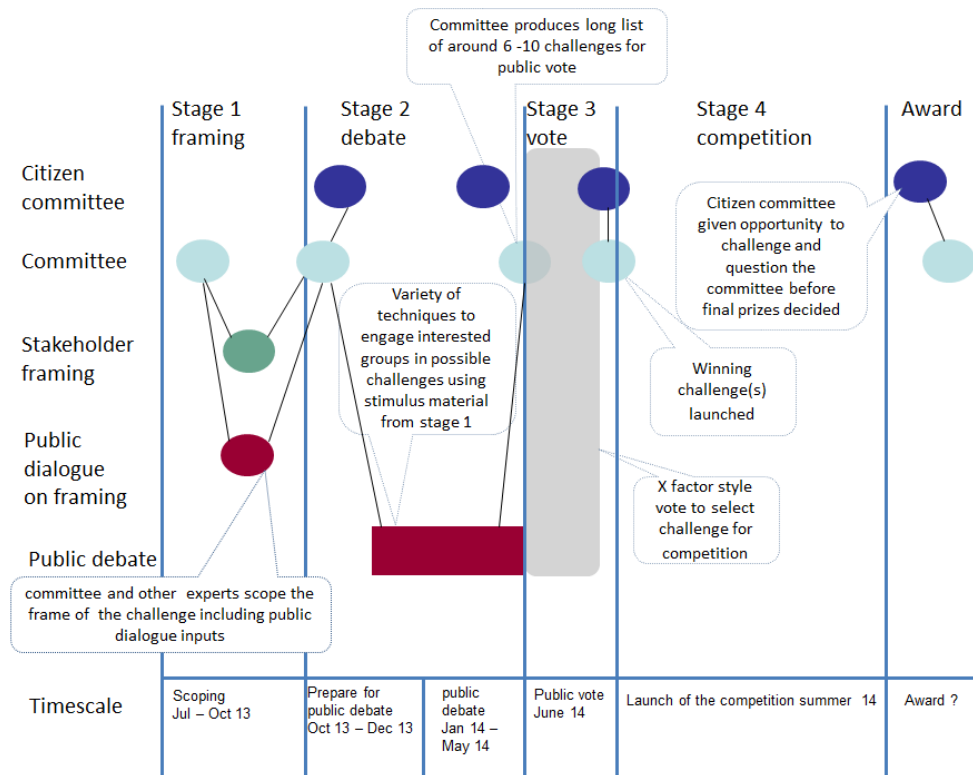


Figure 1 The phases of the Longitude prize⁶

2.2 ACTIVITIES UNDERTAKEN AS PART OF THE DIALOGUE PROCESS

Activities undertaken as part of the dialogue process in this phase included the following (see Figure 2 for a detailed timeline):

- **Wider stakeholder engagement activities – undertaken by Nesta**
- **Public dialogue Workshops from 24 October to 7 November 2013 in London, Cambridge and Leeds - undertaken by Ipsos MORI**
The public dialogue events involved three groups of around 11 members of the general public at each, totalling 32 people overall. In each location the public participants came to two workshops: Workshop 1 and Workshop 2. Each workshop lasted around three hours. The Cambridge workshop

⁶ Project plan developed by the Nesta team and the DES

was for young people only. The evaluator observed both London workshops, and a Sciencewise Dialogue and Engagement Specialist (DES) attended the Cambridge event.

- **Stakeholder dialogue workshop on 18 November 2013 in London - organised by Nesta with the design, facilitation and reporting responsibilities being with Ipsos MORI.** This event involved 16 scientists, academics and experts from a range of fields meeting for three hours with Nesta staff and the Sciencewise DES. The evaluator observed.
- **The governance and management of the dialogue process involved the Longitude Committee and the Project Management team.** The Project Management team was made up of funders of the project (the Director of the Innovation Lab at BIS; Sciencewise senior manager); Nesta's Chief Executive, the Nesta Prize team, the Sciencewise DES, and after appointment as dialogue delivery agency, Ipsos MORI team members.

Figure 2 Longitude Prize 2014 Phase 1 Timeline and tasks

Roundtable at No 10		29 th April 2013
Press release - the Prime Minister announced a multi-million pound prize fund designed to solve some of the world's most pressing problems	Prime Minister	14 June 2013
Discussions between Sciencewise and Nesta about potential funding-application	Nesta, SW	June 2013

Figure 2 Longitude Prize 2014 Phase 1 Timeline and tasks

Longitude Committee meeting	Nesta, Committee	1 July 2013
Longitude Prize Research Assistant was appointed	Nesta	Early August 2013
Sciencewise/ BIS funding agreed for public dialogue	SW, BIS, Nesta	9 August
Sciencewise DES appointed and met Nesta	SW, Nesta	Early Sept. 2013
ITT for delivery agency and independent evaluator distributed	SW, Nesta	19 September
Delivery agency Inception meeting	Ipsos MORI, Nesta, SW, BIS	3 October 2013
Teleconference to finalise objectives, plan, invite list etc for stakeholder workshop	Ipsos MORI, Nesta, SW	9 October
Recruitment materials for Public Dialogue developed	Ipsos MORI	10 October
Comments on recruitment materials for Public Dialogue	Nesta, SW	11 October
Outline for Public Dialogue workshops: event 1 and 2	Ipsos MORI	11 October
Recruit Public Dialogue workshop participants	Ipsos MORI	11-24 October

Figure 2 Longitude Prize 2014 Phase 1 Timeline and tasks		
Comments on outline for PD workshops: event 1 and 2	Nesta, SW	11-14 October
Recruit stakeholders for stakeholder workshop	Ipsos MORI	w/c 14 October
Recruit Nesta representatives for public dialogue workshops	Nesta	15-24 October
Independent evaluator inception meeting	Nesta, SW	15 October
Develop PD workshop materials	Ipsos MORI	15-18 October
Teleconference to discuss project progress	Ipsos MORI, Nesta, SW	21 October 2-3
Comments on PD workshop materials	Nesta, SW	21-22 October
Revised PD workshop materials	Ipsos MORI	23 October
Finalise PD workshop materials (teleconference)	Ipsos MORI, Nesta, SW	24 October
Facilitate dialogue workshops: London (Thurs 24 and 31 Oct); Cambridge (Wed 30 Oct and 6 Nov); Leeds (Thurs 31 Oct and 7 Nov)	Ipsos MORI	24 October – 7 November
Executive Assistant working for the Longitude Prize started work	Nesta	28 October
Invitations start going out to stakeholder dialogue	Nesta	Late Oct.- Early Nov.
Plan stakeholder workshop and Committee meeting (teleconferences)	Ipsos MORI, Nesta, SW	8 and 11 November
Develop stakeholder workshop materials	Ipsos MORI	11 November
Comments on stakeholder workshop materials	Nesta, SW	12-17 Nov.
Stakeholder workshop held at Dana Centre, Science Museum, London	Ipsos MORI, Nesta, SW	18 November (9.30-1)
Planning at Dana Centre for Longitude Committee meeting	Ipsos MORI, Nesta, SW	18 November (1.30-3)
Develop Committee presentation materials	Ipsos MORI	19 November
Comments on Committee presentation materials	Nesta, SW	19-20 November
Presentation of topline findings to Longitude Committee	Ipsos MORI	21 November 11.30am -1.0pm
Draft dialogue report	Ipsos MORI	13 December
Comments on draft dialogue report	Nesta, SW	20 December
Review meeting and consideration of phase 2 engagement	Ipsos MORI, Nesta, SW, BIS	21 January 2014

Figure 2 Longitude Prize 2014 Phase 1 Timeline and tasks		
Final dialogue report produced	Ipsos MORI	January 2014
Final dialogue report available	Ipsos MORI	5 February 2014
Feedback to stakeholder dialogue participants	Nesta	27 February
Feedback to public dialogue participants	Ipsos MORI	28 March 2014
Evaluation interviews	Sarah del Tufo	March to April 2014
First draft of evaluation report	Sarah del Tufo	April 2014
Evaluation report published	Sarah del Tufo	December 2014

3. THE PURPOSE AND FOCUS OF THE EVALUATION

3.1 THE AIMS OF THE EVALUATION

The brief for the evaluation identified that the purposes of this dialogue project were:

- To ensure that the public and stakeholders were engaged in the scope and framing of a new Longitude prize for innovation in science and technology.
- To ensure that there is a high degree of transparency around the process for developing Longitude challenges.
- To frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public and stakeholders.

The evaluation brief identified that the evaluation should consider Phase 1 of project as a whole, covering all the activities and in accordance with the '*Requirements for evaluating Sciencewise Projects*'⁷.

The aims of the evaluation were:

- to provide an independent assessment of the impacts and quality of the dialogue project to demonstrate the extent of the project's success, credibility and effectiveness against its objectives, covering both the outcomes and the dialogue processes (including an assessment of impacts on policy and those involved)
- to contribute to increasing the wider effectiveness and use of public dialogue.

The objectives for the evaluation, and the ways in which the evaluation would meet its aims were:

- to gather and present objective and robust evidence of the impacts, achievements and activities of the project in order to come to conclusions
- to identify lessons from the project to support capacity building across Government, and the wider development of good practice in public dialogue.

The Sciencewise principles of good practice for public dialogue were used to evaluate the process⁸.

⁷ Sciencewise (2014). *SWP07 Requirements evaluating Sciencewise Projects*. <http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Project-files/SWP07-Requirements-for-Evaluation.pdf>. This document has since been updated and reissued (<http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Publications/SWP07-Evaluating-projects-27March14-FINAL.pdf>), but this evaluation was based on the version in use at the time the project was set up.

3.2 KEY QUESTIONS FOR THE EVALUATION

The evaluation brief identified some key questions to be answered:

- Has the dialogue met its objectives? Were the objectives set the right ones?
- Has the dialogue met standards of good practice (Sciencewise principles)?
- The value and benefits of the project, including the extent to which all those involved been satisfied with the outcomes and process?
- How successful has the governance of the project been, including the role of advisory panels, stakeholder groups, the commissioning body and the Sciencewise role?
- What difference / impact has the dialogue made on policy, and on policy makers and others involved?
- What was the balance overall of the costs and benefits of the dialogue?
- What are the lessons for the future (what worked well and less well, and more widely)?

3.3 HOW WAS SUCCESS TO BE MEASURED?

The brief expected that success would be measured by a range of factors including:

- The use of the results of the dialogue to influence national policy making involving science and technology
- The high quality of the design and delivery of the public dialogue project (good practice, value and effectiveness)
- The greater willingness of the commissioning body to undertake public dialogue in future.

Examples of possible metrics included:

- Examples of how policy priorities and decisions have been affected by using the dialogue results
- Examples of policy problems avoided, or problems solved, as a result of the dialogue
- Evidence of the distribution and use of the dialogue results among policy makers
- Evidence of the dialogue process meeting the Sciencewise guiding principles
- Evidence of the satisfaction of public and stakeholder participants with the quality and outcomes of the dialogue

⁸ The five principles are: Context, Scope, Delivery, Impact and Evaluation and they seek to ensure that: the conditions leading to the dialogue process are conducive to the best outcomes (Context); the range of issues and policy opinions covered in the dialogue reflects the participants' interests (Scope); the dialogue process itself represents best practice in design and execution (Delivery); the outputs of dialogue can deliver the desired outcomes (Impact) and that the process is shown to be robust and contributes to learning (Evaluation). Sciencewise (2013). *The Government's approach to public dialogue on science and technology*. The Guiding Principles have also been updated and reissued <http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Publications/Sciencewise-Guiding-PrinciplesEF12-Nov-13.pdf>, but this evaluation was based on the version in use at the time the project was set up.

- Evidence of the validity and credibility of the dialogue with the policy target audiences, enabling them to use the results of the dialogue in policy making with confidence
- Statements from policy makers on the impacts, value and benefits of public dialogue.

3.4 EVALUATION APPROACH AND METHODOLOGY

There are broadly two ways of approaching evaluation: seeing the evaluator as completely external, putting the programme under the microscope; or as an independent person, holding a mirror up for the project participants to look in and identify the learning and action required. This evaluation takes the latter approach.

The approach to the evaluation was one that aimed to:

- Be developmental, and supportive, working closely with the project staff and participants and engaging the key stakeholders, in order to strengthen the project
- Constitute a learning experience for all concerned
- Promote appropriate confidentiality and safety for all participants to be open without fear that they will be penalised in the future
- Be respectful of the equal opportunity and cultural values of the project and strongly affirming of equal opportunities in its practice
- Assist with feedback to participants to share learning
- Assist Sciencewise to collate and collect evidence that will aid the use of public dialogue approaches

To collect data for the evaluation, the following methods were used:

Observations

The evaluator observed four of the seven dialogue events:

- Public Dialogue Events 1 and 2 meetings in London
- A Sciencewise Dialogue and Engagement Specialist (DES) also observed one of the Cambridge public dialogue events
- Stakeholder Dialogue event in London

The evaluator also observed:

- The Longitude Committee meeting in London in November 2013
- The review session after the stakeholder event preparing for the Committee meeting and two conference calls

Evaluation notes were taken throughout observation activities, of what was said and also immediate reflections on the events noted.

Ipsos MORI, Nesta and Sciencewise staff were generous in inviting the evaluator to sit in all conference calls between commissioning and delivery agencies, and copying in on email discussions between commissioning and delivery agencies and the Sciencewise Dialogue and Engagement Specialist (DES), and keeping in regular contact and debriefing. The Ipsos MORI team were happy to work with evaluator to improve the process as went along – for example, drawing on early feedback and observations from workshops to improve and tweak processes for subsequent workshops.

Post-event Feedback forms

As well as the observation, at each public and stakeholder workshop event, feedback forms were distributed to all participants. At the workshops not attended by the evaluator, the Ipsos MORI team very kindly linked the handing over of the feedback evaluation form to giving the participant their incentives fee, this ensuring a full set of responses. Questions were drafted by the evaluator in collaboration with the Sciencewise Evaluation Manager, and the dialogue commissioners and delivery agency, to enable gathering of data on participants.

The questionnaires were filled in at the events by 100% of public participants so these results can be seen to reflect the views of all the members of the public who participated. A summary of responses is provided in Appendix 1. 9 of the 16 stakeholders attending the stakeholder event (only 11 remained until the end of the event) also completed questionnaires. A summary of these responses is provided in Appendix 2.

Post-dialogue interviews

Once the report of the dialogue had been finalised (January 2014) there was a delay in making it public due to a publicity embargo as a result of discussions with the BBC. 25⁹ post-dialogue interviews were then conducted with public dialogue participants (5); stakeholder meeting participants (4); Longitude Committee members including a representative of BIS (4); dialogue commissioner staff from Nesta (3); dialogue delivery team members from Ipsos MORI (2); and Sciencewise DES (2).¹⁰ Interviews were conducted by telephone lasting 10-60 minutes. It did not prove possible to interview the BBC staff member who was key in the delivery of the next stage of the Prize. Because of the publicity embargo, the dialogue report was not in the public domain until after the completion of the evaluation research, so it was not possible to identify citations and links to the dialogue report or activity on Twitter.

As a result of the embargo, the public participants were only informed about the dialogue results at the end of March 2014. Of the 28 who gave permission for re-contact and gave contact information, 23 were contacted by the evaluator, four emails were returned, but only five agreed to an interview. These covered all three venues. This is an unusually poor response, so it is suspected that a five months gap before conducting evaluation interviews was too long. Not all of those interviewed were able to confirm that they had received the Ipsos MORI letter informing them of the Longitude Committee's decision.

Two other evaluation activities were undertaken:

- **Viewing of the vox pop interviews** produced by Ipsos MORI.
- **Reviewing materials** that were developed for use with the public and stakeholders during the dialogue project were reviewed, along with Nesta's pre-dialogue materials, Longitude Committee minutes and the final dialogue report.

4. FINDINGS - INITIAL STAKEHOLDER ENGAGEMENT IN DEVELOPING THE LONGITUDE PRIZE CHALLENGES

The framing and scoping phase involved Nesta staff working with the Longitude Prize 2014 Committee and specialist stakeholders in business, academia etc and then engaging the UK public and some stakeholders through a new dialogue project. It was planned that reports from the stakeholder and public dialogue workshops in this first phase would test the ideas developed by the specialists, give the public the opportunity to

⁹ Some stakeholder interviewees were both Committee members and attended the stakeholder event.

¹⁰ The main Sciencewise DES was not able to attend any of the public dialogue events, so another Sciencewise DES observed the second Cambridge dialogue.

identify their own challenges, and hopefully give insight into how the public saw the challenges and why they held these views. It was hoped that the dialogue work would start the process of engaging public support of the prize along with a sense of excitement and ownership, as well as engaging the scientific and business communities. Most importantly the stakeholder and public dialogue workshop reports were expected to inform the Committee's decision making about which challenges to choose within the identified themes, using criteria to be developed - a clear 'policy hook'.¹¹

During the early stages of the prize development, there was some debate in Nesta as to whether polling or having a debate in the media or public dialogue were the best approach in this scoping stage to public engagement. However, in June 2013, discussions took place between Nesta and Sciencewise about a possible funding bid to Sciencewise for the co-funding of the public and stakeholder dialogue work. The bid was written, and Sciencewise funding was agreed in early August 2013.

In terms of the Longitude Prize issues, it appears from a number of those interviewed that little had been done with the notes from the round table meeting at No 10 on 29th April 2013, though seven themes had been identified¹² and some links made with the BBC. There were a large number of ideas identified, but it was a newly appointed Nesta staff member's task to develop the themes. An on line questionnaire was sent to a range of scientists and technology specialists which achieved some 30-40 returns, though many started to complete the survey but did not finish it, and the quality of answers were limited. Potential informants were also interviewed face to face and on the telephone. As Nesta did not have an existing database set up of potential informants, it was a time consuming process to seek out contacts. These interviews were not recorded, though the learning was fed into the decision making process¹³.

Meanwhile, Nesta started pulling together six sub-groups, each championed and chaired by a Longitude Committee member. Not all themes had an expert on the Committee, so other Committee members stepped in. The sub-group meetings mainly involved some 45-90 minutes discussion and produced varying quality of outputs. One subgroup member noted that there was a lack of clarity about the topic in their subgroup, with the six participants *'all coming at it from different angles with no in depth discussion and too little time'*. Some groups were seen by observers and participants as *'quite outstanding'*, but others produced reports that were seen to be weak, which then led to weak stimulus materials for the public dialogues. This then meant that those issues were not picked up well in the dialogues. Some sub-groups (e.g. robotics) did not take place until just before the stakeholder dialogue meeting. i.e. after the public dialogue workshops were completed. It was noted that:

'It [sub-groups] was a good was to start, but then needed more depth work with clearer criteria for choice of topic ... possibly using a horizon scanning organisation ... the challenges were underdeveloped and incorrect in some cases. They needed clearer outcomes to be articulated and a greater science guardianship.' (Nesta Staff)¹⁴

It is generally recognised that this stakeholder engagement work was started far too late, and suffered from a lack of parameters within which informants could respond- everything about the prize was open to discussion, which led to hundreds of ideas for solutions (rather than challenges) all of which then had to be researched. A number of those interviewed felt that a better set of challenges would have been reached if the detailed planning process had started early enough.

¹¹ For a detailed timeline see Figure 2

¹² Technology & Robotics for Enhancing Living; Improving Access to communication; Living within our means (environmental); Extending Life & Improving Health; Feeding the planet; Global Development; Living within our means (energy)

¹³ See sections 5

¹⁴ This depth work was commissioned by Nesta following the public and stakeholder dialogues from Science Practice in Spring 2014

There were quite strong views expressed by a number of stakeholders that the meeting at Number 10 Downing Street, followed by the Longitude Committee discussions and then the trawl for ideas and the sub-groups was not the best way of approaching the prize. This was because it led to a focus on solutions rather than issues/ problems, and a lack of clarity about the purpose of the prize and the rationales behind it, that really matched the vision and salience of the original prize.

5. FINDINGS- PREPARING FOR THE PUBLIC DIALOGUE WORK

5.1 INTRODUCTION

A public dialogue is about seeking public perspectives, usually supported by information resources, to help explore issues, aspirations, values and concerns when shaping policy. It is a democratic process based on a commitment to the right of citizens to contribute to the decisions that will affect their lives, involving mutual listening, information and dialogue from an inclusive if not representative set of voices. This public dialogue work was part of making sure that the Longitude challenge was run in a way that really engaged the public in shaping the prize, that the process was transparent and accessible, that it produced results that contributed to the choices made and developed learning that could be used in phase 2 onwards, as well as with other challenges.

The July 2013 Longitude Committee meeting did not discuss public engagement in the scoping phase in detail, though Sciencewise staff were present at the meeting. Some Committee members were challenging of the value of public dialogue approaches, feeling that decisions about the prize challenges, and the criteria used to select them, should be left to scientists i.e. experts were needed not the public at this stage, with public involvement coming through the voting later in the process. However, other Committee members were strongly committed to undertaking public dialogue, and the Nesta team, Sciencewise and BIS were keen to get public engagement throughout the process. It was noted in the dialogue ITT that:

'It is vital that....the challenges set are not simply those framed by academics or business leaders, but rather that the Committee responsible for overseeing the Prize understands the issues, priorities and views of the full range of stakeholders including the general public. This will be consistent with the Government's commitment to open and transparent policy making.....By involving the public in this early scoping phase, the aim is to ensure that the issues and challenges set by Longitude Prize 2014 will be consistent with issues that are of public concern.'

It was hoped that public and stakeholder engagement in Phase 1 would lead to further engagement in Phase 2 leading up to the vote.

In early September, the Sciencewise Dialogue and Engagement Specialist (DES) started working with the team, resourced by Nesta as well as Sciencewise. The DES helped the small prize team produce an engagement plan covering all phases of the prize from the prize scoping and shaping through informing the public about the challenges and the public vote and the awarding of the prize. This plan then formed the basis of the separate Invitations to Tender (ITTs) to recruit the dialogue delivery agency and the evaluator. In early to mid-October 2013, Ipsos MORI was appointed as dialogue delivery agency and Sarah del Tufo as the evaluator, following competitive tender processes.

The initial stakeholder engagement, small group discussions, online survey, meetings and interviews which were undertaken by Nesta in the period leading up to the public dialogues produced the materials about the 19 challenges which were fed into the development of the stimulus materials for the public workshops.

5.2 DEVELOPING THE PUBLIC DIALOGUE MATERIALS

The original dialogue delivery ITT, reflecting the advice of the Sciencewise DES, suggested a stakeholder meeting prior to the public dialogues to help set out the scope for the public dialogues and *'to develop criteria for prize selection, as well as to understand stakeholder position....'* It was thought that *'The outputs of the stakeholder workshop will form the basis for undertaking work with the public to test ideas developed by stakeholders'*. However, because of time pressures to deliver the public dialogue evidence for the Longitude Committee meeting on 21st November 2013, at the dialogue project inception meeting, the process was reversed.

So, based on an incomplete set of sub-group notes, because not all the sub-groups had met, there was very limited time and information resources to put together the stimulus materials for the public dialogues. The potential challenges were at development stage and therefore continually evolving to take account of the latest thinking about the prize. In addition, because of limited resources, the Nesta team had very limited time to input into the dialogue materials as they were developed. Stimulus materials for public dialogues are often worked on using advisory groups perhaps over two months before they are put in front of the public. Because of the timetable this could not happen, with only three weeks between the inception meeting and the public dialogue workshops. There were lots of iterations mainly by email in preparing the materials- but as was noted, *'it was a mad timescale'*. It was generally recognised that all those involved should have worked more closely together on knowledge transfer and on the science of the themes. The dialogue agency would have welcomed this and much more client engagement throughout, but a lack of capacity in the Nesta team in this part of the Longitude prize project precluded this.

Feedback from evaluation stakeholder interviews suggests that the stimulus materials for the public dialogue events were seen as underdeveloped, wordy, complex and not fully scientifically accurate, with 19 topics/ solutions to explore in a short amount of time, even though the facilitators requested that the number of topics was reduced. The public stimulus materials were mainly liked by the participants and were presented well, but were generally seen in the interviews with commissioners as weak in terms of the scientific content, due to lack of time and the lack of scientific resources to develop them, although it was felt that those involved had done well given the material available to work with.

After information overload for the public participants in the first London workshop, the material was edited a little, but because the workshops were just two short evenings, there was no time for scenarios, or case studies to help people think about what issues that could be taken forward. The language of the stimulus material proved complicated e.g. zero-Nitrogen, but participants were reluctant to say they were struggling until workshop 2. Two participants in London in the workshop 2 break noted: *'enjoyable but difficult to take it all in; 'I need time to mull over in my mind'*. However, the dialogue delivery team would question whether more time was needed: *'We were able to understand people's values and principles about why certain issues should be taken forward therefore further time allocated to discussion on challenges would, we argue, not have added to the study.'*

Detailed planning of public dialogue needs to involve both those who have knowledge of the subject areas to be covered, and those who have knowledge and experience of public engagement so that an effective process can be designed to answer the questions that need to be addressed. The quality of information provision affects the quality of deliberation. Effective information provision requires close working between those who deliver the process and those who have knowledge of the subject areas, to produce appropriate information that can be absorbed by public participants. As we have seen, time was limited for the development of quality content materials and it would appear that some of the themes therefore were overlooked by participants. There had been comments on the materials but no time to make radical changes. There was a lack of experience in commissioning public dialogues, and significant reliance on contractor ex-

pertise for dialogue material development. As was realised by those who observed the dialogue process, weak framing (i.e. the context in which choices were presented) was crucial in inadvertently channeling public dialogue participants towards or away from certain themes and challenges. It should be noted that the dialogue delivery team had to work with emerging sub-group outputs, as well as the latest thinking within Nesta, which was still being developed during the dialogue events. This was particularly the case with information on the robotics topic, where the sub-group had not met, and the stimulus materials had to be developed from Nesta notes.

It should be noted that the delivery contractors, despite having little time for reflection and making changes, were very open to feedback from participants and observers, and made changes to the workshop materials.

An additional area where preparation was not undertaken reflected Nesta's own lack of parameters for the design and mechanics of the prize. It was felt that these should remain open until the end of the dialogues. It was thought that Nesta and the Committee could move on to configuring the design details of the prize *after* the consultations. This lack of clarity produced some confusion in both stakeholder and public dialogue participants, and attention was drawn away from focusing on exploring the prize themes.

5.3 RECRUITING THE PUBLIC DIALOGUE PARTICIPANTS

It was planned to recruit a diverse sample of public participants that reflected a range of different backgrounds and views. The street recruiters were asked to recruit 12 public dialogue participants per venue with at least 8 participants agreeing to take part in vox-pops (a short video that recorded what they thought about the topic) after workshop 2 in Leeds and Cambridge.¹⁵

After describing the original Longitude prize, and the aim of the new prize being '*... to encourage and motivate members of the science community to solve some major societal challenges of today*', potential participants were told that '*the aim of the workshop is to find out what the public think are the main societal challenges that the science community should try and solve.*' They were informed that '*the views of the public will then be taken forward to a bigger public debate and vote in early 2014 that will establish the prize challenge*'.

'Hard quotas' were set for recruitment around occupation¹⁶, interest in science¹⁷, gender¹⁸, age¹⁹, 'social grade'²⁰ and ethnicity²¹ but participants were also sought who were creative and willing to contribute to the discussion as much as possible, though they did not need any prior understanding or experience of science or current challenges facing society. The 'soft' quotas focused on creativity, though this was only formally tested for in Cambridge²². Feedback from participants suggested that generally there was satisfaction that an interesting and diverse group of people had been recruited.

¹⁵ Few people from organisations involved in commissioning the dialogue attended the public dialogues, therefore the vox pops were particularly valuable.

¹⁶ Not in market research or the media or have taken part in qualitative research in past 9 months

¹⁷ Leeds and London: Screen out people who strongly disagree that it is important to know about science in their daily life; For the Cambridge workshop (young people) only accept people who agree that it is important to know about science in their daily life.

¹⁸ A mix of male and female (at least 4 of each)

¹⁹ For the London and Leeds workshop: 18-25 years old - at least 2 participants; 25-34 at least 2 participants; 35-54 at least 2 participants (aim for a range of ages); 55+ at least 2 participants (aim for a range of ages). For the Cambridge workshop: 18-25 all participants

²⁰ For each workshop: ABC1 – at least 4 participants; C2DE – at least 4 participants

²¹ For each workshop: BME at least 2-3 participants

²² Potential participants asked 'How many uses of a paper clip can you think of?'

5.4 ABSENCE OF EXPERT RESOURCE PEOPLE IN THE PUBLIC DIALOGUE WORKSHOPS

Information provision affects the quality of public deliberation, the quality of the conclusions that result, and therefore the extent to which they are seen as credible and are used by decision makers and thus influence policy decisions. In most but not all Sciencewise funded public dialogues, there are clear distinctions between facilitators neutrally managing the process, and those responsible for content provision and answering questions. The exceptions have been where, as with this dialogue, the content to be covered was so wide that it is thought that no individual could cover all the areas of expertise. In other public dialogue projects, there is usually sufficient time for the preparation of materials (with extensive input and revision including by external stakeholders), and sufficient time and funding to run full-day workshops. Although it was hoped that there would be resource people present, it was decided not to involve them. Originally, it was hoped to have video materials to cover specialist input but, again, this did not happen because of insufficient time, so each facilitator had their own set of stimulus materials with sub-group outputs in the notes. This was supplemented with facilitators' knowledge of science and technology solutions and underpinning social and ethical arguments from recent complementary work on behalf of Sciencewise.

The absence of experts in the public workshops was problematic, and denied an opportunity for participants to directly get information. The result was that the facilitators were thrown into answering questions and acting as an informational resource. In two workshops, when presenting on zero-carbon and robotics, the facilitators were clearly talking beyond their expertise, despite preparation. This was not fair to them- they are not scientists- and it also moved the facilitators out of their role of supporting the dialogue. Observers at two of the workshops were concerned at information not being available, or the resources to clarify with participants when they misunderstood what was being read out. Nesta staff gave input in the second London workshop and a Sciencewise DES also provided information in the second Cambridge workshop.

A view was expressed by a number of those interviewed - both those who had observed the public dialogues and those who had not - that public dialogues without resource people present should be avoided. The view was expressed that resource people could be science communicators or even a really good school science teacher. This was both because of the dangers of allowing inaccurate assumptions to stand unchallenged, and not allowing participants to access information they wanted, but also because it turned the facilitators into scientific informants and possibly undermined their roles as facilitators of the process.

6. FINDINGS- THE PUBLIC DIALOGUE PROCESS

6.1 WORKSHOP 1

The discussion at the start of the first public dialogue workshops was based on homework given at the time of participant recruitment. It revealed the societal issues which the participants were concerned about and allowed the facilitators to identify how the public's spontaneous views of societal challenges reflected, or differed from, the ways the experts conceptualised and categorised potential prize challenges see Figure 4.

complex issues at their own pace, possibly using more visual approaches, could have aided participants understanding of the issues better.

6.2 WORKSHOP 2

The second workshop built on the homework task around what life might be like in 2030 and what could be improved by then. The group then broke into smaller groups to design a poster using materials they had brought, as well as using magazines available on the table, to illustrate future societal challenges and how science and technology could help make a better future²⁵. The group then compared their lists of priorities for the prizes discussed at the end of workshop 1, and compared this list to the Nesta listing. Whilst in workshop 2, the views were broadly the same, some people, having reflected upon the issues and information presented in workshop 1, did reconsider their initial views i.e. thinking more globally such as feeding the planet. One observer noted that when voting on issues participants seemed to use different criteria – some were personal focussed and others issue based.

The group then identified prize selection criteria from the public perspective. The session also enabled discussion and debate on Nesta's suggested prize criteria and participants were asked to consider a series of mocked-up 'criteria' statements (e.g. should the whole of society benefit, or particular groups in society, provided any impact was life-changing). The session also involved developing ideas to prompt public and innovator engagement in Longitude Prize 2014 and ideas for sustaining public interest during the lifetime of the Longitude prize.

The poster exercise was fun for some participants and disliked by others. The exercise was designed to counter the somewhat negative framing of technology by the first group in London²⁶ as well as give a more creative outlet. However, observers felt it did not aid discussion or develop insights and was under designed. The section on the prize worked well as it got people thinking and arguing and changing their minds.

Education and behaviour change and preventing wars came up a number of times in different workshops but the London facilitator said these could not be considered because they were not open to science and technology solutions. The lack of clarity about the scope of science and technology was also present in the stakeholder meeting discussions- some Nesta staff clearly had a wider view of what constituted science and technology than had been communicated to the facilitators.

6.3 HEADLINE FINDINGS FROM THE PARTICIPANT QUESTIONNAIRES

At the end of each public dialogue workshop, public participants were asked to complete a feedback questionnaire (see Appendix 1 for a summary of responses), which asked for their honest reflections on the workshop experience. Questions were focused on eliciting from participants their thoughts on: how well organised, structured and facilitated the workshop had been: what they identified as its strengths and weaknesses; what they had gained from the workshop, such as in the way of any new learning; what they would recommend changing in re-running and improving the workshop; and what they considered the impacts of the workshop would be.

²⁵ After the London workshop, this poster exercise was moved towards the end of the session which seemed to work better from participant reaction

²⁶ A Nesta staff member, observing workshop 1 wondered if 'we could nudge the participants towards thinking about how the Longitude prize might facilitate change in a positive direction?' The Sciencewise DES cautioned in an email against being overly concerned about negativity from the public at workshops like these: 'We don't want to fall into the trap of persuading people why technology is good, the task for these workshops is to understand where people's anxieties lie and use the findings to think about how to communicate things they may find challenging, not necessarily to change their minds.'

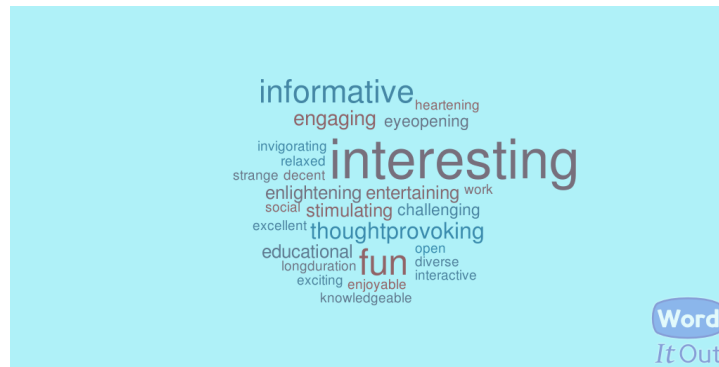


Figure 3 The public participant word choice to describe the workshops

A majority (31/32) of participants stated that they were **clear about the purpose of the evening workshops** and what they were going to be talking about (97%)

A majority (30/32) of participants stated that there was **a good mix of different sorts of people** in the workshops (94%)

All participants thought the **invitation process and advance details for the workshops were well-handled**

All participants thought **the workshop was well organised**

All participants thought the **information presented both evenings seemed fair, balanced and helpful**

A majority (31/32) of participants stated that the **materials were interesting and engaged them** (97%)

There were very contrasting feelings about whether participants would have liked **more information or not**, with 10 wanting more information, 10 not wanting more and 10 being neutral

A majority (31/32) of participants stated that they **could ask questions** easily and get appropriate answers (97%)

A majority (26/32) of participants felt they had enough time to discuss the issues (81%)

All participants agreed that '**I was able to contribute my views and have my say**'

All participants thought that their **views were valued and listened to** with respect

All participants thought that overall they **felt able to fully take part in the workshop**

A majority (26/32) of participants thought **that the facilitation was independent and did a good job** making sure different voices were heard throughout the evening (81%)

A majority (27/32) of participants found time/ energy to **do the homework/ follow up work** between the two workshops (84%)

A majority (24/32) of participants **were confident that the public's views expressed** in these workshops would influence the choice of the Longitude Prize 2014 challenges (75%)

A majority (30/32) of participants **felt comfortable with the presence of observers** at the event (those watching but not taking part) (94%)

When asked *'Which parts of the workshops did you find **most interesting**, and why?'* 18 of the 32 responses identified the debates and discussions, hearing other people's views, and the mix of people and opinions expressed.

When asked *'Which parts of the workshops did you find **most difficult / challenging**, and why?'* there was a wide variety of responses; for some participants the poster work, the amount of thinking required, and the lack of time were problematic.

When asked *'In your opinion what **ONE thing could be improved about these workshops**?'* more visual aids were identified by four participants; more time and longer sessions by four participants; more information by three people; and four people were unhappy that quieter people had not been sufficiently involved, meaning that the full range of views was not always heard.

When asked *'What was the **most interesting fact or opinion** that you heard during these events that really influenced your views?'* the answers were varied but focused on hearing other people's very different views with eight participants mentioning anti microbial resistance.

When asked *'How easy was it to make sense of the quite complex and challenging issues presented to you and so take part in the discussions and contribute your views about them?'* Eight participants felt it was 'very easy' - as 'it was well explained'; five participants felt it was 'easy' - 'especially when things were explained'; eight felt it was 'Fairly' or 'quite' or 'reasonably easy'. Comments included: 'Overall manageable for me as already had some views and info- if not may have been harder'; 'I had to do personal research to get better understanding'; 'Challenge at first but once presented with information found eze'. Two participants felt it was 'Not easy'. Comments included: 'Not that easy but it was explained well- It was as easy as such complex issues could be'; '(the facilitator) did a good job of simplifying difficult worded questions'; 'Took some thought'.

When asked *'What **one thing** should Nesta take into account in planning the Longitude Prize 2014?'* the key messages were around:

- inclusivity in reaching engaging and benefitting the public - what the PEOPLE want
- must have practical utility
- strong advertising to stimulate public interest- interesting and accessible
- choosing global issues.

6.4 PUBLIC PARTICIPANT FEEDBACK FIVE MONTHS AFTER THE WORKSHOPS

During the small number of post-dialogue interviews (five) covering all three venues, interviewees mentioned a number of different reasons for participating, though a number had turned up not really understanding the purpose of the workshop. Mainly the reason given was interest in the prize. Participants were given a small payment for attending workshops and this was mentioned by two people both of whom had recently been made redundant, or were spouses of recently redundant people. Even in those cases this seems to have been an additional positive factor rather than their main motivation.

People appreciated the opportunity to find out about and discuss the prize and talk about issues they had not thought about before. Most of those interviewed found the whole experience really interesting and enjoyed meeting a lot of very different people and having a debate about the issues. It was noted that people had radically different views and had different reasons for choosing their top challenges. One person noted that they had changed some of their views and it was *'a real learning experience'*.

Two people had not found it easy to make sense of the quite complex and challenging issues presented to them but felt the facilitators had worked hard to help them. One person noted:

The way the very technical issues were presented- I don't think I totally understood all the issues - very technical for a layman... gave it my best but could not understand the issues

However, the others did not find it too difficult- *'they made it easy to understand'*. One participant said that other participants had helped explain difficult ideas. Most had found it easy to take part but one participant had struggled because of the complexity of the ideas, and another noted that as *'one of the quiet ones'*, the facilitator had often tried to bring him in.

Few facts or opinions had stayed with participants though one participant remained disturbed that some people thought that HIV Aids was people's own fault. The messages for people organising workshops like this in the future included having fewer challenges to explore and more time - *'we were really getting into discussions when we had to stop.'* Otherwise facilitation, venue etc were seen by the participants as good.

6.5 DID THE PUBLIC WORKSHOPS PROMOTE DIALOGUE?

It is clear from the observations and the questionnaire feedback at the end of both workshops, and the interviews 5 months later that the workshops were lively and interesting. Participants enjoyed the group discussions, which helped to develop their understanding of the issues to some extent, discuss the issues that concerned them, learn from others and in some cases change their views. In many of the group exercises observed there was laughter, talk, activity, and interest and most participants remained engaged in the discussions. The facilitators created a relatively relaxed and friendly atmosphere and developed rapport with the participants.

Evidence of dialogue came from the feedback, the interviews, informal conversations, and the vox pops. Comments included:

Thought provoking really interesting and enjoyable
Topics I'd not even thought about
Opened my mind to a lot of things I'd not thought about before
Now I've listened to everyone's ideas I've changed my mind (on the criteria)
I would vote differently now

There was evidence of people listening to each other and building on each other's ideas, and workshop 2 involved ideas that developed in complexity over the course of the discussion, with people changing their mind about an idea or issue- especially in relation to the criteria.

6.6 THE NECESSITY OF QUALITY FACILITATION AND HOSTING

These were difficult dialogues to facilitate and there were examples of good questioning, and bringing in quiet participants, though that this did not happen sufficiently was a source of concern to four participants in the Cambridge dialogue. The Leeds facilitator and a participant had to cope with a racist participant - the feedback suggested that it was handled well. The groups worked well together and built on other people's ideas etc.; no domination was observed, and there was quite strong disagreement at times, but it was handled well. One London participant turned up late at the start, was late after breaks and used their mobile, and did not always engage with group. This was not questioned by the facilitator.

Some of the public workshops were troubled by organisational and timekeeping problems. At the first London workshop, some participants began arriving just before 6pm, but were brought up from the foyer late,

so there were only seven participants in the room by 6.20pm for a 6.15pm start. The team arrived only shortly before the start of the first workshop²⁷ only to discover video problems and a lack of milk. Therefore the group started late and with longer breaks than planned so the facilitator really only had just over two hours. Two participants mentioned how hot the London room was in their workshop 1 feedback; this was not an issue in workshop 2. In the London workshop 2 flip chart pens were not working, so writing on the flip chart was unreadable, and so the participants' topic list on the flip chart could not be read easily so had less status than the other two printed lists (i.e. the group's original votes in the first session and Nesta's lists). These preparatory and set-up issues are small but important aspects of quality facilitation. At one of the Cambridge workshops, the facilitators were not there early enough so the workshop started late. Preparation and set up were seen as inadequate with one facilitator unprepared with no papers, and not copied into correspondence before the workshop. Two of the observers interviewed felt that the facilitator style lacked respect for the participants as colleagues, and that the 'thank yous' at the end were not sufficiently strong, though this was not commented on by the participants. This issue is returned to in Section 15.

7. FINDINGS - THE STAKEHOLDER WORKSHOP PROCESS

7.1 PREPARING FOR AND RUNNING THE STAKEHOLDER WORKSHOP

Following the public dialogue workshops, stakeholders from scientific, academic and expert backgrounds were invited to a three hour workshop held at the Science Museum's Dana Centre in South Kensington, London. It had proved hard to recruit to the workshop with coverage of all the key Longitude themes, with invitations sent out by Nesta who lacked a stakeholder database. 16 stakeholders²⁸ attended the workshop, which was held two days before the November Longitude Committee meeting.

The workshop allowed stakeholders time to consider findings from the public dialogue as well as additional insights gained from concurrent discussion with experts with regard to potential prize selection criteria and prize challenges²⁹. Unlike the public dialogues, the stakeholders were asked to develop their criteria first, before considering the different challenges, and then actively choosing their top challenges by standing beside them and speaking for them. An interesting feature of this exercise was that 2/3 people stood by posters that did not relate to own specialisms - one participant felt that this did not just indicate openness of mind but also indicated how much they knew was already going on in their field so did not promote it. The stakeholders' key concerns focused on the challenges being too broad brush, too high level and not being measurable.

The Sciencewise DES was very involved in the planning conference call 10 days before the workshop, suggesting approaches that were more participatory and active. Observers at the workshop noted basic gaps in good practice in facilitation - facilitators came too late to set up the workshop; participants were not welcomed, registered or introduced to each other effectively; the introduction to the workshop structure was unclear; the third small group facilitator who had not been part of the facilitation team before was not properly briefed and did not seem to have clear instructions, and it was observed that the Sciencewise DES

²⁷ The team arrived in time to prepare for the second workshop

²⁸ Reduced to 11 by the end of the workshop

²⁹ As the final dialogue report notes: 'Between the public dialogue workshops and the stakeholder event, discussions between Longitude committee members and other experts led to further iterations of potential prize challenges. To reflect these changes, Ipsos MORI in collaboration with Nesta amended the wording of a small number of potential prize challenges while some were replaced in the stimulus presented to the stakeholder event. However, almost all prize challenges presented to the public were retained so that, in so far as possible, stakeholders and the public commented on similar issues.'

took over the facilitation in that group; the participants were not thanked at the end; and there was no contact with the participants by Nesta until over 3 months later.

There were differences of view between Nesta and Ipsos MORI about responsibilities for workshop logistics. Nesta was responsible for inviting stakeholders, sending out briefing packs, and arranging the venue, but both teams thought the other was responsible for workshop logistics.

Because the prize design and technical aspects about how the prize would work in practice were unclear, as with the public dialogues, participants got distracted into discussions that were not useful, but it was thought that the facilitation team should have been able to manage this more effectively.

7.2 FINDINGS FROM THE PARTICIPANT QUESTIONNAIRES AT THE END OF WORKSHOP

At the end of the workshop, 9 of the 16 participants completed feedback forms³⁰. The results show that participants largely agreed that their views were valued and listened to with respect, that no single view was allowed to dominate unfairly, that there was enough time (although one disagreed), that the facilitation was good and that the meeting was useful and worthwhile. However, there was also feedback indicating some lack of clarity about the purpose of the workshop, and some concerns that the main relevant stakeholder interests were not represented at the workshop- *'I don't know who the main stakeholders are; I don't know who was invited - or why!'* There were also some mixed feelings about whether the stakeholders' views expressed in this workshop would influence the choice of the Longitude Prize 2014 challenges. One example was the comment noting:

'You asked us to ring 3 topics at end - meaning you are looking for the process to be completed - but we said the topics are not equal, complete and need more consideration'.

It was clear that it had been stimulating and interesting for some participants and they valued the discussions about the challenges and the criteria to be used in their selection. However, participants had not seen the detailed materials available to the Longitude Committee, and others had not even read the more limited background materials sent out just before the workshop. Questionnaire respondents identified being clearer about the outcomes and having more information in advance as important to any future workshop. The key benefits of taking part in the workshop were identified as understanding the difficulties the Longitude Committee were facing and *'Seeing the result of multi- brains to reach solutions'*. At least one participant was unconvinced of the significance of what they identified as *'qualitative public research'*.

7.3 PARTICIPANT FEEDBACK FOUR MONTHS AFTER THE WORKSHOP

Four months later, six participants at the stakeholder workshop were interviewed, and feedback taken from five Nesta and Sciencewise staff and Committee members who attended the workshop. Most of the interviewees who had attended the event as participants reported having interesting conversations, gaining useful insights and having achieved some networking. However, overall the stakeholder interviews indicated a general dissatisfaction with the management and quality of the workshop and its outcomes. There was quite a strong view that the facilitators did not necessarily have the skills around science communication to engage with that group of scientific stakeholders so that the introduction could be strong and clear, framing the day and indicating:

- the wider context within which the workshop sat

³⁰ See Appendix 2

- how it would contribute to the wider policy aims
- and ensuring the purpose and structure of the day were clear to participants.

It is fair to note that the facilitators expected this to be part of the Nesta welcome and that the lack of clarity reflected in part Nesta's own lack of parameters for the design and mechanics of the prize (e.g. timescales), as it was felt by Nesta that these should remain open until the end of the dialogues. The Sciencewise DES stepped in to explain the prize process that had been agreed. Three of those interviewed raised the question, *'What is the object of the whole prize?'* However, one Longitude Committee member who attended, who was also very confused before the meeting about what it was for, had found the discussion really useful.

Interviewees felt that participants had not been fully briefed about the nature of the meeting and the role they were being asked to play. They fed back that they were generally very confused before the meeting about who it was for and felt that the aims and desired outcomes were very ill defined - *'the meeting did not know where it was going'*. One noted *'If I was cynical I'd just think they were ticking a box'*.

Interviewees identified their motivations for attending as being because it offered an opportunity to be part of shaping a really important initiative and also for the opportunity to network and broaden thinking.

Some interviewees felt that the outcome of the discussions that had happened to date were also a bit vague and it was not clear where ideas came from or how the organisers would know when the prize had been achieved – they felt there was a need for more detailed criteria and measurables. Whilst most of those interviewed thought that the discussions were useful, interesting and complex, there was a general view that there was need for a clearer set of options and more direct questions around the criteria to be used in selecting the prize. A number of those interviewed felt that such an open ended process with few agreed parameters should not be used again.

Not all of those interviewed had read the final dialogue report sent to them in February 2014, but there was recognition that the discussion held at the end of the stakeholder workshop had taken seriously their concerns in some ways - *'the group in the room had derailed the plan - it was a narrowing/ focussing workshop but went off at different tangents and away from where Nesta was trying to lead'*. However, one participant felt strongly that the report did not reflect accurately the strength of feeling raised.

Some areas chosen for the prize - like Malnutrition - had involved really interesting discussions but, along with Dementia, it was seen by one participant as involving political and/ or social solutions which they thought were excluded. Others felt that the workshop had not been properly recorded, although audio recording, facilitator notes and annotated flipcharts were said to have been used.

Five months later and all except one of the 11 stakeholder workshop participants and observers interviewed still felt angry, critical or disappointed about the experience. Comments from interviewees included:

'Terrible - no idea who in room; no introductions, no idea of contribution'

'Needed to connect stakeholders- make visible to each other- no name badges³¹; not welcomed'

'Nesta handed over to Ipsos MORI and neither took control; I feel very angry; they did not have a clue.....When things started to stray, the Ipsos MORI facilitator did not have the right person in the room to manage it- it needed someone close to the process- for Nesta to step in and ensure discussion'

'There was a lack of clear instructions to the group facilitators- the groups were all talking about different things'

³¹ Nesta did provide name badges but as there was no registration/ welcome table they were little used; Ipsos MORI felt that as Nesta invited the participants and were responsible for the logistics, this was their role.

'I felt let down by the process- disappointed though some of the challenges are ok'

'It did not feel respectful to participants; we were not thanked... by the time you had travelled it was most of a day....'

'It was a missed opportunity'

'Badly run, badly reported/noted'

'I was really disappointed in the Ipsos MORI team and quite surprised at how poor the practice was'.

These issues are returned to in section 15.

One participant had written to Nesta recommending engaging with stakeholder groups³² but got no reply- *'this was not courteous'*. In addition, a number of those who had attended felt that the group should have been kept informed after the event:

'It was good to bring a diverse group together but we should have been kept in the loop to show they were willing to listen'.

8. FINDINGS- RECORDING, ANALYSIS, REPORTING AND FEEDBACK

8.1 RECORDING, ANALYSIS AND REPORTING

The public dialogue workshops were recorded on a dictaphone with participant permission, and in addition there was a note taker and flip charts and collages. These were then used by Ipsos MORI to pull together transcripts, followed by developing a detailed outline of the key factors which drive people's views (i.e. why people said the things they did) which was followed with another outline highlighting the range of views expressed during the workshops (i.e. what they said). There was then a collaborative analysis workshop involving the Ipsos MORI team, leading to compiling an overarching report.

The stakeholder meeting were said by the facilitators to have been recorded using audio recording, facilitator notes and flip charts, but this is disputed by some of the interviewed participants. However, there was not a clear and transparent recording of the points made during the meeting e.g. noting down on flip charts at the front of the room which could act as a formal record with participants encouraged to challenge what was being written up if it was not correct. This approach would have been very useful in reassuring participants that their points were being fully recorded, and in giving them some control over that record.

It was planned that following the completion of the public dialogue workshops, Nesta, Ipsos MORI and the Sciencewise DES would have a telephone discussion about the findings, but in practice the focus of the call was mainly preparing for the stakeholder meeting. Again, immediately after the stakeholder meeting, Nesta and the Sciencewise DES planned to review the findings and link the outputs from the stakeholder workshop and public dialogue events to provide clear insights on similarities and differences provided by the public and stakeholders and then decide which challenges should be included in the report as final recommendations. However, because the stakeholder meeting had challenged much of the approach to the challenge themes - and the Longitude Committee meeting was only two days away - again, in practice, the discussion was not extensive and focused on planning how to approach the Committee meeting. It was generally recognised that more time was needed to do the analysis. The final dialogue report findings are broadly consonant with the presentation to the Longitude Committee only two days after the stakeholder dialogue workshop, but it offers greater depth and insights.

³² In fact a small ethnographic study was undertaken in Spring 2014 in relation to the motor function challenge

Those that have read the final dialogue report³³ produced in draft in December 2013 (with a final version in January 2014) found it readable, and liked the way the report juxtaposed expert stakeholder and public views.

8.2 THE LONGITUDE COMMITTEE MEETING 21 NOVEMBER 2013

The Committee meeting that was due to make decisions about the prize challenges in November 2013 was set for 1.5 hours including other business, because its members were perceived to be too busy to give more time.

A summary of the analysis of the views of the public and stakeholders on potential themes and challenges presented to the Committee had revealed that further development of prize challenges would be required prior to the process of prize shortlisting. The small number of Committee members interviewed had not all read the dialogue report so the presentation slides (and handouts) were important. Ipsos MORI worked hard to ensure that the public and stakeholder views were presented clearly, and without adding more weight to the ordering than they felt was defensible. It was unfortunate that for shorthand reasons, the public dialogue views were labelled public opinion, further confirming any negative views about dialogue that existed. There were also difficulties because some of the amended challenges presented to the Committee were quite different to what the public saw and some were totally new, reflecting late interviews and sub committee meetings after the public dialogues. Nesta's wider stakeholder engagement led to a final ranking in the presentation to the Longitude Committee that was not reflected in Ipsos MORI's rankings. The key points for the Committee to consider were identified in the joint Nesta/ Ipsos MORI presentation as:

- **The committee should not feel constrained by the themes (i.e. challenge categories)** – although they were felt to be in broadly the right areas.
- Where technological solutions were included in the challenge description, **views of the technology rather than the challenge itself drove people's responses**. This is important to bear in mind when thinking about how challenges should be framed.
- **Suggested alternatives** should not be underestimated as they have the potential to engage further and increase the salience of less popular themes e.g. energy.

After the presentation, which was only allocated 15 minutes, the Sciencewise DES facilitated a priority setting exercise - the results are identified in Figure 5 (in section 13). It had been agreed that to save time, the sub-group chairs should not speak to their challenges, but the Chair invited them to make short presentations, so time for discussion was very limited. Whilst some challenges were agreed, many of the areas were seen as needing considerable additional work (See Figure 5).

8.3 DISSEMINATING FEEDBACK TO PARTICIPANTS

One of the aspects of public engagement that most annoys public and stakeholder participants is the lack of feedback when people have bothered to participate. Participants need to know what impact the process has had. The ITT for the Longitude project did include a requirement for the "output to be provided to participants". The final dialogue report was completed in January 2014. However, because of BBC embargoes (they did not want information sent out before their planned programme in May 2014 was announced), the report was not circulated until February 2014 for the stakeholders and the end of March 2014 for the public participants. Initially there was some confusion about which organisation had the responsibility for this

³³ Because it was not in the public domain, this is mainly Nesta and BIS staff, the Sciencewise DES and a Committee member

feedback and it was only at the Nesta's insistence and evaluator prompting that it happened. This delayed the participant evaluation interviews by some months.

Ipsos MORI recommended that stakeholder workshop and public dialogue participants be further involved in advising on the choice of prizes and taking the work forward in phase 2. Because of the lack of time and resources this work was not undertaken.

9. FINDINGS- THE REVIEW MEETING

In late January 2014, Nesta invited the Project Management Team members (see below) to a review meeting, facilitated by the Sciencewise DES.³⁴ The purpose of this meeting was to review the work done so far, discuss how Nesta could use the results of the public and stakeholder dialogue to influence the design of the Longitude Prize, and discuss the next phase of public dialogue and engagement. The meeting largely focused on Stage 2 possibilities but did also identify some learning from the dialogue process including:

'What was useful about the public and stakeholder dialogues:

- Criteria – from stakeholders and public was very useful
 - Benefit whole society / interconnected / affordability (seen in a number of the problems)
- Educating the public – for example around anti microbial resistance

What should be done differently if the dialogue were to be done again:

- Input of more social scientists
- Start 6 months earlier which would have given more time to plan public and stakeholder engagement - especially around subgroups
- Greater scientific expertise was required
- Needed explicit policy ownership of different topics
- Need to liaise with Research Councils
- Better stakeholder management – develop a stakeholder database³⁵

As a result of this workshop, and the delays in sharing the findings of the report with stakeholders and the public dialogue participants until March 2014, only this Review meeting, rather than the usual Sciencewise 'wash up' workshop after the first draft of the evaluation report was circulated, took place.

10. FINDINGS - PROJECT GOVERNANCE AND MANAGEMENT

There were two groups involved in project governance and management:

a) The Longitude Committee.

The Committee met three times during this phase of the Longitude Prize³⁶. The purpose of the Committee was identified at its first meeting in July 2013, was agreed to be to:

³⁴ The evaluator was unable to attend for family reasons

³⁵ Taken from DES notes of the meeting

- Act as public guardians of the Longitude Prize for the next 12 months, from ideation, through debate to launch – at which point the committee will be adjusted according to the main topic chosen
- Think about how we can reinvent the Longitude Prize within the current context of our lives and challenges we face as a society
- Act as a filter for prize topics and themes that come from engagement with the scientific community, entrepreneurs and business leaders, and others including social scientists and members of the public

It was stated that ‘The board must find a topic where we can identify a prize, this prize that will make a difference and act as an incentive. It should be possible to measure success objectively thus objectivising judging. The main challenge will be to enable the public to follow the progress.’³⁷

It was stated in the dialogue delivery ITT that:

*‘The Longitude Committee will advise on the direction of the project and help to inform and shape the dialogue process, ensuring that it is far reaching, accessible, involves all relevant stakeholder groups and appropriately selected members of the public, and that all materials used are comprehensive, balanced and neutral, and accessible to lay participants. **The Longitude Committee will be a key factor in building confidence in the robustness and objectivity of the process.....Dialogue contractors will be required to liaise closely with the Longitude Committee, and will in particular be required to submit all dialogue materials, presentations and processes for approval of their substantive content before use.**’*

The Committee only met once some months prior to the appointment of the dialogue delivery agency, and then again at the end of the dialogue process, so could not fulfil this role. Some members of the Management Team (see below) attended the Committee including BIS, the Sciencewise DES, and Nesta. Whilst three Committee members attended the stakeholder workshop, no Committee members observed any of the public dialogue events, and the materials for the dialogue events were not shared with Committee members.

b) The Project Management team

The Project Management team was made up of funders of the project (the Director of the Innovation Lab at BIS; Sciencewise senior manager); Nesta’s Chief Executive, the Nesta Prize team, the Sciencewise DES, and after appointment as dialogue delivery agency, Ipsos MORI team members. No Longitude Committee members attended this group. It was stated in the Dialogue delivery ITT that ‘*Nesta in collaboration with Sciencewise, will oversee the process and approve the dialogue design and materials*’.

The Management Team was responsible for commissioning the public dialogue and ensuring delivery. The purpose of this team was not fully defined but it did meet to appoint the dialogue delivery agency and for the final review meeting - see section 9.

Perceptions of the dialogue project governance and management

Interview feedback suggests that the Management team was less involved in the dialogue than would have been helpful, and few of those interviewed had much to say about its role and work. Members of the Man-

³⁶ 14 different members have attended the Committee during this period, half of whom attended 2 - 3 times. These were: Lord Martin Rees (Chair)- Astronomer Royal; Imran Khan, Chief Executive – British Science Association; Philip Campbell- Editor-in-Chief – Nature; David Mackay- Chief Scientific Adviser at the Department of Energy and Climate Change; Dame Sally Davies- Chief Medical Officer for England, Department of Health; Roger Highfield- Director of External Affairs - Science Museum; Dame Athene Donald, Professor of Experimental Physics, Cambridge

³⁷ Committee minutes July 2013

agement team were encouraged to attend the public dialogue workshops but other than some Nesta staff and a Sciencewise DES they did not; some Management team members attended the stakeholder workshop and were also involved in commenting on the final dialogue report.

There was general acknowledgement that the Nesta team lacked sufficient time and resources to manage the delivery contract well, and that the project would have been more successful if it had been more tightly managed. More generally there was acceptance that there had been some failures of management and oversight:

'Nesta needed to really manage the contract... also a very different tender was needed- clearer, and really focussed with scientific guardianship'

Overall, evaluation feedback and observation suggests that Nesta would have reached a better set of challenges if a detailed planning process had started early enough, with the Committee, sub-groups and the public and stakeholder dialogues starting much earlier. There is general recognition that the Nesta Prize team was under resourced. There was also general appreciation of the work of the Longitude staff, one of whom had come into the work with a strong scientific background but limited project management experience and limited access to management support. It was said that *'without her, it would not have happened'*. Later on, a staff member was recruited whose work was also valued, and it was said that after they had arrived the whole project greatly improved. It was not clear why these appointments had been made so late.

11. FINDINGS- SCIENCEWISE AND THE DIALOGUE AND ENGAGEMENT SPECIALIST'S ROLE

Interview evidence indicates that Sciencewise's funding was really valuable and without Sciencewise's funding little public dialogue would have taken place in the scoping phase. However, it was recognised that the experience had not helped demonstrate the merit of public dialogue, but had reinforced negative perceptions and possibly put some people off public dialogue.

There was universal appreciation of the Sciencewise DES' helpful work and role, both in planning and thinking through with Nesta the public and stakeholder engagement process, keeping the engagement process going, and ensuring basic quality control. Comments included: *'she took on the client role'*; *'she gave added capacity'*; *'just brilliant'*; *'her work was fantastic'*. Nesta was not able to be part of all teleconferences with Ipsos MORI when planning workshops which made them very dependent on the Sciencewise DES. The DES facilitated a really challenging Committee discussion on the dialogue report findings, gave detailed feedback on the dialogue report, and stayed involved through the process of Nesta preparing to design stage 2. It was also recognised that during this dialogue she had to dip in and out more than would have been helpful for family reasons, especially during the period around the public dialogue preparation. Although the DES was not able to be fully involved throughout the process, it was generally recognised that Nesta had relied on that experience to get things moving and that it had been vital to have someone to work with on the project who was approachable and a good communicator.

The Sciencewise DES role was valued across Nesta and it was expected that Nesta would re-engage with Sciencewise in the future. The lack of Sciencewise enthusiasm to fund public dialogue work in Stage 2 was a disappointment to the Nesta team.

12. FINDINGS- DID THE DIALOGUE MEET ITS OBJECTIVES?

The dialogue objectives were to:

- ensure that the public and stakeholders are engaged in the scope and framing of a new Longitude prize for innovation in science and technology
- ensure that there is a high degree of transparency around the process for developing Longitude challenges
- frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public and stakeholders

Objective: to ensure that the public and stakeholders are engaged in the scope and framing of a new Longitude prize for innovation in science and technology

There is good evidence that the public and stakeholders were engaged in the scope and framing of a new Longitude prize for innovation in science and technology. As we will see in section 13, their views did influence the scope and framing of the prize especially in the areas of criteria/ values- *‘they shaped and verified the values, as well as giving ideas about how to get the public engaged. It was recognised that there were also inputs to the scope and framing of the prize from other external stakeholders, the Longitude Committee, the BBC and the Nesta team into developing the challenges.*

Objective: to ensure that there is a high degree of transparency around the process for developing Longitude challenges

Transparency in a public dialogue usually refers to the information provided to the participants, the reporting of their views, and how their views feed into decision-making processes. There was general agreement from those interviewed that though aspects of the process of the public and stakeholder dialogue were transparent, it was not fully clear how the results were used in decision-making processes, alongside the other inputs. It was noted in an interview that:

‘The selection process has not been perfect, nor was it clearly articulated how we got to end decisions- there were unclear pathways; for example robotics and dementia where discussions took place outside the process and worked against information collected from dialogues’

There was thus not a full audit trail and understanding of the influences on the way to the decisions, although since the completion of the evaluation, Nesta has published its prize methodology in a report.³⁸

From early on the Sciencewise DES had pressed that a database or spreadsheet recording system should be set up so track could be kept of the inputs, but this did not happen because of time. The Sciencewise DES also noted in an email that *‘we must make sure that the Ipsos MORI reports sit alongside notes from the interviews and discussions with stakeholders outside of the meetings’*. Ipsos MORI also recommended that Nesta should have a documented audit trail where their stakeholder ranking of prize challenges, emerging from the subgroups and interviews, especially in relation to the criteria, deviated from what was said in the stakeholder workshop, and the reasons why in case anyone asked. This work did not take place because of time constraints. It was as was noted in a Nesta staff email, *‘a fast, early-stage horizon scanning process, it is ad hoc to some extent - phone calls, interviews and using opportunities as they arise.’* It therefore became unclear how public and stakeholder dialogue inputs were integrated or differentiated from input from other sources when being considered in the decision making. Thus there was not a high degree of transparency

³⁸<http://www.nesta.org.uk/publications/longitude-prize-2014-briefing-and-methodology>

around the process of developing the challenges. One key commissioner interviewed felt that this was an unrealistic objective in the circumstances.

It is really positive to note that in relation to Nesta's Spring 2014 work with Science Practice after the dialogues were completed, to clarify the six prize challenges, there are notes from all the meetings, and all the proposed challenges are backed up. This would appear to be as a direct result of Nesta learning from the dialogue work as well as increased capacity.

Objective: frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public and stakeholders

There is evidence – see section 13 - that public and stakeholder views did help frame and develop specific ideas and topics for potential challenges. Without these inputs, it was thought that the ideas and topics would have been completely internal to Nesta and the Longitude committee. The public and stakeholder dialogue process and report did help shape the ideas as well as giving an injection of structure into the process. For Nesta, it would have been interesting if topics had come up that Nesta had not thought about, but it was unsurprising that they did not;³⁹ for Nesta it confirmed that their thinking was broadly on the right track.

One of the classic questions that is put to those considering public dialogue approaches is: *'Is a public dialogue likely to give you new insights that are potentially of value, beyond those which technical expertise and stakeholder views are able to provide?'* Whilst some of those interviewed felt the answer was no, there is evidence that the public and stakeholder dialogues, whatever their limitations, offered insights and evidence and gave Nesta the evidence to convince the Committee to recognise that further work was needed before decisions could be made and put a structure around the process of developing the challenges, that otherwise might not have been found from elsewhere.

13. FINDINGS- IMPACT, VALUE AND BENEFITS OF THE DIALOGUE

The Sciencewise principles suggest that public dialogue on science and technology should aim to:

- Ensure that participants, the scientific community and policy makers and the wider public can easily understand the outputs across the full range of issues considered
- Ensure that participants' views are taken into account, with clear and transparent mechanisms to show how these views have been taken into account in policy and decision-making
- Influence the knowledge and attitudes of the public, policy makers and the scientific community towards the issue at hand
- Influence the knowledge and attitudes of the public, policy makers and the scientific community towards the use of public dialogue in informing policy and decision-making
- Encourage collaboration, networking, broader participation and co-operation in relation to public engagement in science and technology
- Be directed towards those best placed to act upon its outputs
- To represent the rationale and implications of divergent views

³⁹ Fusion, war, identity fraud and recycling were some of the topics raised in the public dialogues and the evaluation interviews as not having got through to the final list

This section looks at what difference / impact has the dialogue made on the Longitude prize decisions, and on the Committee and others involved and the value and benefits of the project, including the extent to which all those involved were satisfied with the outcomes and process.

13.1 IMPACT OF THE DIALOGUES ON THE CHOICE OF CHALLENGES, THE CRITERIA USED TO CHOOSE THEM, AND HOW THE PUBLIC COULD BE ENCOURAGED TO ENGAGE IN THE PROCESS

Nesta was not required to act on the stakeholder and public dialogue evidence information but to use it to help the Committee ensure whatever challenges were selected, public and stakeholder views were taken into account.

Two of the Longitude Committee members interviewed had not read the dialogue report, had very limited memory of the Ipsos MORI presentation to the Committee, and felt it had not impacted on their decisions- *'the dialogues did not make any difference'*. It was generally thought that most Committee members had not looked at tabular summaries in the presentation materials. One member noted *'it was frustrating- there were some clear messages but a sense at the committee that these were not taken on Committee'*

However, it is important to recognise that drawing on the dialogue report findings, the BBC and Nesta staff and Science Practice (the organisation commissioned by Nesta after the public and stakeholder dialogues were completed, to help clarify the challenges) have also influenced the decisions, as well as the criteria used to make the decisions (e.g. criteria such as benefit whole society / interconnected / affordability, all of which were raised in the public dialogue). It is clear from the evaluation interviews that the groups mentioned above were thought to have been influenced by the public and stakeholder dialogue evidence in the report.

A number of those interviewed said that the dialogue results had provided an additional and useful strand of evidence to strengthen their decision making process about the topics selected, and to be clear and transparent about how and why certain topics were selected and others rejected. Overall, one Committee member felt that the Committee had moved past their pet projects and reached good challenges- *'a quality product despite the process'*. Others agreed with this assessment.

Five issues were raised by a number of those interviewed around the way in which the prize was framed and how the dialogue process was used to develop the challenges. These were:

- Initially, the prize was framed around solutions not challenges i.e. a category error. There were also many umbrella categories. Comments included:

'I've not seen anything that looks like a prize- it is not scoped as a prize'

'It needs to be focused on a key problem, not the technologies that might solve it (so here communications is not right, whereas education/ learning/ social development might be more appropriate..... Also technology and robots is not right as a category, since they are the means and we are interested in the ends.... and like the original Longitude prize we should not be prescriptive about the solutions'

- The scope was very broad until after the dialogues. A tighter set of options was needed to put before the public and stakeholders. There was quite a strong view that the challenges needed to be precise and a very definite ask- it is hoped that the final challenges are that.
- The rationale for the prize was not clear- *'I am not sure what the prize is for'*- and this needed to have been agreed at the start

- At least some of the prize design and technical aspects parameters needed to be agreed before the dialogues. One key decision maker noted - *'I would not be part of launching such an open prize again'*.
- Some of those interviewed felt if they did it again they would not start with a round table of scientists and civil servants because the Committee inherited an unsatisfactory set of ideas. Ideas from interviewees included getting a group of more creative people together including social scientists, science communicators, designers, science educators to design a blue sky workshop and identify what are the right challenges to make a good prize. Another idea was to involve the BBC to look for inspirational value and recapture the original vision-*'it needed imaginative people to push expectations and come up with ideas.'* There was quite a strong view that it would have been valuable to engage more social scientists in the process.

Views about the value of public dialogue included that:

- o The challenges should have been developed by scientific experts with no public engagement
- o The public had been too channelled and blue sky thinking might have been better

It was interesting that two of those interviewed felt that the final decisions about the prize challenges- see figure 5 final column- were much closer to the public and stakeholder dialogue findings than they had expected- *'the final list does chime with the public views'; 'the prizes are now much closer to what was expected after two dialogue workshops- they are not inconsistent with the principles expressed'*.

It is interesting to trace these connections seeing how much the present challenges- see Figure 5 final column- link with the key issues mentioned by the public at the first dialogue workshops (see Figure 4 in section 6.1) as well as the end of the public dialogue workshops- see figure 5, column 3. The development of the criteria also shows this convergence- see figure 6.

Examining Figures 5 and 6 covering the challenges emerging over time, and criteria used to select them, it is possible to identify how they emerged, and the role of the public dialogue and stakeholder dialogues in contributing to the decisions. Whereas some of those interviewed felt that a better process might have led to a better set of challenges, as it was noted, *'we have a good set of challenges now'*.

How much the public dialogues influenced the way in which the prize was presented more widely could not be covered in the evaluation which was completed before the BBC Horizon programme broadcast on 22nd May 2014, and the vote in the period leading up to the 25th June 2014, when antibiotics was announced as the focus of the £10 million Longitude Prize.

Figure 5 EMERGING THEMES FOR THE PRIZE

After Board discussion July 2013	From subgroups and interviews October 2013	From public dialogues: October - November	From Stakeholder dialogue event November	From November Board meeting	Final listing February 2014 after detailed work and Board meeting
Improving health and wellbeing	<p>Health and Wellbeing</p> <p>Problem 1: Curing, or reversing the effects of, dementia</p> <p>Problem 2: Enabling and enhancing independent living</p> <p>Problem 3: Antimicrobial resistance</p> <p>Problem 4: Social harm from addiction</p>	<p>Most support:</p> <p>Tackling food shortage.</p> <p>Tackling malnutrition.</p> <p>Tackling pollution and contamination.</p> <p>Improving ecosystems.</p> <p>Providing a reliable energy supply to all.</p> <p>Helping people to live independent lives.</p> <p>Suggested alternatives:</p> <p>Tackling Alzheimer's.</p> <p>Mental health / blindness / "killer diseases".</p> <p>Combating obesity.</p> <p>Water shortage and quality.</p>	<p>Most support:</p> <p>Tackling antibiotic resistance.</p> <p>Curing or reversing the effects of dementia.</p> <p>Providing a reliable energy supply to all.</p> <p>Reducing energy usage in passenger transport.</p> <p>Suggested alternatives:</p> <p>Energy storage.</p> <p>Reduce dependence on oil in transport.</p> <p>Resource and waste re-use.</p> <p>Declining fish stocks.</p> <p>Tackling marine eco-system degradation.</p> <p>Tackling water acidification / desalination.</p>	<p>Agreed:</p> <p>Anti-microbial resistance.</p> <p>Verbal real time Babel fish.</p> <p>Harvesting and storage of energy from ambient sources or self sustaining devices.</p> <p>Reducing energy consumption (within specific area e.g. trains).</p> <p>Nitrogen fixing / enhanced photosynthesis (e.g. a manmade leaf).</p> <p>Food - needed more thought.</p> <p>Disaster.</p> <p>Resistance - more thought needed.</p> <p>Supportive environments for the elderly or enabling independent living.</p> <p>Other options discussed but not in detail or not achieving group agreement:</p> <p>Recycling energy.</p> <p>Democratising computer coding.</p> <p>Artificial meat.</p> <p>Desalination.</p> <p>Food wastage.</p> <p>Converting waste to food.</p> <p>Food security and urbanisation.</p>	<p>AGREED:</p> <p>Dementia – How can we ensure people with dementia and other degenerative health conditions live full and meaningful lives?</p> <p>Anti-microbial resistance - Given the rise of antimicrobial resistance, how can we ensure effective treatment in the future?</p>

Communication	Democratising Access to Communication Problem 1: Disparity in access to digital communication channels Problem 2: Maintaining Secure Online Identities				
Living within our means (energy and environment)	Living within our means (Energy) Problem 1: Intermittency- enable maximum integration of renewables into energy infrastructure. Problem 2: Improving home energy use Problem 3: Reducing energy consumption in passenger transport Living within our means (Environment) Problem 1: Improving the way in which we utilise our ecosystems Problem 2: Excessive use of Nitrogen Problem 3: Pollution and land/soil degradation				Zero-carbon flight - How can we drastically reduce the impact of global air travel on the environment whilst meeting future transport demand? Desalination – Considering increasing global water scarcity, how can we affordably meet our water needs using sea water?
Feeding the planet Global Development	Global Development and Food Security Problem 1: Crop sustainability Problem 2: Resilient energy access Problem 3: Malnutrition Problem 4: Disaster Risk Management				Malnutrition - How can we drastically reduce preventable deaths by tackling global malnutrition?
Technology + robotics for enhanced living	Challenge 1: Improving our skills, health and safety Challenge 2: Improving society's decision-making				Paralysis/Motor function - How can we restore a full range of thought-controlled, able-bodied movements to those with full or partial paralysis?

Figure 6 Emerging criteria for the choice of prize

From July Committee meeting 2013	From public dialogues: October - November 2013	From stakeholder dialogue event November 2013	From November 2013 Longitude Committee presentation
<p>The Committee agreed that:</p> <ul style="list-style-type: none"> • It must find a topic where we can identify a prize, this prize that will make a difference and act as an incentive. • It must be able to pick something for solving within the shorter term e.g. next 2 years • It does not select already existing challenges • It should be possible to measure success objectively thus objectivising judging. • Similar to the original Longitude prize, it is important to articulate the challenge to the public clearly so that a solution is not prescribed. 	<p>Ambitious but solvable. Longitude Prize 2014 should reflect the scale and significance of the original Longitude prize.</p> <p>Interconnected. Tackling or solving one challenge to help resolve other problems.</p> <p>Global reach. Specifically, promoting global equality between developed and developing countries.</p> <p>Benefit the whole of society. Unless the prize has the potential to make a “life-changing” impact for specific groups.</p> <p>Also important:</p> <ul style="list-style-type: none"> • Proven impact • Add value • Scaleable • Engaging 	<p>Specific, outcome focussed prize challenges. This will help with the development of prize success metrics and stimulate innovator engagement.</p> <p>Impact that makes a real difference in society.</p> <p>Scaleable. Final prize challenge shortlisting should consider issues such as practicality, and affordability to the end user.</p> <p>The prize should stimulate innovation that would not happen without the incentive of Longitude Prize 2014.</p>	<ul style="list-style-type: none"> • Solvable but on the fringes (within 5 - 10 years) • Emotive and engaging • Substantial societal benefit • Solution will be accelerated by major prize • Solution will be adopted and replicated

Perceptions of the value of public and stakeholder dialogue

Longitude Committee members' views about the value of public dialogue as opposed to public engagement appear unchanged by the experience, though the small number interviewed should be noted. Those interviewed who were doubtful of its value, identified it had offered no added value; those in favour of public dialogue were still supportive of its value, if disappointed that this dialogue had not proved more useful and that it had thrown light on the problems of dialogues. Equally Project Management Team members had not changed their positions on dialogue, but some now felt wiser about its challenges.

A key focus of BIS in the Longitude prize was how the public was being consulted and how their views in developing the Longitude prize were being taken into account. Once the report was available, BIS staff shared findings with colleagues and ministers and there was interest in them; especially the public lack of interest in particular challenges- and the evidence on the selection criteria to be used.

The BBC had a copy of the dialogue report and were said to have used it, especially around the ethical issues raised. However, with the dialogue report embargoed by the BBC until after the completion of the evaluation, few other people knew of the dialogue results at that stage.

13.2 IMPACT OF THE PUBLIC AND THE STAKEHOLDER DIALOGUE ON THE PARTICIPANTS

Public Feedback after Workshop 2

A majority (30/32) of participants said they had **learned something new** as a result of taking part

A majority (28/32) of participants thought **taking part in these workshops has affected their views on some of the issues they discussed**

A majority (30/32) of participants thought it was important that **the public are involved in discussing these sorts of issues**

All participants thought they were **more likely to get involved in these kinds of events** in future

A majority (26/32) of participants were **more convinced of the value of public participation in these sorts of topics**

A majority (29/32) of participants were **more likely to recommend taking part in these kind of events** to others

A majority (27/32) of participants were more convinced of the **value of public participation in Science and technology decisions**

When asked *'What was the main thing you gained from taking part in this project, if anything?* nine participants identified the issues faced globally, how science can impact on daily and global living, knowledge about science in general; five participants identified the conversations that they could be part of with an interesting group of participants; four felt that they had been listened to and that the public's views were actually listened to and valued, and that *'people do change the world!'*. For individuals it had offered experience, enjoyment, research, money and knowledge.

A majority (24/32) of participants **were confident that the public's views expressed** in these workshops would influence the choice of the Longitude Prize 2014 challenges; whilst no participants thought that they would not influence the choice, the young people from Cambridge and some of the London participants said they were neutral or did not know.

In the Ipsos MORI vox pop interviews undertaken alongside the public dialogues, when asked ***'What would you say is the most interesting thing you have learned in the Longitude Prize 2014 public dialogue workshops?'*** the comments included:

'Antibiotic resistance- I had no idea and now it concerns me' (young person-Male)

'Wanting to engage with public- try to get a democratic feel to the project' (young person-Male)

'Diversity of issues raised- a lot I would not have thought about' (young person-Female)

'Diversity and breadth of issues that can be underpinned by science' (Female)

'Different people's points of view and opinions- some see issues like dementia as important others not' (Female)

'How science can affect the planet globally now and in the future and improve the quality of life' (Male)

When asked about the **best thing about the prize** the comments included:

'Different aspects of science and involving young people; getting people interested in science is a very important thing to do'

'Publicity and large enough sum of money to tackle issue'

'Raise awareness that puts science in the public eye; lots of people are apathetic'

'Idea the public is involved. What the man in the street is thinking is important'

'Feels like it's a democratic process, trying to get to the root of the problem; what people want to solve'

'Money being used to incentivise good ideas; putting it out there and give extra push'

'A real chance to have your say- not just elites in Whitehall or Oxbridge. The masses can choose'
'How the prize can change things- there is an opportunity to influence the final decision... how important it is that everyone is engaged'
'Everyone involved because everyone is affected'

Participants saw this kind of experience of having a dialogue with people who are unfamiliar to or unlike themselves as really valuable in its own right.

Public participant feedback after five months

All except one participant said they had received an email about the selected Longitude challenges but none had really read the email in detail. Despite not having studied the detail, all except one participant interviewed felt they could see some of the influences of the dialogues in the choice of challenges - *'seemed to be quite a lot of what we agreed- it chimed; 'yes we did influence'*. One participant felt that the choices seemed *'a bit trendy issues- by products of over population- malnutrition and desalination'*. Interviewees were not sure that the public's views expressed in the dialogue workshops would influence the way the challenges were presented to the public but hoped so.

The main thing participants gained from taking part in this project was enjoyment of being part of the group, some new learning and a feeling they had contributed:

People who were there was a strong feeling of comradeship- we were part of something like being on a jury... they felt like old friends. There was a lot of debate and listening and questioning and being influenced

Really nice people- I was pleased to be asked

You feel you have made a real contribution- really nice- unusual for normal people to be asked these questions;

An eye opener- areas I would not have known about- dementia and pollution and zero carbon

All those interviewed would be watching and voting; and all except one had spoken with family and friends about the experience. One participant really wanted to see information going into schools on the importance of science and was delighted to hear of the proposed Longitude packs for years 6-8.

All except one participant was now convinced of the value of public participation in science and technology decisions:

We might not make much of an impact but our opinions are documented.

I feel more valued- important as it impacts on our lives

However one participant was quite puzzled about the objectives of the exercise- *'I'm not clear what the point was- asking uninformed people about science... Why ask Joe soap what the next scientific advance would be?'*

Stakeholder feedback after the workshop

As we saw earlier (section 7.2), immediate feedback on the stakeholder event was positive on numerous issues, but also showed that it only had a small effect on participants and only half felt confident that the stakeholders' views expressed in this workshop would influence the choice of the Longitude 2014 challenges.

Stakeholder feedback after five months

Whilst most of those interviewed identified having interesting conversations, gained useful insights and did some networking, most of those interviewed as a result of attending the workshop were less likely to say yes to attending this kind of workshop in the future. See section 7.3 for more details on the findings of these interviews.

13.4 DIALOGUE COSTS

The total cost of the public dialogue project was £157,032, including public and stakeholder engagement, the evaluation and web platform development, to which Sciencewise contributed £48,825. The total also covered work around branding, and work with Science Practice. Funding was from Nesta and Sciencewise. The aim of the project was to contribute to the design of the £10 million Longitude Prize.

The costs of the dialogue were therefore a relatively small proportion of the Prize costs. The scale of the dialogue was specified in the initial delivery ITT agreed by Nesta (e.g. less than 50 stakeholders and 25-40 public participants). However, it became clear that the scale of dialogue activities was felt by some of the key target audiences for the findings (e.g. the Longitude Committee) to be inadequate. Sciencewise funding can only be used for public dialogue and as we will see in section 15, some of those interviewed were not convinced of the value of the work that took place and felt that the money could have been better spent in other ways. In part this may reflect existing mixed perceptions of the value of public dialogue.

14. FINDINGS- HAS THE DIALOGUE MET SCIENCEWISE PRINCIPLES?

14.1 THE CONTEXT

The Sciencewise principles suggest that public dialogue on science and technology should aim to:

- i) Be clear in its purposes and objectives from the outset.
- ii) Be well timed in relation to public and political concerns.
- iii) Commence as early as possible in the policy/decision process.
- iv) Feed into public policy - with commitment and buy-in from policy actors.
- v) Take place within a culture of openness, transparency and participation with sufficient account taken of hard to reach groups where necessary.
- vi) Have sufficient resources in terms of time, skills and funding.
- vii) Be governed in a way appropriate to the context and objectives.

The purpose and objectives for the dialogue were clear, though by the time the dialogue was funded the pressure on timing was intense. The objectives of the dialogue workshops were clear to public participants but not to the stakeholder dialogue participants.

Context is also about timing and governance. As Sciencewise evaluations indicate, any public engagement activities struggle to contend with restrictive timeframes and/or a project's lack of time resources, and this dialogue was particularly pressured:

- If funding had been applied for much earlier, the delivery agency could have been appointed in May/ June 2013.

- The timeframe for deliberative activities was too tight and potentially over-rushed: the three hour workshops started late and had longer breaks than planned, so some were in reality 2.5 hours.
- Planning and delivery was very rushed: topic guides were being amended on the day of the workshop... *'it all felt too rushed'; 'we were always playing catch-up'*.
- The Nesta staffing for the development of the prize was very limited until the appointment of new staff at the end of October with stronger project management experience
- After the stakeholder workshop there were only two days to develop the presentation for the Committee
- The Committee meeting that was due to make decisions about the prize in November 2013 was set for 1.5 hours including other business, because its membership was thought to be too busy to allocate further time.

As is so often the case in participatory deliberations, time was an issue. This was especially true in the context of this project, where there was an imbalance between the number of topics to be discussed and the agreed length of the public dialogue events. As a result, the informational aspects of the workshops were so extensive that the amount of time available for more extensive and expansive deliberation among participants suffered.

A further key issue of context is how the results of the dialogue process are to be used. Ideally, the findings should have been fed into a clear process of decision-making so that participants know that the time they are spending on the dialogue process will have an influence on a wider process. As we saw in section 13, the influence on decision making is unclear, though that there was some influence is clear.

14.2 THE SCOPE

The Sciencewise Guiding Principles suggest that, on issues of Scope, as far as practicable, public dialogue on science and technology should aim to:

- i) Cover both the aspirations and concerns held by the public, scientists in the public and private sector, and policy makers.
- ii) Be focused on specific issues, with clarity about the scope of the dialogue.
- iii) Be clear about the extent to which participants will be able to influence outcomes. Dialogue will be focused on informing, rather than determining policy and decisions.
- iv) Involve a number and demographic of the population that is appropriate to the task to give robustness to the workshop outcomes.

Scope refers to what is discussed, how issues are framed and whether or not there is room for discussion of related topics. A key question is the extent to which the public can influence outcomes. It is also about ensuring that the dialogue covers public participants' concerns and aspirations and whether or not there is time and space to examine and discuss the scope to the satisfaction of the participants and how those discussions shape the dialogue process as it progresses. This can be assessed through how materials are presented, how questions that are outside the presented scope are answered and managed, together with how much flexibility there is in the programme for change in timings or approaches to discussions.

In this case, although in general public participants were satisfied with the amount and scope of the information provided, there were concerns from the commissioners of the project about the quality and accuracy of the materials, and how understandable and clear they were. The public dialogue events offered very limited time for discussion on the challenges, but did offer time to discuss the criteria and suggestions for how to get the public engaged with the prize. As we will see in section 15, there were also concerns about

the size of the public dialogue sample among those who were expected to use the results, which led to questions about the robustness of the evidence. The stakeholder dialogue workshop was generally seen as weak in scope and delivery.

14.3 THE DELIVERY

The Sciencewise principles suggest that public dialogue on science and technology should aim to:

- i) Ensure that policy makers and experts promoting and/or participating in the dialogue process are competent in their own areas of specialisation and in the techniques and requirements of dialogue. Measures may need to be put in place to build the capacity of the public, experts and policy makers to enable effective participation.
- ii) Employ techniques and processes appropriate to the objectives. Multiple techniques and methods may be used within a dialogue process, where the objectives require it.
- iii) Be organised and delivered by competent bodies.
- iv) Include specific aims and objectives for each element of the process.
- v) Take place between the general public and scientists (including publicly and privately funded experts) and other specialists as necessary. Policy makers will also be involved where necessary.
- vi) Be accessible to all who wish to take part with special measures to access hard to reach groups, including considerations of appropriate venues and technical equipment in line with the Disability and Discrimination Act 1995. Where the objectives require it, media partners may be needed to ensure that the process reaches the wider population.
- vii) Be conducted fairly with no in-built bias; non-confrontational, with no faction allowed to dominate; all participants treated respectfully; and all participants enabled to understand and question others' claims and knowledge.
- viii) Provide participants with information and views from a range of perspectives, and access information from other sources, thus making them informed.
- ix) Be deliberative - allowing time for participants to become informed in the area; be able to reflect on their own and others' views; and explore issues in depth with other participants. The context and objectives for the process will determine whether it is desirable to seek consensus, or to map out the range of views.
- x) Be appropriately 'representative' - the range of participants may need to reflect both the range of relevant interests, and pertinent socio-demographic characteristics (including geographical coverage)...The methodology and results need to be robust enough to give policy makers a good basis on which to make policy.

Selection of participants

The public participants were selected using criteria which resulted in a good cross section of ages, gender and ethnicity. A total number of 32 public participants were involved in the dialogue workshops, which was seen as relatively small by some of those who were expected to use the dialogue results, and overall the range and numbers of participants involved were not sufficient to make the results of the process fully credible to Committee members (see section 15 for details).

The selection of the participants in the stakeholder workshop was partly based on self selection and a diverse group attended.

Presentation of information

A number of key issues emerged from the observation of the public dialogue workshops including that the amount of material that was covered was vast and complex, the result of insufficient time for it to be shorter and with more focus and simplicity. As a result, there was superficial information on many technologies. From observation, it appeared not to be very meaningful to ask participants to express their preferences after such little information and deliberation, especially given the lack of science resource people in the room. This sometimes meant that the workshop 1 felt rushed. The need to communicate a lot of information meant that the balance between presentation of information and deliberation was perhaps skewed too much towards the presentations leaving less time for discussion. However, participants' responses to the questionnaires completed after Workshops 1 and 2 and the later interviews showed that most people felt that they had been able to discuss the issues.

The weaknesses in framing the challenges and lack of clear information in the stakeholder workshop were identified as particular problems.

Facilitation and delivery of workshops

Observation and feedback from participants shows that the public dialogue workshops were fairly facilitated, non-confrontational and did encourage dialogue. Facilitators did encourage everyone to speak and handled sensitive situations well. Feedback after Workshop 1 and Workshop 2 shows that all participants were happy that people had been treated equally and their views listened to. From observation a number of issues were noted in relation to each of the workshops around preparation and respect for participants- see section 15.

Recording of the workshops

Good practice requires that mechanisms should be in place to ensure that participants' views are taken into account: this covers how their views are recorded, how they are reported and how they are linked into wider processes. In all the public workshops, notes were taken by members of the dialogue team on laptops throughout. In addition, in some cases flip chart notes were also taken.

In the stakeholder dialogue workshop, there were perceptions among participants that the recording was limited, although various recording methods were used. With both dialogues, participants were not able to influence the recording or reporting of their views.

Accessibility of reports

Reports should be made available to all those who participated, in a format that is easy for them to use. The dialogue report, covering the whole dialogue process, went to the Committee and was used by the Nesta team. This was sent out in February 2014 to stakeholder workshop participants but not to public dialogue participants. In March 2014, copies of the Executive Summary was posted by Ipsos MORI to participants with the full report signposted. Because of the BBC embargo until their planned programme was broadcast on May 22nd 2014, this report was not available on Nesta or Sciencewise's websites. Communicating with public participants at the end of the process was clearly identified as part of the original ITT, but there was initially reluctance to undertake this work and some disagreement about who was responsible for the task.

One of the stakeholder participants who had looked at the dialogue report was not satisfied that it represented what had happened at the workshop they attended. However most of those who had read the report felt it was clear and useful.

Whilst as we have seen there were criticisms of aspects of project delivery, it was also recognised that there was a really challenging timetable and difficult demands which were coped with '*with huge grace*'. Some of those interviewed were critical of the dialogue design. Others felt that the process was good at a high level, but that the issues came at the delivery level, and were due to:

- the timescales
- lack of time, resources and experience of commissioning this kind of dialogue which led to some failures of management and oversight
- the underdeveloped, wordy, complex and not fully scientifically accurate public stimulus materials due to lack of time and the lack of scientific expertise to develop them. Although the materials were mainly liked by the public participants and were presented well, feedback from stakeholder interviews suggested the materials were weak in terms of the scientific content.
- the lack of scientific resources to answer participants' questions at dialogue events, a Nesta decision
- some weaknesses in the facilitation.

The evaluation findings in relation to the Sciencewise Guiding Principles criteria on impact are covered in section 13.

15. FINDINGS- PUBLIC DIALOGUE, MARKET RESEARCH AND QUALITATIVE RESEARCH

It is clear from the evaluation interviews that there were a number of issues around how credible findings from the dialogue were with those making the decisions - the Longitude Committee. Issues of concern included:

- the numbers of participants and whether in order for the data to be credible the dialogue needed to have involved a larger number and more diverse group of public participants; the constraint was the budget
- the value of public dialogue approaches, and how its approach is different from market research or more general public engagement
- how public dialogue approaches differ from other approaches.

Sample size and diversity

The dialogue report noted that '*qualitative research approaches (including public dialogue workshops) are used to shed light on why people hold particular views, rather than how many people hold those views. The research is intended to be illustrative rather than statistically reliable and, as such, does not permit conclusions to be drawn about the extent to which something is happening. In the case of this study, we intended to develop an in-depth understanding of views of Longitude Prize 2014, including suggestions for final prize challenges and what public engagement should look like. Where possible we have stated how common a particular view was amongst participants, but as this is qualitative research, these proportions should be considered indicative, rather than exact.*'

Quite strong views were expressed during the evaluation interviews with decision makers that the sample size for the dialogue was too small with insufficient social and geographical diversity. The number and type of public participants affected the credibility of the results with those who were intended to use them. Some of those interviewed felt that the small scale reduced the likelihood, and desirability, of the dialogue having a major influence on the policy decisions, even though the scale had been specified in the ITT. However, if the result sought is to provide information and inspiration to decision makers, rather than comprehensive research evidence, small numbers appear to be less of a barrier. It was unfortunate therefore that when the public dialogue findings were presented to the Committee, they were labelled in a shorthand way as 'public

opinion'. Some found the criteria identified by the public dialogue relatively interesting but that some of the conclusions were not surprising and were similar to national surveys on public attitudes to science e.g. benefiting most people.

These are issues that need to be explored by Sciencewise, as they were raised as objections to the credibility of the dialogue findings, **both** by those who do and do not value public dialogue approaches.

The value of public dialogue approaches in comparison to other approaches

Deliberation is defined in dictionaries as 'careful consideration' or 'the discussion of reasons for and against', where a range of people learn, reflect and work out what they think and why. It is designed to enable participants to evaluate their positions in the light of other people's different perspectives and new information. Deliberative dialogue involves people discussing their views, in order to help them develop, articulate and share their attitudes and concerns. Interaction between diverse perspectives is an important principle of public dialogue, but dialogues are just snapshots of their views at that time, not evidence of public opinion. To use Daniel Kahneman's⁴⁰ phrase, public dialogues encourage slow deliberative thinking involving '*effortful, infrequent, logical, calculating, conscious thinking*' rather than '*fast thinking*' which is '*Fast, automatic, frequent, emotional, stereotypic, and subconscious*'.

Deliberative dialogue is also about democracy, and a commitment to the right of citizens to contribute to the decisions that will affect their lives, and this was something that was picked up in the participant vox pops and evaluation interviews. Dialogue can involve co-creating and shaping of policy decisions with experts and this is different to the commitments underpinning most qualitative research, and closer to participatory and empowerment research approaches. There are many other participatory approaches involving deliberation and diverse/ inclusive participation as well as public dialogues.⁴¹ However it is important to be realistic about the limitations of public dialogues- the initial choice in this project of problems and how they were framed and the definition of criteria were very influential in determining the end results; the power to moderate the discussion was with the facilitators, as well as the delivery agency analysing the results and disseminating the conclusions.

There was some questioning by those interviewed over what could have been achieved for the same amount of money by using a market research approach, or whether in fact much of the evidence could have been gained from existing polling data about public attitudes to science. What both of these approaches would have missed that the public and stakeholder dialogue in part achieved was the building on each other's thinking, changing views in the light of reflection, particularly around the criteria/ ethics in relation to the prize, and views about how the public should get engaged. However it was pointed out in a number of the interviews with commissioners that polling that covered a wider cross section of people from the five different countries of the UK might have revealed some useful evidence that the Committee might have valued more.

The relationship between the delivery agency and the participants

A number of those interviewed felt that the participants in public and stakeholder dialogues were treated as subjects of market research, but actually needed to be seen and valued as collaborators and partners – a reciprocal relationship rather than just getting information from the public, or consulting them about their views. A number of stakeholder dialogue participants and other observers clearly felt that there was a lack of respect in the way participants were treated, though no public dialogue participants identified this. Good facilitation practice recognises that it is important that participants are welcomed and thanked; that there is

⁴⁰ *Thinking, Fast and Slow* is a 2011 Daniel Kahneman.

⁴¹ E.g. citizens' juries, citizen's panels, committees, consensus conferences, scenario workshops, deliberative polling ...

warmth and good eye contact; and that they are appreciated and given the feeling they have contributed. The fact that they are paid a small sum to attend does not negate these important aspects of facilitation delivery.

16. LEARNING FOR FUTURE DIALOGUE PROCESSES

The key lessons that have emerged from the evaluation are:

- Decision makers needed to recognise and accept the value of public dialogue if they are to use the result with confidence. It is not clear that all the Longitude Committee had fully 'bought into' the dialogue work, even at the end of the process
- Greater shared clarity and agreement around dialogue purpose/ objectives was important as well as clarity about why a public dialogue is the right approach to use and that its findings will be seen to have credibility especially with respect to the size and diversity of participation
- The project required sufficient resources to function. In this case progress was affected by the length of time it took to recruit the Longitude prize staff team and that no data base of stakeholders was developed
- It would have aided the Longitude Prize immensely if the public and stakeholder engagement element had been planned in detail early in the process of developing the Prize
- The dialogue contract needed to be appropriate and managed effectively
- Governance and management accountabilities needed to be much clearer
- More time in general was needed to develop the challenges and the criteria, and prepare for the dialogue events:
 - o Funding for the dialogue should have been applied for much earlier and the dialogue delivery agency appointed in May/ June 2013 to meet the initially fixed deadlines
 - o Development of stimulus materials involving expertise required more time and expert inputs that were available
 - o Workshop topic guides would have benefitted from more time for development and additional expert inputs
- Workshops needed to be long enough to cover the content without rushing participants with sufficient time for real reflection and dialogue. In this case, there was an imbalance between the limited time available for the workshops (two three-hour events) and the large number of topics to cover (19 issues). Limited budgets and lack of planning time resulted in this imbalance not being fully addressed.
- Questions were raised by a number of stakeholders about the value of running public dialogues without science specialists present to answer questions
- Informational experts were needed to help in developing both the public and stakeholder materials and in acting as resources in the workshops so that the facilitation/ process and informational/ content roles were kept separate
- Higher quality facilitation and hosting was necessary for making participants feel welcome, involved and respected in the dialogue process
- There needed to be time and opportunity within the dialogue workshops for participants to verify what was reported as having been discussed; stakeholder as well as the public dialogues needed to be transparently and fully recorded and the decision making process fully explained so that the process is clear and transparent
- More time in general was needed for reflection and analysis by the Management Team. After the stakeholder workshop there were only two days to develop the presentation for the Longitude Committee. Time was also very limited for the Committee to hear and discuss the dialogue results:

the Committee meeting that was due to make decisions about the prize in November 2013 was set for 1.5 hours including other business, because its members were too busy to allocate further time

- The presence of the commissioning body at the public dialogue events offered a very valuable opportunity for reflection and input and it was a loss to the project that few attended
- Findings of all public and stakeholder dialogues need to be fed back to participants in a timely way
- The evaluation took far more time investment than was covered by the agreed budget.

The evaluator was told, *'Nesta will learn from this experience'*, and it is important to note that already there is evidence in Nesta's approach to the work after the completion of the dialogues, that it has already learnt from the experience. Nesta working with the BBC, put a considerable effort into public engagement leading up to the vote and this is continuing over the next years.⁴²

Lessons from the evaluation in relation to the development of future challenge prizes include that there needed to be:

- A clear rationale for the prize
- A framework for the prize with at least some of the parameters within which to consult being agreed before wider discussions- both in the challenge focus and the design and mechanics of the prize

The challenges of this project as a whole also raised questions about at what stage a Sciencewise DES should draw attention to the extent to which the project objectives can still realistically be achieved in the circumstances (in this case the constraints of the timescale). This is hard to answer generically as often, as with this dialogue, there are benefits and positive outcomes even from a very difficult and challenging dialogue process.

17. CONCLUSIONS

The evaluation brief suggested that the success of the dialogue project would be measured by a range of factors including:

- The use of the results of the dialogue to influence national policy making involving science and technology
- The high quality of the design and delivery of the public dialogue project (good practice, value and effectiveness)
- The greater willingness of the commissioning body to undertake public dialogue in future.

The use of the results of the dialogue to influence national policy making involving science and technology

The results of the dialogue did influence the choice of challenges to some extent, and more significantly influenced the criteria used to select the challenges, and the ways in which the public could be encouraged to engage with the prize. There is some evidence that public and stakeholder dialogue views did influence the final choice of Longitude challenges by the Committee in collaboration with the Nesta challenge prize team, and that the criteria and engagement work have influenced the next stages of Nesta work with the BBC. The dialogues also identified the challenges that might not interest the public, and so taking account of this evidence may have helped avoid a choice of challenges that would have been unattractive to the public.

⁴²For example work with schools see: <http://www.longitudeprize.org/schools>

There is limited evidence of the use of the dialogue results among Longitude Committee members, but the results appear to have impacted on the Nesta challenge prize team and the organisation they worked with to finalise the prize listing. As a result of the dialogue, the issues and challenges set by Longitude Prize 2014 were not simply those framed by academics or business leaders, but were broadly consistent with issues that are of public concern.

Because of embargoes imposed by the BBC, few people outside the immediate decision makers had access to the dialogue findings during the period of the evaluation, other than BIS staff and indirectly ministers. A key focus of BIS in the Longitude prize was how the public was being consulted and how their views in developing the Longitude prize were being taken into account. Once the report was available, BIS staff shared findings with colleagues and ministers and there was interest in them; especially the public lack of interest in particular challenges, and the evidence on the criteria.

Stakeholders were sent the report on 27th February 2014, four months after the dialogue events, and most of those interviewed for this evaluation appeared not to have read beyond the executive summary. The public participants had only just received the summary when the research for this evaluation was completed on 16th April 2014 and, among those interviewed, it appears it had not been read in any detail. It is therefore not possible to come to any evaluation conclusions on the wider use of the results at this stage.

The quality of the design and delivery of the public dialogue project

In relation to the quality of the design and delivery of the public dialogue project, there are criticisms of aspects of the delivery. It is recognised that those involved coped with a really challenging timetable and difficult demands '*with huge grace*'. Some of those interviewed were critical of the dialogue design, but some felt that the process was good at a high level, but that the issues came at the delivery level, and were due to:

- the incredibly pressured timescales
- lack of time, resources and experience of commissioning this kind of dialogue which led to some failures of management and oversight, despite considerable support from the Sciencewise DES
- the underdeveloped, wordy, complex and not fully scientifically accurate public stimulus materials due to lack of time and the lack of scientific expertise to develop them
- the lack of scientific resources present at dialogue events to answer participants' questions
- some weaknesses in the facilitation.

Public participants were largely satisfied with the quality of the public dialogues though time was limited for extensive dialogue on the challenges. Despite observation of good dialogue, various observers were concerned about weaknesses in design, facilitation and hosting, especially in relation to the stakeholder dialogue. Public participants clearly found the dialogue experience enjoyable and interesting and were positive about being involved in influencing scientific policy. As a general point, the members of the public who participated in the dialogue demonstrated that there was an appetite for engagement with the Longitude prize, and that it excited the participants.

The willingness of the commissioning body and participants to undertake public dialogue in future

Although the members of the public involved in the Longitude prize dialogue gave a strong endorsement of the process and said they would like to participate in similar workshops, this was not true for most of the stakeholders. The stakeholder dialogue participants and observers interviewed were mainly very critical of their dialogue, both in the lack of clarity about the purpose of their dialogue, and strong weaknesses in its facilitation and hosting. Most of those interviewed said they were less likely to agree to take part in a similar event in the future.

Nesta staff interviewed felt that Nesta was neither more or less willing to undertake public dialogue in future, but was a great deal more knowledgeable about the issues and problems that can arise in conducting dialogues. The small number of Longitude Committee members interviewed had made no changes to their views as a result of this public and stakeholder dialogue- those that went into the dialogue critical of the value of public dialogue found that this dialogue confirmed their viewpoint; those that were supportive of public dialogue had not changed their minds, but were disappointed in the outcomes of this dialogue.

Committee members and some Nesta staff raised issues about the credibility of the dialogue findings given the small sample size for the dialogue - there were seen to be too few public participants with insufficient social and geographical diversity. Issues were also raised as to when public dialogue is the most appropriate way of engaging the public rather than using new or existing polling data.

The dialogue objectives were to:

- ensure that the public and stakeholders are engaged in the scope and framing of a new Longitude prize for innovation in science and technology
- ensure that there is a high degree of transparency around the process for developing Longitude challenges
- frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public and stakeholders

There is evidence to support the view that the first and third objectives were achieved, at least in part, but there was general agreement from those interviewed that though aspects of the process of the public and stakeholder dialogue were transparent, it was not fully clear how the results were used in decision-making processes, alongside the other inputs. However, since the completion of the evaluation, Nesta has published a paper on the prize methodology. There was thus not a full audit trail and understanding the influences on the way to the decisions, but a general view that despite the difficulties a good set of challenges had been identified. Without these inputs, it was thought that the ideas and topics would have been completely internal to Nesta and the Longitude committee and the public and stakeholder dialogue process and report did help shape the ideas as well as giving an injection of structure into the process.

There is evidence that the public and stakeholder dialogues, whatever their limitations, offered insights and evidence and gave Nesta the evidence to convince the Committee to recognise that further work was needed before decisions could be made; and put a structure around the process of developing the challenges, that otherwise might not have been found from elsewhere.

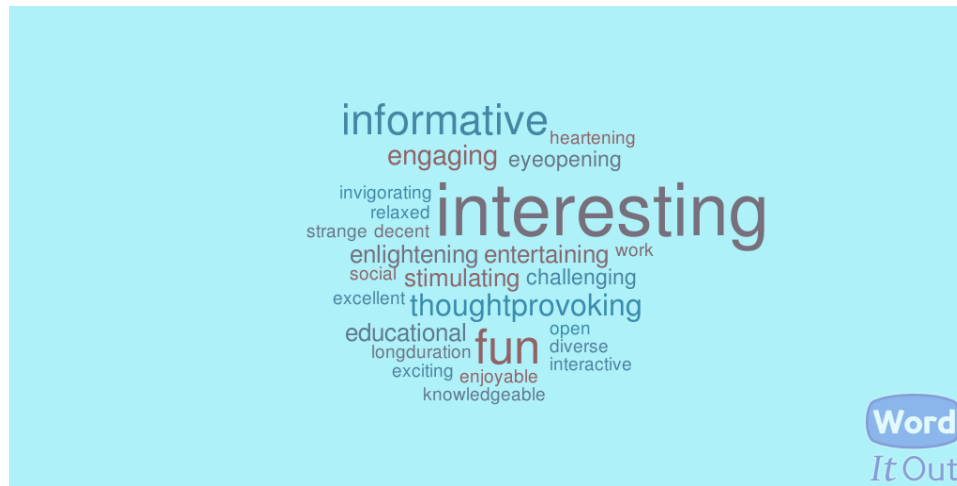
Overall, the findings from this evaluation suggest that despite weaknesses in the process, the public and stakeholder dialogues were of value to the Longitude Committee and the Nesta team in developing a list of potentially exciting and valuable Longitude prize challenges. Public engagement has been a strong feature of the Longitude Prize 2014 since the dialogues.

APPENDIX 1 – SUMMARY ANALYSIS OF PUBLIC DIALOGUE PARTICIPANTS' QUESTIONNAIRES

Longitude Prize 2014 PUBLIC DIALOGUE WORKSHOPS FEEDBACK summary of post workshop 2 questionnaire results – 32 responses

Please consider both events that you attended when you answer the following questions:

What three words would you use to describe your experience of participating in these events?



Q. Please circle one answer for each of the following statements.

1	I was clear about the purpose of the evening workshops and what we were going to be talking about	Strongly Disagree	Disagree	Neutral	Agree 19	Strongly Agree 12	Donon Know 1
2	There was a good mix of different sorts of people in the workshops	Strongly Disagree	Disagree	Neutral 2	Agree 15	Strongly Agree 15	Donon Know
3	The invitation process and advance details for the workshops were well-handled	Strongly Disagree	Disagree	Neutral	Agree 17	Strongly Agree 15	Donon Know
4	The workshop was well organised	Strongly Disagree	Disagree	Neutral	Agree 14	Strongly Agree 18	Donon Know
5	The information presented both evenings seemed fair, balanced and helpful	Strongly Disagree	Disagree	Neutral	Agree 16	Strongly Agree 16	Donon Know
6	The materials were interesting and engaged me	Strongly Disagree	Disagree	Neutral 2	Agree 15	Strongly Agree 15	Donon Know

7	I would have liked more information	Strongly Disagree 5	Disagree 6	Neutral 10	Agree 4	Strongly Agree 6	Donon Know 1
8	I could ask questions easily and get appropriate answers	Strongly Disagree	Disagree	Neutral 2	Agree 13	Strongly Agree 17	Donon Know
9	We had enough time to discuss the issues	Strongly Disagree	Disagree 2	Neutral 4	Agree 14	Strongly Agree 12	Donon Know
10	I was able to contribute my views and have my say	Strongly Disagree	Disagree	Neutral	Agree 8	Strongly Agree 24	Donon Know
11	My views were valued and listened to with respect	Strongly Disagree	Disagree	Neutral	Agree 12	Strongly Agree 20	Donon Know
12	Overall, I felt able to fully take part in the workshop this evening	Strongly Disagree	Disagree	Neutral	Agree 8	Strongly Agree 24	Donon Know
13	The facilitation was independent and did a good job making sure different voices were heard throughout the evening	Strongly Disagree	Disagree	Neutral 1	Agree 9	Strongly Agree 22	Donon Know
14	I found time/ energy to do the homework/ follow up work between the two workshops	Strongly Disagree	Disagree 1	Neutral 3	Agree 19	Strongly Agree 8	Donon Know

15	I am confident that the public's views expressed in these workshops will influence the choice of the Longitude Prize 2014 challenges	Strongly Disagree	Disagree	Neutral 6	Agree 17	Strongly Agree 7	Donon Know 2
16	I learned something new as a result of taking part	Strongly Disagree	Disagree	Neutral 2	Agree 14	Strongly Agree 16	Donon Know
17	Taking part in these workshops has affected my views on some of the issues we discussed	Strongly Disagree	Disagree	Neutral 4	Agree 18	Strongly Agree 10	Donon Know
18	I think it is important that the public are involved in discussing these sorts of issues	Strongly Disagree	Disagree	Neutral 2	Agree 12	Strongly Agree 18	Donon Know
19	I am more likely to get involved in these kinds of events in future	Strongly Disagree	Disagree	Neutral	Agree 14	Strongly Agree 18	Donon Know

20	I am more convinced of the value of public participation in these sorts of topics	Strongly Disagree	Disagree	Neutral 4	Agree 13	Strongly Agree 13	Donon Know 2
21	I am more likely to recommend taking part in these kind of events to others	Strongly Disagree	Disagree	Neutral 1	Agree 14	Strongly Agree 15	Donon Know
22	I am more convinced of the value of public participation in Science and technology decisions	Strongly Disagree	Disagree	Neutral 5	Agree 10	Strongly Agree 17	Donon Know
23	I felt comfortable with the presence of observers this evening (those watching but not taking part)	Strongly Disagree	Disagree	Neutral 1	Agree 10	Strongly Agree 20	Donon Know 1

Which parts of the workshops did you find most interesting, and why?

London

Talking about the seriousness of global matters

All topics covered I found thought provoking and have really open mind to society issue

Questions on what I believe in as a person

The initial themes no 2- to weed out what were the important areas was stimulating

Hearing others views

Making the poster- was able to discuss the homework

Debating- I liked hearing others views

The debates, hearing other people's views was quite interesting as they were different to mine

Group work- lack of time

Open discussions

Listening to others views

Cambridge

The health improvement

Learning people's implicating views

Finding out other people's opinions

Discussion

Group debate because it's good to hear other's views

Group discussions

The making of posters as it is self engaging

The longitude of 2013- very creative

Group discussions- different opinions heard

Poster was most fun. Also general discussion of individual issues- interesting points of view

Open discussion

Leeds

Discussing the results of last week's workshop because the problems we discussed were personal rather than global

The lot

Discussion and other people's views

All of it

Discussions as got to listen to people/workshop because
The debating- to hear other people's views and answers
The mix of people and opinions expressed
Session 2- more practical
When world problems were discussed
I found the explanation of all the different prizes the most interesting
Discussions- able to hear other's views

Which parts of the workshops did you find most difficult / challenging, and why?

London

Some discussion as it caused debate
Sometimes discussing so many opinions at once was mind boggling
Putting over my opinion - 'sterilisation' overpopulation- strong opinion (comment was from person promoting this viewpoint)
Doing posters- how to get complex message across in small space- in succinct way
Trying to think
The views of other people- some people made comments without knowing all the facts e.g. HIV is self-inflicted
Some decisions because they involved a lot of thinking
Group work- lack of time

Cambridge

Finding how society can be improved 2030
Poster x2
Sometimes opinions were heard to come up in ? first
The poster because of time restraints and my lack of artistic ability
Things I knew less about
Trying to understand what some science areas would look into
The discussions sometimes I find a bit challenging
Creative tasks- difficult way to present opinions
Cutting down or picking/ rating options
Nothing

Leeds

The original, though required in prioritising what I had thought about
None x4
Poster
Designing the poster
Session 1- repetitive, boring!
Repetitive nature of discussion in first session
I found the solutions most challenging

In your opinion what ONE thing could be improved about these workshops?

London

Have some visual imagery to create more of an impact
Longer break
More visual examples- short films on topics
A little more thought time and visual information/ facts/ figures
Not a lot

None x2
More snacks
Level of information specific to the prize given

Cambridge

Sandwiches
More information
Options of potential (or past) solutions
Forcing everyone to contribute more
Nothing x2
More information
The mixture of people/ participants
Mean of transportation
Quieter people/ transportation participants on size given/
More methods used to get quieter people involved

Leeds

Longer sessions
More time
None- all good
Slightly more time to discuss
More time on individual subjects
Too long
More visual aids

What was the most interesting fact or opinion that you heard during these events that really influenced your views?

London

Global population and how quick it is growing and how it's bad
People's perception on the causes of overpopulation and global issue
The previous prize and explanation of subjects
Just hearing what effects people's opinions was instructive
People do not think the same as me
They were all equal
Health related topics

Cambridge

What the technological advances could do
Interrelation of problems
Antibiotic resistance
The effect of antibiotics
Development of super bugs
No idea
Transportation and health
Fact about antibiotics being over prescribed
Antibodies- I am now terrified of doctors (sort of)
Antibiotics x2

Leeds

Not one thing- people's different views
Other people's perceptions

That all age groups tend to have the same concerns
The original ideas expressed
Breadth of issues, rather than just one issue
Lab grown organs x2

How easy was it to make sense of the quite complex and challenging issues presented to you and so take part in the discussions and contribute your views about them?

London

Very easy- they were made simple
Challenge at first but once presented with information found eze
I knew 2 people were anti my views!
Overall manageable for me as already had some views and info- if not may have been harder
Not easy
Quite easy- had to do personal research to get better understanding
Took some thought
I felt it was relatively easy to make sense of these issues and I could contribute my views
Fairly easy
Very easy

Cambridge

Easy
Easy especially when things were explained
Very easy
It was as easy as such complex issues could be
Not that easy but it was explained well
No idea
It all depends on self determination
Lauren did a good job of simplifying difficultly worded questions
For me personally very easy. If asked the effort was absolutely made to have points explained
Very easy
Very easy- everyone had their time to speak

Leeds

Reasonably easy
Was easy- everyone listened
Everyone was allowed to participate
Very
Very easy as it was well explained
Quite easy
Easy, if anything other participants get confused
Easy to discuss
I found it quite easy to understand and make sense
Quite easy- I felt able to contribute

'What was the main thing you gained from taking part in this project, if anything?

London

Being able to have more intellectual discussions
An insight into what and how science can impact on daily and global living
Meeting people who 'think' and that people do change the world!

Hearing what people's concerns are and about NESTA was very interesting- gave good outlook on the world and its problems

Experience

Current affairs which impose on society

A realisation of what issues society faces

Perspective, I picked up more perspectives

To listen to others views and expand my own

Cambridge

The value of science in problem solving

Finding out about some of the issues in the world

A sense that the public's views were actually listened to and valued

Enjoyment

Knowledge of what research is going on

How we could improve our health system

Research

Learned about new challenges facing society

Moneyed Knowledge of certain scientific topics and awareness of research groups

Listening to diverse opinion

Leeds

A realisation that all of us had similar views of the problems of the future

There are a lot of problems in the world

Learning about life challenges

Knowledge

Knowing my opinions were listened to and valued

Enlightened viewpoint

Learned more about people's views

Meeting new characters

I feel I gained a lot of knowledge about science in general

I found the project interesting on many levels

What one thing should Nesta take into account in planning the Longitude Prize 2014 ?

London

If they want it to be UK bound or global

More people from different ethnic

That all people animals must benefit

How to reach and engage the public

Has it practical utility

Big advertising- going out to everybody of all ages

Getting all groups in society involved

The target market should be more specific- everyone should be aware but only specific people should be targeted

Getting the backing from the public- best advertising

Cambridge

Health and transportation

Public a views and opinions

Catching public interest

The extent to which the 'winner' can help on a global scale- more people

Plausibility

What the PEOPLE want

The different opinions and what affects most people

Ability to stimulate public interest

Public awakening

Leeds

Be inclusive

The UK progress, then global

Making the TV programme interesting and accessible to everyone

The global issues

Voting process and presenters (to interest all bodies watching)

Get kids involved- schools and college

Public opinions

The project and TV and how to make it interesting

Would you like to add anything else to your answers above?

London

I still think we have to reduce population (babies)

It has to be memorable as it won't happen again in my lifetime but could be passed onto further generations

Cambridge

Letbr keep this programme on

Discussions were well led- did not feel that any opinion was invalid or irrelevant and didn't feel pushed to answer in certain ways

Leeds

Excellent facilitators

No other than it was highly enjoyable

APPENDIX 2- SUMMARY ANALYSIS OF STAKEHOLDER DIALOGUE PARTICIPANTS' QUESTIONNAIRES

Evaluation questionnaire- returns 9/11

Longitude Prize 2014 stakeholder workshop Dana Centre, 18th November 2013

What three words would you use to describe your experience of participating in this event?



Q. Please circle one answer for each of the following statements.

1	I was clear about the purpose of the workshop	Strongly Disagree	Disagree 1	Neutral 4	Agree	Strongly Agree	Donon Know 1
2	All the main relevant stakeholder interests were represented at the workshop	Strongly Disagree 1	Disagree 2	Neutral 1	Agree 2	Strongly Agree	Donon Know 3
3	The structure of the meeting enabled us to discuss the issues properly	Strongly Disagree	Disagree 1	Neutral 1	Agree 7	Strongly Agree	Donon Know
4	Participantre views were valued and listened to with respect	Strongly Disagree	Disagree	Neutral	Agree 8	Strongly Agree 1	Donon Know
5	No single view was allowed to dominate unfairly	Strongly Disagree	Disagree	Neutral	Agree 7	Strongly Agree 2	Donon Know
6	We had enough time to discuss the issues	Strongly Disagree	Disagree 1	Neutral 1	Agree 7	Strongly Agree	Donon Know
7	The facilitation was independent and did a good job making sure different voices were heard	Strongly Disagree	Disagree	Neutral	Agree 8	Strongly Agree 1	Donon Know

8	The meeting was useful and worthwhile	Strongly Disagree	Disagree	Neutral	Agree 6	Strongly Agree 1	Donon Know 1
9	I am confident that the stakeholders' views expressed in this workshop will influence the choice of the Longitude Prize 2014 challenges	Strongly Disagree	Disagree 1	Neutral 2	Agree 4	Strongly Agree	Donon Know 1
10	After this workshop, I am more convinced of the value of public participation in decisions around Science and technology issues	Strongly Disagree	Disagree 1	Neutral 5	Agree 2	Strongly Agree	Donon Know 1

If you strongly disagree or agree with any of these statements, please say why:

I don't know who the main stakeholders are; I don't know who was invited- or why!

Wide range of views

Which parts of the workshop did you find *most* interesting or useful, and why?

Exploring the specific challenges and why they would be relevant

Discussions

Networking and thinking time

Discussions of what the prize might look like, how to select

Which parts of the workshop did you find the *least* interesting or useful, and why?

d/k as had to leave early

all interesting

qualitative public research- unconvinced of significance

criteria development- confusing area with specific

not understanding the process fully

In your opinion what ONE thing could have been improved about the workshop?

Insist we read materials before we Came!

Attendees being sent the full document with write up of each project in advance. Members of full committee have this- would have been useful to have this in advance

Clear on output

What was the main thing you gained from taking part in this workshop, if anything?

Seeing the result of multi- brains to reach solutions

Insight into difficulty of scale of project

What one thing should Nesta take into account in planning the Longitude Prize 2014 ?

Developing 4-5 comparable challenges in terms of potential for impact and breadth of potential solutions

Re- engage with us- don't take what you wanted to hear

Needs lots of input!

Would you like to add anything else to your answers above?

Contacts of other participants

What would have been useful today is more discussion about actual science- i.e. where things are now; how far to go with it